Mediators of the Effects of Past Corporal Punishment Experiences on the Intent to Use Corporal Punishment

par

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Abstract

Considering the negative developmental findings associated with the use of parental corporal punishment, a considerable body of research has attempted to suggest an avenue for interrupting this vicious cycle of intergenerational violence. However, a major limitation in most of these studies has to do with the fact that very few of them has looked at the influence of a third variable such as the use of explanation, perceived fairness and deservedness of punishment, or the attitudes one has towards corporal punishment.

By employing structural equation modelling (SEM), the present study has demonstrated that the apparent relationship between subjective and socio-demographic variables related to corporal punishment and latter intention to use it as a parent is in fact explained by the mediating role of other variables such as attitudes towards corporal punishment, type of corporal punishment, perceived reasons for punishment and reasons given for punishment by the agent. Our main contention was that when a third variable (e.g., attitude towards corporal punishment) is included in the equation, the apparent relationship between punishment variables and outcome disappears. More specifically, as it has resulted from the SEM analysis, the mediating variables explain all of the association between the objective variables and intention to use corporal punishment. That is to say, a model containing no direct paths from the independent variables (i.e., number of ages punished, being an immigrant, frequency of punishment, means of administration of corporal punishment, number of punishing agents, sex) to Intention to Use Corporal Punishment fits the data. Moreover, among the four mediators considered in our model only the attitudinal measures make a significant contribution to the prediction of intention to use corporal punishment.

In addition, in order to explore the profile of differences between subjects on their past experiences with corporal punishment, explanations for punishment, and present attitudes, cluster analysis was employed. Finally, a four cluster solution that made meaningful distinctions between groups was selected for consideration.

Key words: corporal punishment (CP), attitudes, intentions, reflexive variables, frequency measures, objective variables, mediators, structural equation modelling, cluster analysis
Résumé

Considérant les effets négatifs sur le développement des enfants associées à l'utilisation de châtiments corporels, un ensemble considérable de la recherche a tenté de proposer une avenue pour interrompre le cercle vicieux de la violence intergénérationnelle. Toutefois, on pourrait argumenter qu’une limitation majeure dans la plupart de ces études réside dans le fait que très peu d’entre eux ont eu comme but d’investiguer l’importance d’une troisième variable comme le sentiment de mériter le châtiment, les explications reçues sur l’équité de la peine imposée ou les attitudes qu’une personne peut garder envers cette méthode éducative.

En utilisant la modélisation d'équations structurelles, la présente étude a démontré que la relation apparente entre les variables subjectives et sociodémographiques liés à l’expérience de la punition corporelle et l’intention de faire recours à cette méthode éducative en tant que parent est en fait expliquée par le rôle de médiation joué par d'autres variables telles que les attitudes à l'égard de châtiments corporels, le type de châtiments corporels, la façon dont le châtiment a été perçu par le sujet et les raisons données par l'agent pour motiver la peine infligée. La thèse principale avancée par le présent étude est à l’effet qu’une fois le rôle d’une troisième variable est considéré dans l’équation (par exemple, l'attitude envers les châtiments corporels), l'apparente relation entre les variables objectives et les résultats final, soit l’intention de recourir à la punition corporelle, disparaît. Plus précisément, comme il en résulte de l’analyse de modélisation, ce sont les médiateurs qui expliquent toute association possible entre les variables objectives et l’intention d'utiliser les châtiments corporels. C'est-à-dire, un modèle qui ne contiennent aucune liaison directe entre les variables objectives, et directement mésurables (c'est-à-dire l’âgé lors de la punition, le fait d'être un immigrant, la fréquence de la peine, le nombre d'objets utilisés, le nombre d'agents punisseurs, le sexe) et l'intention d'utiliser les châtiments corporels correspondent aux données. De surcroît, parmi les quatre médiateurs pris en compte dans notre modèle, ce sont les opinions à l’égard de la punition corporelle qui possèdent la meilleure capacité prédictive en ce qui a trait à l’intention de recourir aux châtiments corporels. Finalement, afin d'étudier le profil des différences entre les sujets en fonction de leurs expériences passées avec les châtiments corporels, les explications reçues pour la peine, et leurs attitudes, une analyse par groupe a été employée. Bref, une solution en quatre groupes faisant des distinctions significatives entre les groupes a été choisie.
Mots-clés: châtiments corporels, attitudes, intentions, variables reflexives, variables objectives, mesures de fréquence, médiateurs, modélisation d'équations structurelles, analyse par groupe.
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Introductory considerations

Despite the well-known negative consequences, both short and long-term, that can result from corporal punishment such as low self-esteem (Steele, 1987), mental health problems (Turner and Finkelhor, 1996), substance abuse and criminal activity (Straus and Lauer, 1992), low economic achievement (Straus and Gimpel, 1992), aggression (e.g., Brezina, 1999; Stormshak, Bierman, McMahon, and Lengua, 2000; Ulman and Straus, 2003), maladjustment (DuRant, Cadenhead, Pendergrast, Slavens, and Linder, 1994; Eamon, 2001; Turner and Finkelhor, 1996), impaired parent-child relationships (Gershoff, 2002) and physical harm or injury to the child (Gershoff, 2002; Gil, 1970; Kadushin and Martin, 1981), controversy continues in both the United States and Canada regarding the appropriateness and right of parents to use reasonable force in disciplining their children (Baumrind, Larzelere, and Cowan, 2002; Gershoff, 2002).

As pointed out by Holden (2002), there are few parenting topics that are likely to elicit as much emotion and controversy as the debate over the appropriateness of corporal punishment for disciplining children. Practitioners, as well as researchers are rather conflicting in their conclusions regarding its appropriateness and efficaciousness. For example, whereas Leman (2005) advocate spanking and teach its use, Gardere (1999), Severe (2002) and Taylor (2001) advise parents to avoid spanking and offer alternative methods in dealing with children’s misbehaviour.

If we were to describe the debate surrounding appropriate ways to effectively discipline children, the word at hand would be contradiction. If some psychologists and paediatricians have argued that, under certain circumstances, the recourse to force by parents is reasonable and can be used as an effective and necessary disciplinary practice (e.g., Baumrind et al., 2002), others have insisted that physical practices of disciplining produce harmful, immediate, and long-lasting emotional, cognitive, and behavioural effects on children (Straus et al., 1997, Canadian Paediatric Society1, 2004).

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1 It is noteworthy to mention that the Psychosocial Paediatrics Committee of the Canadian Paediatric Society has carefully reviewed the available research in the controversial area of disciplinary spanking and has no longer supports the use of physical discipline with children. Therefore, the Canadian Paediatric Society recommends that physicians strongly discourage disciplinary spanking and all other forms of physical punishment. They appreciate that the amount of research available to date presents compelling evidence for the position that spanking and other forms of physical punishment are associated with negative child outcomes. Accordingly, their present position is that although physical action might be sometimes necessary to support time-out or to prevent a child from harming himself, physical harm to a child inflicted by a parent out of control and in a rage is completely inappropriate and dangerous (Canadian Paediatric Society, 2004).
In a meta-analysis study of the published research on the effects of corporal punishment on affective, cognitive, and behavioural outcomes, Paolucci and Violato (2004) have found small negative behavioural and emotional effects of corporal punishment and almost no effect of such punishment on cognition. The authors included 70 studies published between 1961 and 2000 and involving 47,751 people. Their final conclusion was that there were no significant results to suggest that the exposure to corporal punishment substantially increase the risk to youth of developing affective, cognitive, or behavioural pathologies.

On the other hand, antispansking advocates tend to cite research results that have revealed that although corporal punishment tends to be immediately effective in decreasing undesired behaviour, efficacy is only achieved by increasing the intensity, duration, and frequency of the punishment and by preventing escape or reinforcing properties of the act (Hyman, 1996). Also, compliance is believed to be restricted to the immediate situation, because behaviour is merely suppressed and new more adaptive behaviours are not learned (Hyman; Straus et al.).

Professional groups in the United States have not been able to agree on whether parents should be uniformly counselled not to use physical punishment.

In 1996, a panel convened by the American Academy of Paediatrics concluded that spankings “should not be the primary or only response to misbehaviour used by a caregiver”. The furthest they could go was to agree on a recommendation against physical punishment for children younger than 2 years of age (Conference Participants, 1996). Two years later, the academy issued a policy statement about discipline in which it recommended that parents should “be encouraged and assisted in the development of methods other than spanking for managing undesired behaviour” (Committee on Psychosocial Aspects of Child and Family Health, 1998, p. 727).

Whereas, the experts failed to deliver a single consistent message, the use of corporal punishment as a disciplinary method in our modern societies is far from being one of a marginal importance. The data indicate that the vast majority of Americans favours the physical punishment of children. In 1986, a National Opinion Research Center survey found that 84% of Americans either agreed or strongly agreed that “it is sometimes necessary to discipline a child with a good, hard spanking” (Straus, 1991). A number of studies performed on US samples have revealed that over 90% of parents have spanked their children (Straus, 1983; Straus, Gelles, and Steinmetz, 1980; Wauchope and Straus, 1990).
To give a wider perspective on this issue, we should mention that the prevalence of spanking has been estimated at 51% in Canada (Oldershaw, 2002), 61% in Greece (Halkias et al., 2001), 87% in Northern Ireland (Murphy-Cowan and Stringer, 1999), and ranges from 60 to 90% in the United States (Straus and Stewart, 1999) to more than 90% in Hong Kong (Samuda, 1988), New Zealand (Fergusson and Lysnkey, 1997) and the United Kingdom (Ghate, Hazel, Creighton, Finch, and Field, 2003).

Adults' support of spanking is not limited to young children. Older children are also viewed as appropriate subjects for hitting. In the first National Family Violence Survey, Straus et al. (1980) found that between 70% and 77% of respondents believed that spanking or slapping a 12-year-old child was at least somewhat necessary, normal, and good.

Even well-educated professionals express support for the physical punishment of children. In a study of 619 Ohio family physicians and paediatricians, McCormick (1992) found that 67% favoured giving children a *mild spanking*. Seventy percent of family physicians agreed with corporal punishment, compared with 59% of paediatricians.

Moreover, normative support for corporal punishment is established before most individuals become parents. Graziano and Namaste (1990) have studied a sample of 679 college freshmen and found that approximately two-thirds (68.9%) felt that spanking was an effective disciplinary procedure. Nearly half (45.1%) agreed that *children need to be spanked to teach discipline*. Further, 94.9% of these students believed that parents should have the right to spank and that they would spank their own children (82.7%).

Deley (1988), in an interesting comparative study, has put side by side the experiences with and attitudes towards spanking of American college students with those of college students in Sweden. As a main result of the study, he observed that in addition to receiving corporal punishment more frequently than the Swedes, Americans were more likely to believe in spanking than their Swedish counterparts - 62.3% compared with 28.6% for males and 60.4% compared with 18.9 for females. Further, when asked if they would support a law, similar to the one in Sweden, that would prohibit parents from hitting children at all, only 22.2% of American men and 30.8% of women indicated their agreement. In contrast, 75.4% of the Swedish men and 76.9% of the women stated that they agreed with their country's new law.

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2 In 1979, Sweden enacted legislation prohibiting the use of physical punishment by parents. The law carries no penalty, as its primary purpose is to establish a cultural norm against spanking.
This study epitomizes the important role of the law system in the process of social change, suggesting the social and cultural context as possible factors in shaping attitudes and changing attitudes concerning the use of corporal punishment. In a number of countries in the world, including Canada, governments are grappling with how to attend to children's human rights and the need for protection by changing attitudes about the use of physical force in disciplining children. According to Strauss and Paschall (1998), there are indications that, like Sweden and five other countries that have instituted no-spanking laws, Canada may also be moving to ban corporal punishment (Straus and Paschall, 1998).

In other countries, where physical punishment of children is already illegal, (Iceland (2003), Israel (2000), Germany (2000), Latvia (1998), Croatia (1999), Italy (1996), Cyprus (1994), Austria (1989), Norway (1987), Denmark (1986/1997), Finland (1984) and Sweden (1979), there have been made major advancements in the implementation of full legal reform and the promotion of effective means of positive discipline. There is ample evidence from the countries cited above to show that the ban of corporal punishment had rapidly worked to reduce reliance on physical discipline and decrease the number of prosecutions and other formal interventions in families (Freeman, 1999). Sweden was the first country to ban corporal punishment over 20 years ago, in 1979, and this ban has been successful and is supported by the majority of Swedish adults (Freeman, 1999). An illustrative example for the case in point would be Sweden where in the aftermath of the 1979 ban on corporal punishment Sweden’s public opinion has changed dramatically. According to Freeman, this shows that through a public education campaign endorsed by different public health measures and law mechanisms, opinion on this subject is open to change. After examining trends in social variables relevant to the 1979 Swedish corporal punishment ban, Durrant(1999) has concluded that the primary goals of the ban that were to: (1) reduce public support for corporal punishment; (2) encourage earlier identification of children at risk for physical abuse; and (3) facilitate earlier, more supportive intervention, have been met.

Despite the pending controversy over the appropriateness of this educational method there is overwhelming evidence that spanking may be harmful. However, given the fact that this is an energy saving method that is likely to elicit quick responses, it may be difficult to stop that practice.

However, this climate of bitter disputes between conflicting theoretical traditions of childrearing has prompted a slight but steady shift in expert knowledge about the use
of corporal punishment. In the wake of these reforms, child abuse was redefined as a
type of a family problem and, as a consequence of changing the climate many
parents have become more lenient with children and less harsh in their punishment
(Macleod, 1998; Pollock, 1983).
Over the next decades, this looming shift that is irradiating from the scientific world
to legal and cultural realm will most probably influence the way we will be
conceiving the family interaction patterns to the extent that corporal punishment will
totally lose its appeal and will be ranked among other forms of deplorable and illegal
aspects of social life such as rape, wife beating and drug abuse.
US National surveys of parents conducted in 1975, 1985 and 1995 found small but
steady changes in the proportion of parents who reported hitting their toddlers (from
97% in 1975 to 94% in 1995) and a little more noteworthy decrease in the proportion
of parents who reported hitting their adolescent children (among children aged 13 the
proportion decreased from 55% in 1975 to 43% in 1995(Straus , Stewart, 1999).
As Strauss (1999) observed, though the actual spanking has declined this didn’t
happen to the same extent that people’s attitudes have changed towards it. According
to him, this paradoxical situation where inconsistencies between attitudes and
prevalence rates are observable is typical of the process of social change. As it has
been very well established in the field literature (Whitman, Borkowski, Keogh, and
is a close link between attitudes towards corporal punishment and the actual use of it.
Namely, parents professing their beliefs in the educational virtues of corporal
punishment and its positive effects should act accordingly and punish their children.
This rather reasonable relationship was examined by Socolar and Stein (1995) who
had demonstrated that the fact of approving of a certain educative strategy is of
greater importance than the level of impulsivity and by Ateah and Durant (2005) who
found significant positive correlations between favourable attitudes and the
frequency of using physical corrections.
This inconsistency between attitudes towards physical discipline and future corporal
punishment use might be accounted for by a number of other interfering mechanisms
associated with the use of such a method. For instance, it might be the case that
positive attitudes towards the use of corporal punishment lose their force in the
context of daily family interactions patterns. Factors pertaining to children’s
appraisals of their own experience such as appreciations of the parent’s motives
(Ateah and Durrant, 2001), assessments of the fairness and morality of the act
(Gordon and Conger, 2000), interpretations of the situation (Rhoner, 1986) and the interpretation of the meaning of the physiological arousal of parents (R.P.Rohner, Khaleque, and Cournoyer, 2005) might explain this gap between attitudes and behaviours.

In the field literature these variables have been frequently referred to as third variables or mediating variables. As defined by Baron and Kenny (1986) a moderator is a “third variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable” (p. 1174). In their review about the existing literature on corporal punishment, Gershoff (2002) and Benjet and Kazdin (2003) concluded that research needs to address the influence of third variables such as family structure, socioeconomic status, child gender, parental warmth, attitudes in the relation between physical punishment and child outcomes.

Despite the great potential that resides in understanding the role of third variables in assessing the outcomes of corporal punishment, researchers have an incomplete understanding of the pathways that connect children’s experiences with corporal punishment and their subsequent behaviour.

One of the most commonly researched mediators of corporal punishment is the parental acceptance-rejection. This concept has generated a whole theory (PARTheory) which postulates that perceived parental acceptance and rejection universally predicts the adjustment of children and adults (R.P.Rohner, 1990; R.P.Rohner, Khaleque, and Cournoyer, 2005). On the other hand, Mathurin et al. (2006) have found that cultural acceptance of corporal punishment is another important mediating factor in the relationship between the punishment variables and the personality adjustment whereas Harper et. al (2006) have postulated that the gender of the physically punishing or supportive parent may influence the effects of corporal punishment on children. To end with, it should be mentioned that several other factors such as: race (Baumrind, 1972; Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh,1987; Heffer and Kelley, 1987), frequency of punishments (e.g., Larzalere, 1986), parental monitoring (Spencer, M. B. et al, 1996), perceived normative levels of corporal punishment, (Turner and Muller, 2004), and parental anger (Agnew, 1983; Straus and Mouradian, 1998) have been indicated as either buffers or amplifiers for the deleterious effects of corporal punishment.

While there is an abundance of studies analyzing the role of a number of mediators in the relation between the punishment variables and children’s future adjustment,
research evaluating the role of mediating factors in the relationship between corporal punishment and intent to use it as an adult is scarce. One study that is of great interest for our subject is the attempt of Bower-Russa et al. (2001) to identify factors that could mediate the intergenerational patterns of abuse. Specifically, they have ascertained a causal link for the development of disciplinary practices where attitudes regarding disciplinary practices were influenced by disciplinary history, which at their turn, both history and attitudes, were significant predictors of disciplinary responses in a parenting similar task. Continuing on the same lane of research, Despatie (2005) has reached the conclusion that what predicted most the intention to employ corporal punishment was the existence of a favourable or unfavourable opinion towards corporal punishment. However, due to limits in the design method the study has only vaguely hinted to the role of attitudes as principal mediators between objective variables and intention to use corporal punishment.

In an attempt to fill the existent gap, the present paper will uncover the role of attitudes as mediators in the relation between corporal punishment variables and the intention to use this disciplinary technique. Unlike previous research, our study will employ structural equation modelling in order to demonstrate that objective factors, far from exerting a decisive influence on the outcome variable, are merely the fabric that is to be transformed under the critical influence of another set of subjective variables called mediators. That is, the apparent relationship between subjective and socio-demographic variables related to corporal punishment and latter intention to use it as a parent is in fact explained by the mediating role of other variables such as attitudes towards corporal punishment, type of corporal punishment, perceived reasons for punishment and reasons given for punishment by the agent.

In order to uncover clues to the socio-historical changes that may underlie the reduction in corporal punishment over the last century, the present study begins with the presentation of corporal punishment in a broad historical and cross cultural framework. Following a brief chapter where the main study concepts are defined, six theories and two corollary models that use family interaction patterns and relationships between individual family members as explanatory factors for family violence are examined.

Further on, in Chapter 4 a review of the previous body of research on corporal punishment is presented. At this level, several aspects such as prevalence, the role of attitudes in the etiology of corporal punishment and factors explaining the use of corporal punishment are discussed. Then, we proceed to the methodological chapter
of the thesis wherein the main hypotheses and study objectives will be presented. At this point, a description of the sample as well as a presentation of the main procedural steps that have been pursued will be presented. In order to test the validity of our propositions, all our hypothesis will be statistically translated and analyzed. For this purpose, several statistical methods that will be employed along the study will be explained. Finally, upon analyzing the data, the key conclusions of the study will be advanced and future important study directions will be offered.
CHAPTER 1: Historical background
1. Historical background

From time immemorial, the use of corporal punishment as a child rearing method has been a normal occurrence in human society as the values and traditions supporting these disciplinary practices have been hardly, if at all, ever questioned. As Strauss and Mathur noted (Straus and Mathur, 1996), corporal punishment of children is not only manifested in our laws but is also supported by our cultural norms and religious beliefs. In addition, corporal punishment of children by religious leaders and followers has been practiced for many centuries since parents believed that employing physical punishment against their children is a religious duty rather than a criminal assault. Among the specific methods of child punishment throughout the years, flagellation, including the use of the *birch* against children, has been, according to some authors, the most popular in European homes and schools. For the social culture of both colonial America and Europe of the XVI\(^{th}\) and XVII\(^{th}\) centuries concepts like *children rights* were totally unpopular while whipping and beating children were common occurrences. The right of parents to use force was rarely questioned, and the Colonial *stubborn child law* permitted parents to beat or even kill obstinate children (Eisenberg, 1981).

By contrast to the long-established rights of parents, recognition of children’s rights is a fairly recent development. Over the last 300 years, a shift from unconditional acceptance of corporal punishment to its limited approval became noticeable. More recently, its use received considerable attention from various groups including child psychologists and health care professionals. Since the majority of research on corporal punishment presented this child-rearing method in a negative light, the issue has extended beyond the scientific area to finally permeate the legal realm where the debate was focused on limiting or outlawing this practice altogether.

In the following section a comparative study of the roots and societal conditions present in North America and Europe is presented in order to provide an overreaching framework for the understanding of the socio-historical causes that led the long-standing practice of child corporal punishment.
1.1. Corporal punishment in the XXth century North America

1.1.1. Corporal punishment in the United States

The physical punishment of children has always been a normal occurrence in American families as children were normally viewed as the property of parents who had the *right* to raise them as they choose (Belsky, 1993; Garbarino, 1977).

Individual belief in the use of corporal punishment in the United States is supported by public policies that sanction the use of physical means of disciplining young children. Legislation, such as the Adoption and Safe Families Act of 1997, has been introduced in the federal government as well as in many states that protect parental rights to use force in child rearing. Support of corporal punishment was made manifest to a lesser degree even by school officials (Graziano and Kunce, 1992; Graziano and Namaste, 1990; Greven, 1990; Straus, 1991).

Within the last three decades, the normative support of spanking in the US has been reinforced by several events. As Straus observed (1991),

“the child abuse legislation which swept through all 50 states in the late 1960s often reaffirmed cultural support for physical punishment by declaring that nothing in the statute should be construed as interfering with the rights of parents to use physical punishment” (p. 140).

Also, in 1977, the Supreme Court in Ingraham v. Wright has upheld the right of teachers to use corporal punishment with their students (Graziano and Namaste, 1990), including children with disabilities (Lohrmann-O’Rourke and Zirkel, 1998).

Although an adult hitting another adult is prosecuted in all states as assault, the use of corporal punishment by parents is still allowed in the United States (Robinson, Funk, Beth, and Bush, 2005). However; additional laws in Minnesota allow prosecution of corporal punishment (Bitensky, 1998).

As Graziano and Namaste (1990) have stated:

“*With the exception of warfare, self-defence, and the often necessary use of physical force by the police, no human interactions other than adult-child interactions carry such clear social supports for the unilateral use of physical punishment by one party on another*” (p. 450).

This rather strange situation is made in part possible by the fact that a statutory law in all 50 US states includes a parental exemption from being charged with assault for physically attacking a child (Lincoln and Straus, 1985. p.12; Tappan, 1960).
It seems that such an exemption is not unusual since the legal system treats families differently in a number of ways. For instance, until recently, every state had a *marital exemption* for rape (Finkelhor and Yllo, 1985) that allowed a husband to physically force his wife into having sex with him without being charged with rape. Although many states have eliminated the marital exemption for rape, nowhere within the U.S. has this parental exemption for assault been changed.

Notwithstanding, a number of changes are still occurring in the United States since in 1990, 27 states had banned the use of corporal punishment in schools despite opposition from most teachers’ organizations. *(National Coalition to Abolish Corporal Punishment in the Schools, 2001)*

A paramount influence on the way people see and justify the recourse to corporal punishment was exerted by the American religious legacy. Conservative Protestantism has been often found to be the underlying force for supporting corporal punishment of children. As many authors observe, the use of corporal punishment to discipline children is supported by the religious affiliations and beliefs of many Americans (Greven, 1991; Kuczynski and Hildebrandt, 1997).

According to Ellison and Sherkat (1993) this overly favourable attitude towards corporal punishment observed within conservative protestant groups is the reflection of three basic ideological tenets, namely a literal interpretation of the Bible, the belief that the human nature is inherently corrupt and inclined to sin and, finally, the conviction that any infringement of God’s commandments should be punished according to their interpretation of the Bible. What is more, they have argued that the more an individual practices a literal interpretation of the Bible’s verses, the more he is likely to believe that human nature is essentially corrupt and corporal punishment is the most appropriate response to disobedience.

Danso, Hunsberger and Pratt (1997) have proposed that conservative protestant group’s favourable attitude with regard to the corporal punishment is mainly linked to a significant component of their religious culture; that is obedience. Their research results indicate that there is no causal link between the fact of being conservative and attitudes favourable to corporal punishment, rather conservatism acts on their desire

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1 These groups typically believe that the Bible is inspired by God, and is inerrant. Conservatives Protestants have become the main supporters of corporal punishment of children, probably because of their belief in the inerrancy of the Bible, and the frequent advocacy in the book of Proverbs of spanking as the preferred method to discipline children. Many feel that abandoning spanking will leave their children undisciplined and lead to increased lawlessness and violence in society as those children reach adulthood. They are also referred to as fundamentalists or evangelical Christians.
to educate their offspring according to the fundamentals of their religion, and in so doing, obedience is seen as a mean to achieve that goal.

Altemeyer (1988) and Altemeyer et Hunsberger (1992) contend that there is a causal relation between parental authoritarianism and the religious orientation in the sense that, since they are more disposed to obey, these most authoritarians individuals would be inclined to adhere to those religious groups favouring a vertical authoritarian structure. In such a structure, corporal punishment is seen as a normal occurrence since it is believed that parents must be the incarnation of God’s authority and hence are legitimized, to make sure that children’s souls, seen as corrupted, are totally subdued to the will of the Lord.

These cultural norms influenced by legal and religious traditions not only render corporal punishment morally acceptable but it contributed to making it become expected reaction of any parent confronted with a disobedient child to the extent that resorting to corporal punishment is seen as a final proof of love and care. Within this religious orientation biblical passages from the Book of Proverbs are frequently cited to support corporal punishment, while the corporal punishment which is referred to as Biblical discipline (United Nations Convention on the Rights of the Child, 2005), is never or hardly, if at all, doubted. In the U.S., corporal punishment of children is most favoured in the Southern and Midwestern states known colloquially as the Bible Belt.

Greven (1990) suggested that the fundamentalist groups of Conservative Protestants are at heightened risk of perpetrating child physical abuse (CPA) because of their faith in the infallibility of biblical passages and their way to literally interpret them. Passages such as such as "He that spared the rod hateth his son: but he that loveth him chasteneth him betimes" (Proverbs 13:24, King James Version) are usually employed by these parents (see also Bottoms, Nielsen, Murray, and Filipas, 2003; Maurer, 1982; Straus, 1994) as elements of traditional Christian doctrine to support and promote corporal punishment. Moreover, the Book of Proverbs is often cited especially because it identifies punishment as a form of love. Therefore, studies have consistently demonstrated that, on average, Conservative Protestants have more favourable attitudes towards corporal punishment (Giles-Sims et al., 1995; Ellison, Bartkowski, and Segal, 1996; Stolley and Szinovacz, 1997; Gershoff, Miller, and Holden, 1999; Xu et al., 2000) and report using corporal punishment more often (Day, Peterson, and McCracken, 1998; Ellison, Bartkowski, Segal, 1996a, 1996b; Gershoff et al., 1999) than do individuals with other or no religious affiliations.
Hence, it is of paramount importance to bear in mind that the religious context in support of corporal punishment is such in the United States that the issue of corporal punishment cannot be brought up without considering its interwoven religious components.

1.1.2. Corporal punishment in Canada

In Canada, physical punishment is clearly sanctioned by law. Section 43 of the Criminal Code states that;

“every school teacher, parent, or person standing in the place of a parent is justified in using force by way of a correction towards 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”.

Even though Section 43 does not mention corporal punishment explicitly, the case law makes it clear this is what is at issue (Robertshaw, 1994; Turner, 2002). Despite the fact that this provision implicitly legitimizes the use of corporal punishment against children by permitting parents to use a “reasonable” degree of force “by way of correction towards a child”, rejection of physical punishment as an educational and childrearing tool was made increasingly explicit in Canadian law. Physical punishment by foster parents was forbidden under child protection legislation in British Columbia (1996), Manitoba (1999) and Ontario (1990). Day care legislation forbids its use across most of the country, and the Education Acts of British Columbia, New Brunswick, Nova Scotia, Newfoundland, Prince Edward Island, Yukon, Northwest Territories and Nunavut have abolished it from the schools in those regions (see Trocmé and Durrant, 2003).


In 1994 a debate erupted in Canada over the use of physical discipline when an American tourist was arrested on Canadian soil for spanking his daughter's bare bottom after she slammed the car door on her sister's fingers. Then, in summer 2001, an Ontario case reignited the controversy. Families belonging to the Church of God claimed that it was their religious and parental right to discipline their children as
they saw fit. Wanting to raise them to be responsible, happy, law-abiding citizens, they believed that corporal punishment served to achieve this goal. Welfare workers from the Children's Aid Society (CAS) saw it differently, and seized the children; they later let them return home under close CAS supervision.

Following the incident, Section 43 of the Criminal Code was challenged in the Ontario courts on constitutional grounds (Canadian Foundation for Children, Youth and the Law v. Canada (Attorney General) (2002) 207 DLR (4th) 632, aff'g 188 DLR (4th) 718, as cited in Trocmé and Durrant, 2003). It was argued that the legal justification of physical punishment violated sections 7, 12 and 15 of the Charter of Rights and Freedoms, which guarantee, respectively, the right to security, protection from cruel and unusual punishment and equal protection of the law without discrimination based on age. Proponents of the repeal of this law approached the battle from two other standpoints; namely the philosophical and the perspective. They firstly cited the importance of recognizing children’s inherent rights (e.g. McGillivray, 1993; 1998) and secondly brought forth the argument of the adverse developmental outcomes associated with the use of physical punishment as pointed out by Gershoff (Gershoff, 2002).

Despite the fact that the Ontario Supreme Court of Justice and the Ontario Court of Appeals upheld the constitutionality of the section and ruled that it did not in fact conflict with Canada's obligations under the United Nations' Convention on the Rights of the Child, the appellant asked that the Supreme Court of Canada still hear the appeal.

In January 2004, the Supreme Court of Canada, in a 6-3 split, released its decision upholding the constitutionality of section 43 of the Criminal Code of Canada. However, it is noteworthy to mention that while the majority of the Court upheld the constitutionality of Section 43, the Court has narrowed and clarified the definition of “reasonable under the circumstances.” The decision states:

“Generally, s. 43 exempts from criminal sanction only minor corrective force of a transitory and trifling nature. On the basis of current expert consensus, it does not apply to corporal punishment of children under two or teenagers. Degrading, inhuman or harmful conduct is not protected. Discipline by the use of objects or blows or slaps to the head is unreasonable. Teachers may reasonably apply force to remove a child from a classroom or secure compliance with instructions, but not merely as corporal punishment. Coupled with the requirement that the conduct be corrective, which rules out
conduct stemming from the caregiver’s frustration, loss of temper or abusive personality, a consistent picture emerges of the area covered by s. 43...

(Canadian Foundation for Children, Youth and the Law v. Canada, 2000: 28)

Finally, in spite of acknowledging that physical punishment may cause harm, the Court ruled that section 43 does not violate the fundamental rights of children and upheld its constitutionality (Canadian Foundation for Children, Youth and the Law v. Canada, 2000: 28). However, its decision imposed new legal boundaries beyond which the use of physical force to discipline children becomes a criminal act. The Supreme Court ruled that the immunity provided to parents by Section 43 is limited. The phrase “person standing in the place of a parent” has been held by the courts to indicate an individual who has assumed “all the obligations of parenthood”. Moreover, the parents must intend the punishment to be for "...educative or corrective purposes..." only and are not supposed to corporally punish children under the age of two and teenagers. Additionally, the Supreme Court has altered the legislation in effect, by removing the word "schoolteacher" from Section 43. Although corporal punishment was declared forbidden in schools, both private and public, teachers can use force to remove or restrain a child in appropriate circumstances. Defining the term “reasonable force”, the Court’s ruling set out new guidelines characterizing “reasonable” acts versus acts that are considered unacceptable or harmful to children. That is, a parent can only use “minor corrective force of a transient and trifling nature”, corporal punishment must be for “educational” or “corrective” purposes and not be motivated by anger, frustration, or abusiveness; and, inflicting corporal punishment must be limited to the use of the open hand.

Support for the federal government’s position came for a number of religiously based lobby groups such as the Coalition for Family Autonomy, Focus on the Family (Canada), Home School Legal Defense Association of Canada, REAL Women of Canada, and Canada Family Action Coalition. Joining the anti-smacking campaign, alongside the Canadian Foundation for Children, Youth and the Law, Inc., were the Ontario Association of Children’s Aid Societies and the Child Welfare League of Canada. Though it was feared that the decision could be overturn against teachers who could face criminal assault charges for physically restraining an unruly student, the Canadian Teachers Federation also agreed with the court ruling as corporal punishment is not an endorsed practice in Canadian public schools.
Both opposing sides expressed mixed feelings about the Supreme Court’s decision. Although the Court’s ruling to upheld the constitutionality of S. 43 of Criminal Code was very welcomed among corporal punishment activists, it became clear to everybody that from now on “religious freedom cannot trump the rights of children to security of the person” (Greenspan, E. and Rosenberg, M., 2004). From a legal point of view, a parent who followed the advice of James Dobson (Dobson, 1970) to use corporal punishment on an infant at the age of 18 months would be committing a criminal act.

On the other side it was argued by Children’s Aid Society that, although the Supreme Court set new boundaries for what constitutes reasonable forms of corporal punishment, the new ruling contributes to an environment where violence towards children is acceptable. In the words of Marvin Bernstein, Director of Policy Development and Legal Support of the Ontario Association of Children’s Aid Societies (O.A.C.A.S.), the decision was deemed as “out of step with current research, which has demonstrated the risks of corporal punishment” (Berenstein, 2006).

1.2. Europe and corporal punishment

In the context of cultural diversity that is characteristic of Europe’s societies, large discrepancies in the acceptance of corporal punishment as a child rearing tool are self-evident.

In Ireland, for instance, the understanding that corporal punishment was potentially harmful or that it could entail lasting negative effects on children’s future development is a recent progress. Here, the view that a good beating never hurt anyone prevailed and the predominant mentality was that some corporal punishment was necessary to instil respect for authority, to maintain discipline, and to rear good citizens. Although corporal punishment was banned in Ireland schools since 1982, the rights of parents to use corporal punishment in their own homes against children remains scarcely questioned (Maguire and Cinnéide, 2005).

At the other pole is situated Sweden where legislative reform has eliminated every form of children corporal punishment. During the beginning of the twentieth century severe corporal punishment was still a common in Sweden (Sverne, 1993). However, concerns about the welfare of children began to be expressed early in the century (see Durrant and Olsen, 1997).
The first pivotal point in Sweden’s child welfare policy happened when the first legislative reform took place in 1928 and corporal punishment was abolished from Swedish secondary schools (gymnasiums). Later in 1957, the Penal Code defence for parental use of physical punishment was repealed. The epitome and the end of a series of legislative reforms aimed at making the rejection of corporal punishment became increasingly explicit in law after almost 50 years when, in 1979, Sweden finally became the first nation to abolish all types of corporal punishment of children by all caretakers. This law states that: “children are entitled to care, security, and a good upbringing. Children are to be treated with respect for their person and individuality, and may not be subjected to physical punishment or other injurious or humiliating treatment” (Föräldrabalken, Chapter 6, Section 1, see Durrant, 2003).

At the time of its introduction, public opinion was fairly evenly divided on the issue. However, a survey undertaken by the Swedish Government to assess the effects of the legislation found that the ban has been particularly effective in changing attitudes. After 15 years, only 11% of the public supports the use of corporal punishment while its use has diminished dramatically (Durrant, 1999a). In addition, by the mid-1990s, only 36% of Swedish youths had been struck by their mothers by the age of 13, and usually no more than once or twice (Statistics Sweden, 1996, as cited from Durrant, 1999a).

Some groups in favour of retaining the current legislation have argued that Swedish legislation has resulted in an increase in the number of children removed from their families and a rise in antisocial and criminal behaviour among young people, but the official statistics from the Swedish Government do not bear out these claims. As Durrant argues, the only notable transformation was a decreasing in children death rates as a result of abuse by their parents (Durrant, 1999b).

The United Kingdom’s consideration of a ban on parental corporal punishment was prompted by a ruling of the European Court of Human Rights (ECHR) in September 1998. Citing Article 3 of the European Court of Human Rights (ECHR) protecting individuals from inhuman or degrading treatment (Council of Europe, 1998, Prohibition of Torture section), the ECHR ruled that British law did not adequately protect a 9-year-old boy who had been repeatedly beaten by his father with a three-foot long cane and awarded the boy compensatory damages and legal fees (A. versus The United Kingdom, 1998). In response to this ruling, England’s Department of Health in January 2000 issued a consultation document acknowledging that corporal
punishment may be harmful to children. Nevertheless, the government didn’t support a ban on parental corporal punishment.

Several other countries, have now prohibited corporal punishment by parents. In addition to Sweden, European countries such as Finland (1983), Denmark (1986/1997), Norway (1987), Austria (1989), Cyprus (1994), Italy (1996), Latvia (1998), Croatia (1998), Israel (2000), Germany (2000), Bulgaria (2000), Iceland (2003), Ukraine (2004), Romania (2005), Hungary (2005), Portugal (2007), Spain (2007) and Greece (2007) have banned parents’ use of corporal punishment (Durrant, 2008). Moreover, in several other countries around the world physical punishment has been abolished from the school systems. It is forbidden in the schools of all nations of Western Europe, as well as China, Japan, New Zealand, the Russian Federation, South Africa, Thailand, and Zimbabwe, among others. This view was endorsed by the international convention on the rights of children (United Nations) which has been ratified by almost all countries excepting Somalia and the U.S. (United Nations Children’s Fund, 1999). The United Nations’ Convention on the Rights of the Child (1989) explicitly requires that parties shall take all appropriate legislative, administrative, social and educational measures to protect children from all forms of physical or mental violence, injury or abuse, neglect, maltreatment and exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has the care of the child (Article 19, p. 1). In an effort to reduce family violence, the Council of Ministers of the Council of Europe has urged all member states to consider full legal reform and strategies aiming at changing public attitudes on the issue (Council of Europe, 1997).

In 2004, the Parliamentary Assembly of the Council of Europe has called for a Europe-wide ban on all corporal punishment of children. The Commissioner for Human Rights of the Council of Europe has stated: “There is no more telling symbol of [children’s] downgrading than adults’ assumption that they have a “right” even a duty, to hit children”. As the debate over the appropriateness of corporal punishment continues, this brief historic framework gives a fruitful background for a more thorough exploration of the issue.

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4 Parliamentary Assembly of the Council of Europe, Recommendation 1666; p. 6, 2004
CHAPTER 2: Defining the main concepts
2. Defining the main concepts

Before advancing any further it is important to define the different concepts frequently used in this study. To date, there is no national or scientific consensus on what constitutes acceptable definitions of physical discipline. Instead of a universal definition of corporal punishment, there are various sources which attempt to define this behaviour. Oftentimes these definitions are influenced by subsidiary beliefs and views about the appropriateness and efficiency of the method. The spate of definitions and approaches to corporal punishment employed in the research literature is divided upon a major underlying criterion: the acceptance of corporal punishment as an educational technique. Therefore, those that are favourably approaching the issue, mainly the Conservative Protestant groups, tend to distinguish among correct and abusive forms of corporal punishment according to factors as diverse as severity, chronicity, its instrumental or impulsive motivation, legalities, injurious or non-injurious character and so forth. At the opposing side, detractors; among them researchers, child care workers and medical professionals, are of the opinion that such distinctions are artificial and obscure the debate.

2.1.1. Punishment, discipline and educational technique

Even if the term punishment is often associated to a larger notion called discipline, the two words cannot be interchangeably used.

The etymology of punishment shows us that the word derives from the Greek poine and its Latin derivative poena, which means revenge. Therefore its underlying meanings are associated to the ideas of penalty, and penance. In its capitalized form, Poine was the Greek goddess of revenge. In the collective and unconscious perception, the term punishment seems to be linked to an idea of deliberately inflicting pain for the sake of attaining revenge.

For DeBord (1996), punishment is defined as an unpleasant action imposed upon a person in response to an act that was undesirable to the person inflicting the retaliation, whereas discipline is viewed as a larger concept serving to designate a set of major guidelines helping parents in their task of educating a child. A similar view is expressed by Holden (2002) who considers that discipline generally involves instruction and guidance, whereas punishment is intended to suppress responses of the child that are viewed as undesirable by the parent.
2.1.2. Corporal punishment

Corporal punishment, as defined by the Gage Canadian Dictionary, is physical punishment: punishment given by striking the body, as in spanking, strapping, beating, or whipping (1995: p.264). In most societies, corporal punishment is indeed understood as a form of physical chastisement that consists in practices such as spanking, slapping and physical contact that does not leave marks (i.e. bruises, welts, etc.) on the child. Usually the definition is restricted to physical contact with an open hand, and to contact on extremities or buttocks. It excludes behaviours like kicking, twisting arms, shaking, pinching, pulling ears, stabbing, shoving, choking or beating (Canadian Paediatric Society\(^5\), 1996; Friedman and Schonberg, 1996). Most definitions emphasize the normative use of physical punishment as opposed to physical maltreatment. According to others, corporal punishment is a form of discipline that could be defined as bodily punishment of any kind with spanking being considered one of its forms (Friedman and Schonberg, 1996). Educationally, corporal punishment has been generally defined as: the infliction of pain by a teacher or other educational official upon the body of a student as a penalty for doing something which has been disapproved of by the punisher (Wineman and James, 1967).

It is interesting to note that many of the current definitions regarding corporal punishment have included a wider scope of practices associated with physical contact than just spanking. Accordingly, any contact regardless of context or intent, has been interpreted as corporal punishment. Additional studies define corporal punishment as the intentional application of physical pain as a method of changing behaviour and add to the wide variety of behaviours that could be included under the scope of corporal punishment the following methods: painful body postures, use of electric shock, use of excessive exercise drills, or prevention of urine or stool elimination (Bauer et al, 1990).

A distinction within corporal punishment was made in the field literature between planned and unplanned corporal punishment, namely instrumental versus impulsive corporal punishment (Holden and Miller, 1997; Straus and Mouradian, 1998). According to theses authors, if not accompanied by a strong parental emotion but rather a controlled, planned action, it is said to be instrumental. Conversely, when the reaction was triggered spontaneously, in the heat of the moment and accompanied by

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\(^5\) Canadian Paediatric Society’s Statement: Effective Discipline for Children. Ottawa, Ontario; 1996
feelings of anger and impression of being out of control, corporal punishment is said to be impulsive.

While instrumental corporal punishment is likely to be part of the daily disciplinary repertoire for parents, impulsive corporal punishment can be thought of as an incidental episode and it is used only as a last resort with parents feeling frustrated and angry. Parents making use of the instrumental form of corporal punishment tend to show favourable attitudes towards its educational virtues while children subjected to this form of punishment may be more accepting and compliant of this measure (Gershoff, 2002). On the other hand, children experiencing sporadic instances of impulsive corporal punishment may become fearful or angry at their parents. Holden and Miller (1997) have shown that parents who use corporal punishment in an impulsive manner have low expectations for its use in securing compliance and instilling respect for authority, whereas Straus and Mouradian (1998) found that such parents rate their children high in antisocial behaviour.

For some authors the instrumental–impulsive dichotomy is useful to differentiate discipline from abuse (Vasta, 1982). According to these authors, the impulsive form of corporal punishment can no longer be considered corporal punishment but rather a form of physical abuse. However, such a distinction is not supported by research that seems to support the notion that corporal punishment and physical abuse are two points along a continuum, such that if corporal punishment is administered too severely or too frequently, it crosses the line into physical abuse (Garbarino, 1977; Gelles and Straus, 1988; Kadushin and Martin, 1981; Straus and Kantor, 1994; Wolfe, 1987; Zigler and Hall, 1989). Moreover, the notion of a corporal punishment–physical abuse continuum is confirmed by parents recalling that as many as two thirds of their abusive incidents began as attempts to change children’s behaviour or to “teach them a lesson” (Coontz and Martin, 1988; Gil, 1973; Kadushin and Martin, 1981).

Finally, another common definition of corporal punishment used in the related literature is proposed by Strauss and will be used in our work, since it seems to be the most widespread definition used in research: the use of physical force with the intention of causing a child to experience pain but not injury for the purposes of correction or control of the child’s behaviour (Straus, 2001, p. 4).
2.1.3. Corporal punishment and physical punishment

There is no standard usage in the literature for the terms corporal punishment and physical punishment. While many researchers use the terms corporal punishment and physical punishment interchangeably some others seize the distinction between the terms.

According to Rohner, physical punishment refers to:

“the direct or indirect infliction of physical discomfort or pain on a youth by a parent or other person in a position of authority over the youth, usually for the purpose of stopping a youth’s unwanted behaviour, for the purpose of preventing the recurrence of an unwanted behaviour, or because the youth failed to do something (s)he was supposed to do.” (Ripoll-Núñez and Rohner, 2006, p241).

For Maldonado (2004), the key distinction between the two consists in the non abusive character of corporal punishment as compared to physical punishment which is considered somehow abusive. Unlike corporal punishment which implies the use of physical contact by a parent with the intent of modifying the behaviour of the child, by producing an unpleasant and painful sensation, physical punishment also may be part of a parental disciplinary response or it may be used in relative isolation, without teaching and guidance, as an attempt to stop undesired behaviour.

However, it can be argued that whether punishment is construed as a part of parental disciplinary response or is used in relative isolation without evident teaching and guidance meanings is of little importance in understanding the abusive nature of the concept. In addition, the proposition that there is a clear distinctive line between these two forms of punishment remains open for debate as it becomes readily evident from analyzing the two definition offered by Strauss and Rohner that different wording is used for describing the same act. Thus, both definition are involving the notion of pain and are implying that this pain is instrumentally inflicted for “purposes of correcting and controlling the child’s behaviour” in the case of Strauss’ definition and respectively. “for the purpose of preventing the recurrence of unwanted behaviour” in the case of Rohner’s definition. This example of definitional ambiguity illustrates the challenges that exist in situations where a culture or a subculture accepts a practice that others presume to be harmful to children. Far from being an objectively generated confusion triggered by the state of research on the matter and directed by the need to better conceptualize the terms that are to be further used for empirical research, the definitional vagueness is the expression of an
underlying debate over acceptable/unacceptable forms of corporal punishment that is characteristic of a contemporary American society where corporal punishment is fervently supported by various Protestant Conservative groups.

2.1.4. Physical punishment and physical discipline

As for the distinction between *physical punishment* and *physical discipline*, there is a vivid debate in the literature. While it is sometimes argued that *physical punishment* and *physical discipline* are one and the same phenomena (Gil, 1970; Kadushin and Martin, 1981; Trocmé and Durrant, 2003), there is a considerable number of researchers considering that there are some major distinctions between these terms. For instance, Whiple and Richey (1997) contend that a distinction between *physical punishment* and *physical discipline* should be made arguing that by doing so the negative connotation associated with the term *physical punishment* would be avoided. For them *physical discipline* represents a positive technique to be employed with children in a disciplinary context while *physical punishment* carries negative semantics and should definitely be avoided. Again, it could be argued that the researchers proposing this distinction were more concerned with semantics than with the very essence of the act as they have unconvincingly pleaded for the existence of a difference in essence between this rather two synonymic names that were offered for what can be clearly construed as a same act.

2.1.5. Corporal punishment and physical abuse

The concern for distinguishing between *corporal punishment* and *physical abuse* is characteristic among religiously based groups supporting the use of corporal punishment. The involvement of Conservative Protestant groups in this area of research is adding to the terminological confusion as it carries within the idea that one can safely employ coercive force to discipline children.

For Baumrind et al. (2002), what makes the difference between the two is the fact that corporal punishment is a *more moderate application of normative spanking within the context of a generally supportive parent–child relationship* (pp. 580–581). Consequently, he argues that normative spanking should be accepted with only abusive techniques prohibited. According to him, unless this hitting is restricted to several slaps on a young’s child behind with an open hand for the intended purpose of behaviour modification, it is considered child abuse and a part of inappropriate
Form analyzing these two instances of punishment, it becomes self-evident that physical abuse look very much akin to corporal punishment if judged by their manifestations. Both involve hitting or striking children either with hands or with objects and the same dimensions that characterize normative corporal punishment can, when taken to extremes, make hitting a child look much more like abuse than punishment. Unlike Baumrind, many other experts (Gelles and Straus, 1988; Graziano, 1994; Kadushin and Martin, 1981; Gershoff, 2002) contend that corporal punishment can be easily transformed into abuse under certain conditions and therefore, it becomes very dangerous to make such a distinction.

Others (Simons et al., 1991) illustrate the need to focus on the continuous rather than dichotomous nature of these constructs. According to them, it would be more appropriate to better differentiate the continuum of behaviours ranging from physical discipline, to corporal punishment, to physical child abuse. The main issue that such an approach would automatically raise would be to clearly distinguish at what point on the continuum does physical discipline of children become physical abuse? A first attempted answer to this conundrum was frequency. A number of studies that compared clinical and nonclinical samples suggest that part of the distinction between parents who physically discipline their children versus parents who physically abuse may lay in the number of episodes. As a common conclusion reached by these studies is the finding that abusive parents spank their children more often than do their nonabusive counterparts (Barber, 1992; Holden and Ritchie, 1991; Oldershaw, Waiters, and Hall, 1989; Whipple and Webster-Stratton, 1991). Whipple (1997) suggests that a better operationalization of behaviour would be helpful in drawing the line between different instances of educational techniques. By examining five American articles that appeared between 1980 and 1995 that met certain criteria for differentiating among three constructs (physical discipline, corporal punishment, and physical child abuse) and based on samples drawn from the United States, she came to the conclusion that parents “crossing the line” from corporal punishment to abuse may be those whose daily spanking rates are more than two standard deviations above the mean. She suggests that the average amount of spanking done by nonabusive parents is 2.5 times within a 24-hour time period and that parents who become abusive spank their children six or more times per day.

A second factor in drawing the line between corporal punishment and child abuse would be the severity. Dyslin and Thomsen (2005) observed that physical abuse is fundamentally defined by its more extreme forms of physical aggression than
spanking (e.g., being hit with a fist, burned, or choked). Physical child abuse includes forms of parental behaviours, which Straus and Gelles (1990) term very severe violence (e.g., kicking, biting, hitting, beating up, burning or scalding, threatening to or actually using a knife or gun) and includes such visible injuries as bruises, cuts, burns, or broken bones. Physical abuse has also been defined as cruelty to children, [with an individual] knowingly and wilfully inflicting unnecessarily severe corporal punishment or physical suffering upon the child (Widom, 1989a, p.355). Aside from the fact that this definition fails to explicitly establish the point over which corporal punishment can be deemed as “severe”, it conveys in subsidiary the idea that, unlike physical abuse, corporal punishment may, in certain circumstances, meet the conditions for being a necessary disciplinary tool with beneficial outcomes for children’s future adjustment. Sorting out the dilemma, paediatricians with a special interest in child maltreatment and often child development, frequently label spanking as a deviant behaviour. Following this line of reasoning, the executive committee members of the American Academy of Pediatrics’ Section on Child Abuse and Neglect have encouraged paediatricians to discuss with parents “. . . the dangers and harmful effects of corporal punishment [including spanking] and alternative techniques of behavioural management” (Section on Child Abuse and Neglect, 1994, p. 106).

From a different perspective, it could be argued that the array of definition that have been suggested for defining different instances of children corporal punishment are strikingly similar with what constitutes the concept of wife abuse. According to the Ontario Medical Association Committee on Wife Assault (1986) wife abuse is defined as “physical or psychological abuse directed by a man against his female partner, in an attempt to control her behaviour or intimidate her”. As Lansdown (2000) noted, in both cases there is explicit or implicit acceptance on the part of the perpetrator that: it is acceptable for a larger, stronger person to hit a smaller and more vulnerable person, violence is an appropriate or effective means of making someone behave in ways you want them, you have a right to physically hurt the other person and there is social approval for your behaviour. Both forms of violence are based on an underlying power imbalance between the victim and the offender with the perpetrator accomplishing his goals by the inducement of fear. In both situations, abused women/children change their behaviour, preferences and choices because they fear the consequences or retaliation of their abusive partners/parents. Finally, all
forms of abuse result in the women/children losing their dignity, control, safety and personal power.

As far as cases of wife abuse are concerned, the law doesn’t leave any place for doubt; under the Section 265 of the Criminal Code of Canada the crime of using the force or threat of force against another person or that person's property without her consent is called assault. Or, as Durrant (2008) argued, if one accepts that the use of physical punishment to correct a wife, an elderly parent, or a friend’s child is a violation of that individual’s rights, then one must conclude that the use of corporal punishment to correct one’s children cannot longer be accepted as a legitimate parenting tool. From this standpoint, since children are entitled to protection of their physical integrity and dignity equal to the protection that adults enjoy, the search for “beneficial outcomes” of corporal punishment of children should be deemed equivalent to a search for the benefits of physical punishment of wives, seniors, employees, or other groups of human beings. Moreover, attempts to delineate an acceptable level of violence against a child or the search for ethnic subgroups that benefit more from, or are less impacted by, corporal punishment become irrelevant.

To sum up, it is noteworthy to mention that, since violence perpetrated against children is correlated to a host of negative behavioural outcomes in later life, one could not objectively discriminate between acceptable versus unacceptable, necessary versus unnecessary forms of corporal punishment. Consequently, the spate of definitions that have been given for discriminating between different instances of violence against children are dismissed as attempts to legitimize a behaviour that can be referred to as corporal punishment and can be defined as: “the use of physical force with the intention of causing a child to experience pain, but not injury, for the purpose of correction or control of the child’s behaviour” (Straus, 2001, p. 4).

2.2.1. Attitudes and beliefs

In the scientific literature, attitudes and beliefs are somehow used interchangeably often resulting in a lack of understanding and clarity of the two concepts. Attitudes are defined as a mental predisposition to act that is expressed by evaluating a particular entity with some degree of favour or disfavour (Scholl 2002). According to the same author, individuals generally have attitudes that focus on objects, people, institutions and mental categories. Attitudes are comprised of four components: cognitions, affect, behavioural intentions and evaluations. According to Holden and Buck (2002), parenting attitudes reflect tendencies, internal states, or explicit
evaluations pertaining to parents’ actions towards their children, encompassing their perceptions of children and views about child development. An attitude is not passive, but rather it exerts a dynamic or directive influence on behaviour. For Allport (1935), an attitude is “a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related” (1935: page 810). In Allport’s view, attitudes are believed to directly influence behaviour, biases, inclinations and tendencies that organize one’s response to situations, activities, people or goals.

As for the term belief, Siegel (1992) proposes that a belief be defined as a tendency or disposition to describe or relate objects, events, or situations, using individual or conventional premises. Explicitly, he refers to tendencies and dispositions of relationship patterns between objects, events or situations. Each individual, based on his own personal history of interactions with objects, events or situations, creates his own system of associations that are referred to as beliefs. Corral-Verdugo (1995) exemplifies how a system of such beliefs works: if a child behaves improperly then he/she should be punished (1995: p. 670). Another base for the crystallisation of beliefs would be, beside personal experience, the normative prescriptions or the individual’s socio-cultural milieu (Lightfoot and Valsiner, 1992; McGillicuddy-De Lisi and Sigel, 1995). What is more, this predetermined system of beliefs not only could predict future behaviour but could also shape the degree of receptivity to child rearing advice or assistance (according to Goodnow, 1995), since they act as a mould, as glasses used to see the outside world. Beliefs can also bring comfort by providing an organizational framework for experience and by allowing a sense of predictability and control when confronted with unfamiliar circumstances.

In that respect, McGillicuddy-De Lisi and Sigel (1995) state that parenting beliefs help parents cope with daily child caregiving challenges. Similarly to attitudes, a belief manifests itself not only at the level of the linguistic occurrence (I believe that ….), but also underlines behaviour oftentimes.

2.2.2. Attitudes and behaviour

Although child development and clinical approaches to parenting have focused on the relationship between parental attitudes and parenting practices, there seem to have been an implicit assumption that beliefs also motivate action and behaviour (Bugental, Blue, and Druscoza, 1989; Iverson and Segal, 1992; Larrance and
Twentyman, 1983; Trickett and Susman, 1988). It has been well-documented in social psychology that beliefs or attitudes bear only a weak relation to behaviour (Wicker, 1969). Holden and al. (1997) have argued that the intention to use corporal punishment as a parent might not predict the future parent-child interaction patterns as it was revealed in a study in which a bidirectional effect was discovered. Studying a group of mothers whose attitudes towards corporal punishment changed after becoming parents, becoming less in favour of it, he found that 89% reported that their children’s negative reactions to being spanked made them change their attitude and less likely to use corporal punishment.

In attempting to understand the role that attitudes play in predicting the risk for aggressive parenting it is important, according to Jackson et al. (1999), to consider the possibility that the initial role that attitudes play may be obscured by the ongoing interplay between attitudes and behaviours. In other words, once a parent uses corporal punishment she may be inclined to harmonize her attitudes to her actual behaviour. However, the link between attitude and behaviour has been demonstrated in samples of teenage mothers (Whitman, Borkowski, Keogh, and Weed, 2001), and parenting attitudes have been associated with maternal and child functioning in a variety of other samples (Holden, 1995). Furthermore, it has been demonstrated that belief in spanking correlates significantly with both practice (0.46) and severity (0.36) of spanking for parents of children under the age of 4 (Socolar and Stein, 1995). In addition, Straus (1992) has reported that parents believing in the use of corporal punishment hit their children more often, use extreme forms of punishment more often, and have an abuse rate that is four times higher than that of those who do not approve of the method. Therefore, it is expected that parents manifesting their positive attitudes towards corporal punishment and its positive effects should act accordingly with their children. It also follows that a study assessing the presence of positive attitudes regarding the use of corporal punishment should show a high correlation between this attitudinal system and the punitive behaviour.
CHAPTER 3: Theories explaining the use of corporal punishment
This subsection provides an overview of the theoretical frameworks that inform this research. Following are presented theories and models that explain corporal punishment use and its approval such as traumatic bonding theory, social and observational learning theory, attachment theory, social information processing theory, cognitive developmental theory, social situational theory, stress theory and exchange theory. Also, due to its particular emphasis on the role of mediating variables in determining the nature of corporal punishment outcomes, a corollary model called PARTheory is described.

3. Theories explaining the use of corporal punishment

3.1. Preliminary considerations

Before discussing specific theories explaining the use of corporal punishment, it is necessary to take into account current issues in the multidisciplinary field of criminology.

As Garland and Sparks (2000) noted, it is normal occurrence in criminology to find a significant body of research in the field literature that does not employ a single criminological theory; rather using a flourishing multidisciplinary inspired literature. Moreover, there seems to be a lot of research in criminology that is not necessarily guided by theory but is rather originated within an epidemiological model of research. As Ripoll-Núñez and Rhoner (2006) argued, it becomes increasingly difficult to fit a specifically criminological theoretical perspective into this rich and ever-growing body of evidence available. As previous experience has proved it, theory can difficultly, if at all, be generated by research paradigms. The opposite is rather true namely, what seems to inform research design and suggest its work hypotheses is the previous research results obtained within the very same type of background. This holds true for the study of corporal punishment of children that is now growing in different, unexpected new directions.

Lost in this conundrum of theories and approaches we cannot help but ask the crucial epistemological question: how can we know whether a theory is wrong or right? The answer is not simple as we cannot easily differentiate between approaches without taking the risk of losing crucial evidence and important points of view. Moreover, the amount of evidence originated from research cannot be integrated into a generalized theory as that type of research evidence usually lacks ecological grounding and is characterized by a necessary reductionism. Consequently, we can make judgments between more or less adequate explanations offered by a theory and finally we can
chose to follow on a path or another without pretending that we are trying to discover
an ultimate unifying theory and having always in mind that we live in a world in
which there are no final answers.

According to Akers (2000), there should be six criteria for evaluating a theory. First,
theories should be logically consistent; without inherent contradictions, conflicting
statements or hypotheses. A second criterion is scope, or the ability to explain a large
array of behaviours. Applied to our issue of study it is to say that a theory trying to
explain child abuse, spouse abuse, and elder abuse is better, in terms of scope, than
one that explains only child abuse. Third, theories should be parsimonious. In other
words, a theory should possess an irreducible complexity. Any parasitic variables or
principles that would only add to the complexity without ameliorating its explanatory
powers should be avoided. Fourth, a good theory should be testable, thus offering the
opportunity to be refuted or accepted. As a logic consequence, the fifth principle
refers to the availability of empirical evidence. How does the theory fare in terms of
the available empirical evidence? Is it supported by sufficient empirical data?

According to Akers, these are questions that need to be adequately answered by a
good theory. Finally, a theory should have a very precise purpose. A theory that has
no practical value is finally useless unless it can be the source of inspiration for
determining a policy aimed at addressing a specific social problem.

Following, eight theories and two corollary models that use family interaction
patterns and relationships between individual family members as explanatory factors
for family violence will be examined. This attempt is useful for some reasons. First,
it is important to understand why some parents employ corporal punishment as a
means of disciplining their children, while others don’t. Second, this review can
assist us in the formulation of a coherent and scientifically based explanation of the
discovered facts and can also help us draw some pertinent conclusion, recommendation for future research directions and policies that are consistent with
the theory.

3.2.1. Stress Theory

According to Turner (1996), the stress paradigm has been one of the most widely
used and enduring conceptual frameworks for understanding the link between the
social environment and individual outcomes. Thus, one major appeal of this
paradigm is its flexibility and broad range of application. In this section, stress-
process framework and how it may be used to examine the use of corporal
punishment by parents is outlined. The term stress was coined by Hans Selye (1936) who discovered that patients with a variety of ailments manifested many similar symptoms which he ultimately attributed to their bodies' efforts to respond to the stresses of being ill. He called this collection of symptoms stress syndrome, or the general adaptation syndrome (GAS). According to Stokols (1986), the term stress results from an actual or perceived disparity between environmental demands and the organism’s ability to adapt to those demands. Stress is usually manifested through a variety of physiological, emotional, or behavioural responses. The environmental demands or stimuli that that initiate stress are referred to as “stressors”. Rather than representing a static phenomenon, stress is typically viewed as a dynamic interactive process involving a number of different components.

Without a doubt, family represents an important arena for stress experiences as family related events such as widowhood, divorce, unwanted pregnancy, accidents or illness among the family members and unemployment are often highly stress producing. From this theoretical point of view, aggressive impulses that can lead to violent behaviour are seen as reactions to stress. For instance, Monahan (1992) has showed that employment-related stressors such as firings, disputes with superiors or coworkers, or dissatisfaction with the nature of work performed or compensation received represent potential correlates of violent behaviour. Among identified factors accounting for a high incidence of violence within the family are: a high frequency of interaction among family members, the norm of privacy concerning the family, the social acceptance of violence as a legitimate means of settling conflict and the high expectations for families to meet the needs of all family members (Gelles and Straus, 1979). There is evidence in the research literature that stressful conditions can determine parents to use corporal punishment as a form of discipline (Straus et al., 1980). Moreover, there it has been demonstrated that financial strain due to economic loss increases the probability of punitive parenting (Elder and Caspi, 1980). More specifically, it has been suggested that that low SES (socio-economic status) may influence parenting behaviour as parents are inclined to emphasise obedience and external control when disciplining because of their perception that they have little personal control over their environment (Kohn, 1969). However, not all individuals who are exposed to stressors experience adverse outcomes. What accounts for these exceptions are the so-called moderators that are factors that function to increase or decrease susceptibility to a stress outcome. That
is, the association between stress and aggression will become stronger or weaker when a moderating factor is present. According to Turner (2005), social support and coping capabilities of one individual are two types of resources that buffer the adverse effects of stress. Parental attitudes concerning the socialization of children and the distribution of power and authority within the family may also moderate the association between stress and the use of corporal punishment. Mason and Blankenship (1987) suggest that individual with a high need for power may be more likely to be physically aggressive towards an intimate under stress, while Straus (1980) found that men’s attitudes concerning the marital power moderate the effects of stress on wife beating. Thus, it was acknowledged that an authoritarian style of parenting may moderate the association between stress and corporal punishment. Specifically, authoritarian parents who emphasize obedience in children and attach strong values to maintaining their authority are more susceptible to use violence when disciplining under stress than parents without this parenting style.

Importantly, research on parenting practices and child outcomes suggests that not only does corporal punishment itself represent a stressor; it also functions to erode the very resources that have been found to buffer the negative effects of stress. For instance, children exposed to high levels of corporal punishment may receive less social support from peers than those without such an exposure. Bryan and Freed (1982) found that college students who reported high levels of corporal punishment as children or adolescents were more likely than those experiencing less corporal punishment to describe their grades as “below average”, even though there was no actual difference in their grades.

Thus, corporal punishment as both an outcome and source of stress are represented as intervening factors in this larger model. Elder and Caspi (1988) and Patterson (1987, 1988) consider similar models in an attempt to understand the effect of family stressors on children’s behaviour. Elder and Caspi (1988) suggest that economic loss affects “child explosiveness” through its effect on extreme or arbitrary discipline and marital discord, while Patterson (1988) describes how a major crisis, such as unemployment, increases the likelihood of “inept discipline” which in its turn increases the risks of antisocial behaviour. Both these models show how corporal punishment can be viewed as an intermediary link between broad social stress and child development outcomes.

Thus, stress process models that incorporate the broader social context can provide a meaningful framework for understanding how macrosocial and economic conditions
are connected to the use of violence within the family. According to this view, stress associated with events and ongoing strains arising both from the family and from domains outside the family can influence the use of corporal punishment. Within this model, moderating variables such as authoritarian attitudes towards parenting and lack of social support, may increase the likelihood that stress manifest itself in corporal punishment. On the other hand, non-familial social support and more permissive parenting attitudes may reduce this association. Moreover, using a stress-process approach also provides a useful framework for examining possible social-structure differences in the prevalence, antecedents, and outcomes of corporal punishment. For instance, in seeking to understand variations in the use of corporal punishment by social class, parent’s age, or gender, one might argue that a greater exposure to stressors such as financial problems, marital disability, fewer resources that are characteristics of lower classes, may contribute to the increase use of violence.

3.2.2. The social and observational learning theory
Also known as the intergenerational transmission of violence (Bandura, 1977, 1989), the theory provides explanations for how children learn to utilize their parents’ behaviour as a template for their own daily interactions. The theory also provides one of the most blatant arguments against corporal punishment by purporting that aggression is learned through the mechanisms of modelling and imitation (Bandura, 1973, 1977; Parke and Slaby, 1983).

Unwillingly, when parents use physical means of controlling and punishing their children, they are involved in a complex social learning process with long-term effects on their children. Because children experience aggression in the form of corporal punishment, they learn that this is an effective way to get others to behave as they want and will be disposed to imitate it. In other words, they communicate to their children that aggression is perfectly acceptable since it is favoured as a method to obtain compliance (Bandura, 1973; Gelles, 1979; White and Straus, 1981). Moreover, because children are disposed to emulate and please parents whom they care about (Kohlberg, 1969; Kuczynski, Marshall, and Schell, 1997; Mikulas, 1978) corporal punishment becomes very likely to be imitated.

Upon comparing twenty-six highly aggressive adolescent boys with twenty-six control boys, Bandura and Walters (1959) observed that parents of the aggressive boys not only encouraged them to be aggressive but they tended to use corporal
punishment and deprivation as disciplinary techniques. Aronfreed (1968) uses two broad categorizations of the disciplinary measures of parents namely, induction and sensitization. If inductive parents seek to transmit their values and also threaten withdrawal of affection as a reaction to child’s transgressions, the second category of parents uses sensitization which involves corporal punishment, screaming, ridicule and public shaming. He found that children experiencing discipline of the inductive type were less likely to be physically aggressive towards their peers than children whose parents used the sensitization type of discipline. Several other studies have provided support for the theory by showing that persons who were the targets of physical violence as children or saw their parents fighting are more likely to engage in subsequent violence towards their children and spouses (Hotaling and Sugarman, 1986; Kalumss, 1984; Straus, 1983; Straus et al., 1980). While it became obvious that being subject to violence as a child leads to violence as an adult, an important research question pertaining to the mechanisms that account for that transmission has yet to be addressed. There is some limited evidence that points to learned attitudes as one factor that may help explain why being subject to violence as a child leads to violence as an adult. Thus, O’Keefe (1998) found that experiencing violence as a child and acceptance of violence in dating relationships were related to violence in dating relationships while Simons et al. (1991) showed that although beliefs about physical discipline were related to harsh parenting, these beliefs did not mediate the transmission of aggressive parenting across generations. While Simons et al. (1991) did not specify the mechanisms through which the learning might occur they hypothesized that:“harsh parenting might result in the person learning a set of aggressive disciplinary behaviours that are used in a reflexive, rather unthinking way” (1991: p. 167). Markowitz (2001) suggests that children who are subject to violence come to engage in violence in their later marital relationships because they acquire certain attitudes which facilitate violence. However, although both experiences and attitudes were found to be related to violence against children, Markowitz’s findings seem to suggest that attitudes explain only the link between experiencing violence as a child and adult violence against spouses.

To summarize, social-learning theory emphasises social situations as the context in which behaviour is learned. According to Bandura (1977), the mediation of other people is a critical requirement for changing or learning a new behaviour. However, he admitted that that learning do not occurs only through direct experience, it can also take place by observing the example of others.
3.2.3. Attachment theory

Another potentially helpful insight for this study can be found in attachment theory (Bowlby, 1973, 1980, 1982; Bartholomew and Horowitz, 1991; Bartholomew and Shaver, 1998). Bowlby (1982), states that the quality of the child-parent relationship serves as a foundation for later representational working models which consists in a set of internalized beliefs and expectations about oneself and others. These working models contribute in helping the child conceptualize and relate to the social and physical world, thus providing him with strategies to resolve his later developmental issues. Basically, attachment theorists postulate that the child in a secure attachment relationship views the caregiver as loving and responsive and herself as loveable and valuable. At the other extremity, the child who manifests an insecure attachment approaches new social relationships in a maladaptive way that can put her at risk for aggression, as well as dependency and impulse control problems. Moreover, Bowlby’s attachment theory has been used to explain some men’s hostility and anger towards an intimate as their current attachment style has been seen as a moderating factor. Evidence from several studies suggests that difficulties in interpersonal interactions in abusive and neglecting families are the result of disturbed patterns of attachment (e.g., Egeland et al, 1983; Kolko, 1992).

In a study examining the parental child correlates of child attachment within a sample of economically disadvantaged African American preschool-aged children, Barnett et al. (1998) found that 61% of the subjects were classified as securely attached, with girls being significantly more likely to be securely attached than boys (74% versus 45%). Their findings were consistent with attachment theory in showing that parents of securely attached children were rated as significantly more warm and accepting and less controlling with their children than were parents of insecurely attached preschoolers. Relative to parents of securely attached preschoolers, parents of children judged to be insecurely attached reported being more likely to use corporal punishment and less likely to use verbal reminders when their children misbehaved. Though the girls were more likely manifest secure attachments, it was the study’s main conclusion that parenting style was associated with attachment over and above the effects of child sex.

3.2.4. Traumatic Bonding Theory

As a contemporary theory, traumatic bonding theory (Dutton and Painter, 1981) explains family violence in terms of unique relationships that develops between
victim and abuser. Initially, the theory has been employed to explain and treat intimate partner abuse as well as incest. Dutton and Painter (1981) defined traumatic bonding as: "strong emotional ties that develop between two persons where one person intermittently harasses, beats, threatens, abuses or intimidates the other" (1981: p. 106). The theory was originally conceived to explain why women not only do not leave abusive relationships but do not protect themselves or their children.

The main idea espoused by Dutton and Painter’s traumatic bonding theory was that powerful emotional attachments develop from two specific features of abuse relationships: power imbalances and intermittent good treatment (Dutton and Painter, 1993). Pertaining to the first feature of traumatic bonding, namely the power imbalance, Dutton and Painter found that attachment to a person or group larger than the self can increase feelings of personal power but also can create a microcosm in which the subordinate individual feels powerless. Social psychologists have found that unequal power relationships can become increasingly imbalanced over time to the point where the power dynamic itself produces pathology in individuals. Lewin, Lippitt and White (1947) reported increased redirected aggression in powerless members of autocratic groups and Bettleheim (1943) reported Jewish prisoners’ compulsive copying of the behaviour and expressed attitudes of the Nazi prison guards, which he described as “identification with the aggressor”. As the power imbalance magnifies, the subjugated person feels more negative in the self-appraisal, more incapable of fending for herself, and is thus, increasingly more in need of the dominator (Dutton and Painter, 1993). According to the same authors, when coupled with emotional abuse, including threats against the woman and her children and a generalized feeling of powerlessness felt by the victim, physical abuse can serve to maintain the power differential and the relationship homeostasis in battering relationships.

As part of the second component of traumatic bonding theory, the dominator intermittently and periodically maltreats the dominated by threats, verbal and/or physical abuse (From, 1973; Gelles, 1976). The offset is likely to be characterized by the onset of positive behaviours, which Walker (1979) describes as the contrition phase of the abuse cycle. In support of Walker’s cycle of violence, Dutton and Painter (1993) argued that, in the aftermath of a battering incident, the abuser is usually dominated by guilt and contrition which leads him to adopting an exceptionally loving behaviour that serves to reduce the aversive arousal he himself
created by providing reinforcement for his partner to stay in the relationship. Mary deYoung (1992) argues that this cycle of abuse creates a strong emotional tie that is characterized by cognitive distortions and bizarre behavioural strategies that perpetuate the abuse and strengthen the bond.

Despite the fact that the theory was not originally conceived to explain parents to children violence, it has a relative ability to explain “maltreatment effects” (Rajecki, et al., 1978). Thus, Rajecki, Lamb and Obmascher (1978) found conclusive evidence for enhanced infant attachment under conditions of intermittent maltreatment. It was also discovered that attempts to inhibit infants’ bonding to abusive attachment objects were found to inevitably fail unless: 1) they were persistent and consistently abusive and 2) an alternate attachment object existed (Rajecki, et al., 1978).

3.2.5. The social information processing theory

Crick and Dodge’s theory (1996) holds that children approach situations depending both on their innate biological abilities and their expectancies that are learned through experience. To apply this theory to corporal punishment, Dodge and all (1995) contend that experiencing corporal punishment as a child may affect the manner in which a person will processes information regarding the behaviours and intentions of others. That is, children recipients of corporal corrections are susceptible to interpret them as acts of aggressions against them and radiate as a result a general hostility in their interpersonal relations. Thus, having interiorised the fear of being a target of hostility, these individuals employ aggressiveness as a defensive strategy. The theory describes a set of cognitive-emotional mechanisms that have been found to account, in part, for the link between a host of risk factors and the subsequent development of aggression (e.g., Crick and Dodge, 1994). Within the field of developmental psychopathology, social information processing theory was among the major theoretical framework that has been used for addressing the question of which proximal factors give rise to aggression. More specifically, several steps have been proposed within the social information processing theory: encoding, making attributions, selecting a goal, generating responses, evaluating responses, and enacting responses (e.g., Crick and Dodge, 1994; Dodge, Bates, and Pettit, 1990). First, encoding is the process of taking in information from the environment. Subsequently, based on the information encoded from a particular situation, the children could make attributions that involve deciding what motivates the behaviour of other people. This is the point where they could decide that others acted with
benign, hostile or ambivalent intent. Third, a goal is selected by choosing the most desired outcome in a given situation. Fourth, generating responses is the process of thinking of behavioural reactions to a given situation. Fifth, evaluating responses occurs when children assess whether a response is a good one to use in a particular situation and whether that response will be associated with desired outcomes. Finally, enacting responses is the manner in which a child actually behaves.

The aggressive behaviour is, according to this perspective, due to specific deficits that might occur at the level of each of these six steps. For instance, at the encoding information stage problems might occur involving either hypervigilance to hostile cues or neglecting to take in consideration relevant non-hostile cues (Dodge, Bates, and Pettit, 1990). Making false attributions (Dodge, Price, Bachorowski, and Newman, 1990), selecting instrumental (e.g., winning a game) rather than interpersonal (e.g., maintaining a friendship) goals (Slaby and Guerra, 1988), generating fewer behavioural responses overall and a higher proportion of aggressive responses to problems (Asarnow and Callan, 1985), positively evaluating the likely interpersonal and instrumental outcomes of aggression (Crick and Ladd, 1990), and a tendency for enacting aggressive responses (Dodge, Mccluskey, and Feldman, 1985) are the cognitive-emotional mechanisms that account for the link between specific risk factors and the subsequent development of aggression.

It is useful to note that the links between social information processing theory and attachment theory are obvious. Chronologically, attachment theory was the first theoretical framework to use cognitive-emotional mechanisms as explanations for aggressive behaviours and is admittedly operating with a set of more complex hypotheses offering a larger explanatory potential. Using attachment theory as theoretical foundation, the social information processing theory developed a set of similar hypotheses that were refined to include new concepts with certain probative implications for developmental psychology. When framed this way, social information processing theory along with attachment theory can be construed as two components of a major theoretical tendency in contemporary psychology.

3.2.6. Cognitive-Developmental Theory
The developmental theory proposed by Piaget (1932) provides a useful framework for the study of children’s beliefs, moral judgments, and affects related to the experience of corporal punishment. Although Piaget (1932) did not originally intend it, this theoretical approach has been known over the last years under the generic
name of cognitive-developmental theory. Cognitive developmental theory assumes that cognition is the driving force behind all developmental change and sees behaviour and emotions as mere reflections of the cognitive developmental trajectory. As the diversity and frequency of experiences increase, human development is characterized by an ongoing decline in egocentrism that gives place to the expansion of an increasingly complex process of understanding alterity. Throughout this developmental process, the human being acquires the ability to understand others’ perspectives and motives as well as the capacity to reflect and articulate their own reflections of the world.

The developmental pattern of cognition is reflected in ongoing changes in one’s thoughts about social interactions (Garvey and Hogan, 1988), relationships (Nucci, 2004), and morality (Nucci, 2004). From this perspective, cognitive development underlies not only children’s moral reasoning and understanding of emotions but also their moral development. According to this theoretical approach, children’s moral development follows the same trajectory as their cognitive development. Piaget (1932) postulates the existence of a multi-staged moral developmental process. Throughout this process, children are evolving from a stage characterized by heteronomy (a non-discriminating rule-based approach to moral issues with a focus on rewards and punishments meted out by adults) to one characterized by autonomy (a more complex justice-based approach which involves greater understanding of the origins, functions, and aims of rules). As a result, children will eventually become increasingly discriminating in their reasoning about justice, fairness, punishment, and reward and will tend to have a more nuanced understanding of experience and develop the capacity to consider multiple motivations and conflicting dimensions of a situation. As they reject simplistic undifferentiated reasoning schema, children will grow to recognize that they and others can experience two emotions simultaneously (Harris, 1989) and that others’ emotional responses to a given situation may differ from their own. Their empathetic capabilities will also be stimulated to grow as they will become increasingly competent, not only in understanding and expressing their own emotional responses, but also in understanding the emotions of others (Brown and Dunn, 1996; Denham et al., 2002). The cognitive development theory perspective on corporal punishment says, essentially, that it would only be appropriate to be used during the earliest years of life and only at a minimum in later childhood and adolescence if the individual is to move away from heteronomous morality towards a more autonomous morality. Influenced by Piaget’s and Dewey’s
writings, Kohlberg (1983) elaborated a theory of cognitive moral development that generated a philosophy of moral education designed to stimulate moral development. Theory states that moral development passes through six developmental stages allotted to three moral levels: pre-conventional, conventional and post-conventional, autonomous or principled level. These stages are hierarchical insofar as thinking at a higher stage encompasses within it thinking at lower stages. Applying Kohlberg’s theory to corporal punishment it is interesting to note that first stage in Kohlberg’s theory is based on punishment, obedience and physical power where rules are obeyed to avoid punishment, whereas children situated at the second stage of moral development are characterized by conformity to obtain rewards. As children advance to higher stages of moral development, they do not base their morality on respect for authority figures; rather their respect for rules can be defined in terms of duties and respect for other’s rights. In other words, the theory contends that punishment in general, and corporal punishment specifically, is less justified in late childhood and early adolescence as children move towards stages of autonomous morality where social experience and peer interaction become the main vehicles of morality and commitment to rules.

The findings of the existent body of research based on the developmental approach can be useful in generating hypotheses about the developmental trajectory of children’s understanding of this experience. Indeed, research about children’s cognitive judgments of corporal punishment has largely focused on their views of its acceptability. Findings tend to support the cognitive-developmental perspective that younger children are more accepting of physical punishment than older children (Catron and Masters, 1993; Sorbring, Deater-Deckard, and Palmerus, 2005) and tend to have more favourable attitudes towards physical punishment in general. For example, Sorbring et al. (2005) found that, among nine to twelve year-olds, favourability ratings of corporal punishment decreased with age. Catron and Masters (1993) showed that four and five year-olds tend to consider corporal punishment acceptable regardless of the transgression or the agent of punishment, while eleven and twelve year-olds are more discriminating in their acceptance of corporal punishment. However, it could be argued that the relationship between children’s assessments of the acceptability of corporal punishment and age may be obscured by the intercession of a number of unaccounted for factors such as culture (Carlson (1986), disciplinary history (Bower and Knutson , 1996) and hostile parent–child relationships (Rutter, Giller, and Hagell, 1998). As far as fairness of the punishment
is concerned, the few studies that have examined children’s thinking on the matter have found that school-aged children tend to consider *proof of guilt* to be an important dimension of a punishment’s fairness. Consequently, parental punishment administered without proof of the child’s guilt is believed to be unfair (Gold, Darley, Hilton and Zana, 1984).

Studies have also shown that children draw distinctions between moral and other types of transgressions from a young age (Catron and Masters, 1993; Nucci and Turiel, 1978; Smetana, 1981, 1985; Tisak and Turiel, 1984; Turiel, 1983; Weston and Turiel, 1980). Out of the three different categories of transgressions outlined in the field literature (moral, prudential and social convention (for a more detailed description see Sigvaldason, 2006), it appears that preschool age children rate prudential transgressions as most serious, followed by moral transgressions and then social convention transgressions (Catron and Masters, 1993).

According to theory, children’s egocentrism is likely to decline as the social perspective abilities increase. During the process, morality, cognition and emotion may develop interactively and together may account for some of the behavioural outcomes associated with corporal punishment.

3.2.7. The social situational model

The social situational model (Gelles and Cornell, 1985), discussed in Gelles and Straus (1979) as the structural strain model proposes that violence within the family results from two main factors. The first factor is structural stress according to which people in certain positions within society, for instance individuals form lower socioeconomic strata, suffer from more frustration and stress than their wealthier counterparts. The second factor is the existence of a cultural norm that encourages the use of force as a habitual response to this frustration (Coser, 1967). Thus, different practices should emerge among different ethnic, religious, and economic groups. Nonetheless, research that examines the relationship between ethnic group membership and the use of corporal punishment continues to be inconclusive. On one hand, Wolfner and Gelles (1993) found that Black parents were more likely than other categories of parents to use physical punishment. Alvy (1987), as well as Heffer and Kelley (1987), also found that African American parents were more likely than White parents to approve of spanking and other forms of corporal punishment. On the other hand, Stark and McEvoy (1970) found that about the same proportion of Black parents as White parents reported spanking their children. Others
(Escovar and Escovar, 1985; Straus, 1990) have found that White parents were more likely than minority parents to use corporal punishment. Straus (1994) provides further support for this finding, indicating that after controlling for characteristics such as socioeconomic status, age, and whether or not there was violence between the parents, White parents were more likely than Black parents to hit their children. One particular type of cultural factor with a great influence on corporal punishment rates is characterized by a religious theme and doctrine. The “spare the rod” ideology has both religious and secular justifications for corporal punishment in childrearing practices (Davis, 1977). Numerous studies have found that there is a strong and positive relationship between attitudes towards religion and approval for using corporal punishment (Ellison and Sherkat 1993; Ellison, Bartkowski and Segal, 1996; Wiehe, 1990). Ellison and Sherkat (1993) contend that because many Christians believe those who violate God’s rules must be punished, they are likely to endorse using strong, authoritarian disciplinary child-rearing practices. This is particularly true for conservative or fundamentalist Protestant parents. Ellison, Bartkowski, and Segal (1996) found that parents who were conservative Protestants were far more likely to spank their children than parents who were less conservative scriptural believers. Similarly, Capps (1995) argued that elements of traditional Christian doctrine support and promote corporal punishment among fundamentalist Christian parents (see also Bottoms, Nielsen, Murray, and Filipas, 2003; Maurer, 1982; Straus, 1994).

Socioeconomic factors are also theoretically associated with the use of corporal punishment of children. It has been argued that parents from lower socioeconomic classes are more likely to use corporal punishment (Wauchope and Straus, 1990). However, additional research that examined the relationship between socioeconomic class and the use of corporal punishment continues to be inconclusive. Straus (1994) concluded that after controlling for age and ethnicity of parent and whether or not there was violence between the parents, there was no significant relationship between socioeconomic class and the use of corporal punishment.

### 3.2.8. PARTheory

Although often referred to in the field literature as a theory, PARTheory can be better defined as a corollary model that aims at describing the role of mediating factors in the relation between corporal punishment and outcomes. Several authors (Matos and Rohner, 2004; Rohner et al., 1996) argue that the negative outcomes that are
likely to be elicited by the use of corporal punishment are moderated by the perceived *parental acceptance-rejection* factor. Along the same line, Cohen and Wills’ (1985) stress-buffering model suggests that support characterized by acceptance, understanding, and responsiveness may protect individuals from the negative effects of stressful events.

Consequently, as a key factor in determining the effects of corporal punishment, Cohen and Wills (1985) have introduced - in addition to studying parents’ reports of their behaviours towards their children - children’s perceptions of their own current experiences of corporal punishment. In so doing, they take the opportunity to better understand the complexity of children’s reality and the role of several other factors such as the *severity, frequency* and *consistency* of punishment in their experiences with corporal punishment. These studies have shown that the magnitude of correlations between punishment and negative outcomes are mediated by the parental acceptance-rejection factor. Notably, Rohner *et al.* (1991) found that children who experienced love and acceptance from a parent using corporal punishment tended to demonstrate positive levels of adjustment.

Several studies based on PARTheory propose the existence of nonlinear relations between corporal punishment and outcomes (Mathurin *et al.*, 2006; Rohner *et al.*, 1996). However, Turner and Finkelhor (1996) found that children who experienced a high frequency of corporal punishment in conjunction with high parental support exhibited greater distress. It seems that parents who are both highly supportive and frequently employ corporal punishment may foster adverse effects in their children. Such children seem inclined to interpret the existence of these two antagonizing factors that is, supportiveness and the use of corporal punishment, in a self-destructive manner, affecting their self esteem. In their minds, they believe that since they are so harshly disciplined by such loving parents, they must be very bad and deserving of every bit of incurred punishment.

### 3.2.9. Exchange Theory

Initially developed by social psychologist George C. Homans (1961), theory saw social interactions as transactions where we bring certain qualities or resources (investment/cost) and we expect in return to reap some kind of benefit (reward). The theory was further built by Gelles (1997) and extended to apply to cases of family violence. As with the general exchange theory, the key assumption of an exchange theory of corporal punishment is that human interaction is guided by the pursuit of
rewards and the avoidance of punishment and costs. The theory explains both why parents use corporal punishment and why they believe corporal punishment is effective. As Gelles concluded, family members will abuse other family members because they can and because it is inexpensive (Gelles, 1997). In other words, parents use corporal punishment because the costs of using that behaviour do not outweigh the rewards. Also, it is believed that what lowers the perceived costs of using corporal punishment is a long-held cultural belief that corporal punishment is effective and that societies and children would be harmed in its absence. Consequently, in such cultures, subcultures and communities the likelihood of using corporal punishment is higher. Another key element that was linked with greater rates of corporal punishment was a perceived lack of reciprocity in parent’s exchanges with children. Blau (1964) explains that interactions can only continue if reciprocal exchanges occur. A person who supplies reward service to another obliges the other to reciprocate in furnishing benefits to the first. If reciprocity is not received the interactions will be broken off and corporal punishment becomes very likely to ensue. Another unique aspect of the parent-child relationship is the substantial difference in power at personal, social and level. For most of their interactions with their offspring, parents are physically larger and have more economic, personal, and social resources. Since the exchanges between parents and children are inequitable, with the parents holding a privileged place, the playing field wherein cost and rewards are calculated is not an even one. In this context, the use of corporal punishment is not necessarily the last resort used by parents to redress an imbalance in cost and rewards. Conversely, violence may very well be a first choice of behaviour for many parents in order to achieve a certain level of distributive justice or reciprocity. What is more, theory holds that the power differentials in the child-parent relationship are reinforced by private settings where severity and frequency of corporal punishment is sensibly increased. Based on power imbalances that characterizes the parent-child relations, it is expected for the larger and more powerful parent to use corporal punishment when their children are physically or emotionally unlikely to use violence in response or to inflict other costs for the parent who uses corporal punishment. Putting it differently, younger children are more likely than their older counterparts to be subjected to episodes of corporal punishment that tend to surpass in severity and frequency the episodes of punishment received by older children. Finally, since the decision of resorting to violence is entirely at the parental discretion, children perceived as “difficult” or chronically
disobedient, are more likely to receive corporal punishment than children perceived as compliant, or well-behaved be children perceived (for a more detailed explanation of theory’s propositions see Strauss and Donnelly, 2005).

Data on parents’ attitudes towards corporal punishment and their use of corporal punishment against their children suggests that the key component of an exchange theory of corporal punishment may be the actual perceived rewards and cost of corporal punishment. A public opinion survey on attitudes and behaviours conducted each year by the National Committee to Prevent Child Abuse has found a decrease in recent years of respondents supporting the statement that corporal punishment very often or often leads to child injuries. Also, self-reports of spanking or hitting a child have declined from 64 percent in 1988 to 49 percent in 1995 (Daro, 1997). From an exchange theory perspective, one reason for the fact that the reduction in self-reports of spanking does not seem to be a function of an increase in parents who believe that there are harmful consequences of corporal punishment is that parents believe that the rewards of actually using corporal punishment exceed the costs. According to Dairo (1995), as important as cultural approval of corporal punishment may be in explaining the use of corporal punishment, the most important factor of change in corporal punishment rates may be occurring because parents find this behaviour ineffective.

In conclusion, exchange theory provides a useful conceptual framework and falsifiable propositions on the role played by attitudes towards corporal punishment. By postulating cultural factors as mechanisms of perpetuating corporal punishment, the theory suggests interesting avenues of tackling the behaviour. Namely, parents’ legal and constitutional rights to raise their children without unwarranted interference by the state should be questioned while child welfare agencies should be allowed to play a more prominent place in redressing the existent imbalances in child-parent relationships. By raising the costs of corporal punishment, the governments may be successful in changing parents’ cost-benefit calculation. In addition, as Straus contended (2005), another important factor that might bring parents to rethink the assumption that the benefits of using corporal punishment outweigh the costs is the pursuing of a line of research that clearly and unequivocally underlies the negative outcomes of corporal punishment.
3.3. Conclusions

The theories and models proposed above, though very useful in explaining corporal punishment are not flawless. For instance, the theories do not take into account the larger sociological issues that affect violence within the family such as the larger cultural and economical background; neither do they focus on the peculiarities of the actors involved. More specifically, by focussing on in situ mental actions, social information processing theory locates the source of deviant behaviour in the individual in contrast to the broader social ecology, therefore neglecting enduring structural components of personality that are emphasized in psychoanalytic and cognitive-developmental theories. Theory also suggests that patterns of information processing related to child rearing situations as well as beliefs associated to parenting are related to risk for physically punishing the child (Milner, 2000). Situational factors, such as high levels of stress, are further compounded by automatic patterns of information processing and may lead to increase risk for parents to engage in physical aggression against their children (e.g., Hillson and Kuiper, 1994). That is, under conditions of high stress parents may be more likely to engage in rapid, automatic information processing (vs. more controlled, flexible processing), which may increase the influence of basic belief structures on parenting behaviour (Milner, 2000). From a similar point of view, social-learning theory explanations focus on how factors in the social environment may influence the use of and responses to corporal punishment. Social learning theorists suggest that learning can occur by observing the behaviours of others and the outcomes of those behaviours and may or may not result in a behaviour change. However, over the last 30 years social learning theory has become increasingly aware of the role played by enduring structures of personality. Hence, the contemporary social learning perspective is now arguing that the role of cognitive processes in promoting learning is paramount. From this point of view, social learning theory can be viewed as a bridge between behaviourist learning theories and cognitive learning theories. Among other behaviours, corporal punishment can be viewed as a learned behaviour that is acquired by observation and hence, theory suggests that if parents are to breakdown traditional stereotypes concerning the value of corporal punishment they should expose children to a variety of other models of non-violent punishment.

On the other hand, theories situated at higher explanatory levels suggest that risk for physical child abuse is best understood as a dynamic construct involving the interplay of characteristics of the individual, the family, and of the larger social
context (Belsky, 1993; Cicchetti and Rizley, 1981). Thus, according to stress theory, beliefs regarding parenting (e.g., belief in the value of corporal punishment) and high levels of stress may interact in such a way that the association between parenting stress and risk for engaging in violent acts might vary depending on the parent’s belief in the value of corporal punishment. Environmental stress theory points out to several relatively unexplored variables that would be expected to influence parental solicitude and thus, increase the incidence of corporal punishment. That is, highly stress producing factors such as divorce and remarriage, unemployment, unwanted pregnancy, accidents or illness among the family members are further compounded by a second set of factors called moderators (e.g. social support, parental attitudes concerning the socialization of children, the distribution of power authority within the family, parents’ perception about their childcare burden) who function to increase or decrease the susceptibility to a stress outcome. By considering the above processes, the stress model provides a theoretical framework for understanding how the social environmental of adults, reflected in family and work-related experiences can influence the development and well-being of children. However, though it may provide a checklist to use in thinking about possible factors that might lead to the use of corporal punishment, a simple model of environmental stress cannot predict the incidence of corporal punishment in families very well as it is obvious that the nonlinear effects of ecological and sociodemographic variables cannot be explained only by looking at available options offered by stress theory.

One possible improvement is offered by exchange theory that sees the widespread use of corporal punishment as a result of a larger cultural support. According to this point of view, corporal punishment is a culturally disseminated behaviour that is used by individuals who have much more physical, social and economic power than those on whom corporal punishment is imposed. Also, the key explanatory component of an exchange approach of corporal punishment may be the actual perceived rewards and costs of corporal punishment.

As far as their positions towards corporal punishment are concerned, different approaches are adopted to explain, to motivate or, as the case may be, to minimize possible negative outcomes of corporal punishment. For instance, from a cognitive developmental angle, corporal punishment is viewed as, at the very least, harmless when applied to children situated at early stages of their cognitive development. By contending that disciplinary systems that utilize punishment do not necessarily arrest the moral development of young children, the cognitive developmental theory is
situating itself in stark contrast with attachment theory who stresses on the importan
tice of consolidating, from early stages, of a secure child-parent relationship that contributes in providing the child with strategies to resolve her later developmental issues. Moreover, since attachment theorists postulate that difficulties in interpersonal relations in abusive families are the result of disturbed pattern of attachment (e.g., Egeland et al., 1983; Kolko, 1992), strict limits are put on the severity and nature of punishments available to the caretaker. In that respect, corporal punishment appears to be very risky as it may destroy the relationship and destroy the attachment to its source.

In this debate over the appropriateness of corporal punishment use, a distinctive perspective is embraced by PARTheory that proposes the existence of nonlinear relations between corporal punishment and outcomes. That is, negative outcomes that are likely to be elicited by the use of corporal punishment are moderated by the perceived parental acceptance-rejection factor. According to the model, corporal punishment cannot be attributed any specific role as long as other factors surrounding the experience of corporal punishment have not been taken into consideration. In so doing, the model takes the opportunity to better understand the complexity of children’s reality and the role of several other factors such as the parental acceptance-rejection (Rohner et al., 1991) and children’s perceptions of their own current experiences of corporal punishment (Cohen and Wills, 1985).

As it was previously stated, it is particularly difficult to point out a specific theoretical perspective that is entirely capable to provide a satisfactory theoretical background for the rich and ever-growing body of evidence available. Though, the aim of the present study is not to present data in support for a certain theoretical perspective, it is suggested throughout the paper that the attitudes towards corporal punishment play a major role in crystallizing the intentions to use corporal punishment. Consequently, for the purpose of this study, we choose to focus only on those explanations explicitly trying to cast a light on the children’s subjective experience with corporal punishment and the way this experience affects attitudes. From this point of view, the results of the present study seem to resonate with the propositions of exchange theory that predict that an increase in rates of corporal punishment is a function of an increase in parents who believe that there are harmless consequences associated to the use of corporal punishment and are persuaded that the rewards of actually using corporal punishment exceed the costs. Furthermore, this belief, reinforced by an important cultural approval of corporal punishment use, is
morally internalized by parents. According to Grusec and Goodnow (1994), moral internalization is defined by as “taking over the values and attitudes of society as one’s own so that socially acceptable behaviour is motivated not by anticipation of external consequences but by intrinsic or internal factors” (p. 4). Ultimately, the internalization process may offer possible explanations as to how culturally shaped behaviours reinforced by experience are changed into stable intrinsic predispositions to act.

As it appeared throughout the section, different approaches employed to explain the use of corporal punishment emphasised the role of different variables associated with the use of corporal punishment. However, these theories will not be tested in this study as it is obvious that such an enterprise would exceed the scope and the complexity of the present research. Since the ultimate goal of the present paper is to test the mediating role of attitudes and other variables in the relationship between punishment variables and intention to use corporal punishment, an analysis of various variables that were associated in the literature with corporal punishment will be performed throughout the next section.
CHAPTER 4: Research on corporal punishment
Following a scant presentation of the most relevant theories explaining the use of corporal punishment a literature review of factors that have most frequently been used in the scientific literature to explain the use of corporal punishment is presented. The above-mentioned factors were also included in the database and further categorized according to their specific role and place in the explanatory model.

4. Research on corporal punishment

4.1. Factors associated to the use of corporal punishment

The parent-child relationship within disciplinary contexts has been typically conceived in two different ways. On one side it has been argued that the child-parent interaction is not egalitarian as it represents a dominance hierarchy in which the parent holds a privileged place as he is both stronger and responsible for the welfare of the child. In this rationale, parents are viewed as responsible agents capable to decide whether to function as wiser, stronger, and protective figures or to become aggressive against the weaker, less experienced child. On the other hand, it has also been contended that children’s characteristics may often function as precipitating factors capable to elicit changes in parents’ disciplinary behaviours. According to this model, children who are oppositional and defiant tend to elicit aversive behaviours, such as hostile verbal reprimands and corporal punishment from parents. However, as Patterson (1995) argued, given the complex and dynamic character of child-parent relationships it is possible that parents’ and children’s characteristics mutually influence one another across time. Therefore, throughout the following section a brief examination of both parent’s and child’s characteristics that have been most frequently associated in the scientific literature with increases in rates of corporal punishment will be performed.

4.2. Characteristics of the parent

4.2.1. Parental attitudes towards corporal punishment

Belsky (1993), considers that “cultural attitudes, values and practices are not in any sense an immediate or proximate cause of child abuse” (1993; p. 423). According to him, their influence on personal dispositions, such as, beliefs, is prominent as he considers that the etiology of child maltreatment can be traced back to a given society’s attitude towards corporal punishment. Holden and all (1995), as well as Straus (1991), argue that the more a parent favours corporal punishment, the more likely that parent is to use it with his or her children. Ateah and Durant (2005) found
significant positive correlations between favourable attitudes towards corporal punishment and the frequency of using physical corrections while Socolar and Stein (1995) argued that the fact of approving of a certain educative strategy is of greater importance than the level of impulsivity and the emotional state of the parent.

Since attitudes towards physical discipline are deemed to be one of the most important predictors of future corporal punishment use, a large amount of studies has been dedicated to the constellation of attitudes associated to the use of corporal punishment as well as to their salient role as a motivator to act aggressively. Also, a great deal of research has focused on factors that might influence the genesis as well as the direction (positive or negative) of such attitudes. Mostly, this preoccupation first originated within the frame of the intergenerational transmission of violence theory (Bandura, 1977, 1989, Simons et al., 1991; Rodriguez and Sutherland, 1999).

Ever since, it became apparent to everybody that the more strongly parents approve of physical punishment, the more harshly they administer it. Moore and Straus (1987) have revealed a fact that is now fundamentally accepted: parents who approve of corporal punishment have a child abuse rate four times higher than that of parents who do not approve of it. Likewise, Lenton (1990) found that the likelihood of maternal use of more violent discipline increases with a belief in the "necessity, normalcy and goodness of physical punishment" (p. 173). Of all the variables studied by researchers seeking to identify the predictors of parental physical punishment use, such as gender of the parent (e.g., Day, Peterson, and McCracken, 1998), gender of the child (e.g., Knutson and Selner, 1994), age of the child (e.g., Wauchope and Straus, 1992), family stress (Jackson, Gyamfi, Brooks-Gunn, and Blake, 1998), type of behavioural transgression (e.g., Catron and Masters, 1993) e.g., the approval of corporal punishment use was found to be the most consistent and powerful predictor of parental corporal punishment accounting for nearly a third of the variance in the use of such a type of punishment (Ateah and Durrant, 2003).

Research with college students suggests that the belief that corporal punishment constitutes an appropriate disciplining technique exists even prior to parenthood. The Graziano and Namaste’s (1990) survey of 700 college freshmen indicate that an overwhelming majority believed that parents have the right to spank children (85%) and almost all of them admitted that they intended to spank their own children (83%). Hence, in an attempt to reduce the risk of child abuse, the study of disciplinary attitudes associated to the use of corporal punishment has been considered essential. Therefore, negative perceptions of the child (Larrance and
Twentyman, 1983), religious affiliation and beliefs (Greven, 1991; Kuczynski and Hildebrandt, 1997), unrealistic expectations regarding attainment of developmental milestones (Williamson, Borduin, and Howe, 1991), the notion that corporal punishment is a way to correct perceived child misconduct (Corse, Schmid, and Trickett, 1990), perception of the child as deserving harsh punishment (Rodriguez and Price, 2004), belief that children's transgressions are seriously wrong (Chilamkurti and Milner, 1993), personal family experiences and having experienced a particular type of punishment (e.g., shaking, spanking, hitting with an object) (Bower and Knutson, 1996; Bower-Russa et al., 2001; Buntain-Ricklefs et al., 1994) were all identified as attitudes related to the use of corporal punishment. Also, the type of behaviour that triggers the use of corporal punishment and the child’s feeling of deservedness were found to be correlated with the positive or negative attitude towards the use of this disciplinary method (Kelder 1991, Bower 1996). Moreover, the context and the intensity of physical punishment (Kedler, 1991), it’s gravity, (Butain-Ricklefts, et all, 1994), the age of onset, (Flynn, 1998) as well as cultural (Stormskak, 2000; Flynn 1998; Ellison 1996; Gilles-Sims 1995) and socio-demographic characteristics (Flynn, 1998) are amongst the variables found to be determinant in explaining the observed variations in attitudes towards the appropriateness of corporal punishment as a disciplinary method. A study conducted by Flynn (1994) emphasized the role of the greater socio-cultural background in the crystallisation of attitudes towards corporal punishment. Examining the regional variation across the United States, he showed that Northeasterners were more than twice likely to oppose spanking than Southerners (31.2% versus 13.9%). Furthermore, when controlling for numerous social variables such as race, education, religion, and urban/rural native residence, he found that Northeasterners bear the lowest rate of favourable attitudes towards spanking as compared to Midwesterners, Westerners Southerners. Flynn (1996) explains the regional differences by pointing to some interesting differences between spanking experiences of Northeastern and Southern college students. Southerners were more likely than their Northeasterners counterparts to have received corporal punishment, to have been physically punished by both parents; their mothers and their fathers in the year they reported were hit most. However, when corporal punishment experiences were examined controlling for religious affiliation, gender, and parents' education, the influence of region lost its significance. Arguably, it appears that the experience of having been subjected to
corporal punishment seems to be a more reliable predictor of future attitude towards corporal punishment than factors such as parent’s religion and education.

Bower and Knutson (1996) found that the relation between attitudes towards corporal punishment and the intention to use it as a parent was mediated by another important variable; that is the perception of oneself as having been victimised by the parents. Indeed, the child who perceives parental actions as abusive is more probable to express less favourable attitudes towards corporal punishment as an adult than one who perceived her parents as nonabusive while delivering corporal punishment.

Most recently, the attitudinal research has developed a social-cognitive model, whereby one’s experience with corporal punishment influences the tendency to regard various types of violent disciplinary strategies as appropriate and effective (e.g., Bower-Russa et al., 2001; Crouch and Behl, 2001; Deater-Deckard, Pettit, Lansford, Dodge, Bates, 2003). This attitude towards corporal punishment is described as being linked to possible transgenerational transmission of patterns associated to child abuse, thus increasing the risk of child abuse for those subjected to corporal punishment themselves. Whether in teens (Weller et al., 1987) or college students (Graziano and Namaste, 1990), several researchers have discovered that having been spanked is associated with a greater acceptance of spanking. Several other investigations have also found that adolescents, who have experienced corporal punishment, tend to have a favourable attitude towards it. A study on 425 young subjects in the United States whose parents had been interviewed when they were 5 years old found that those young subjects having been spanked as children had a more favourable attitude towards the method (Deater-Deckard et al., 2003). Surveys carried out in Costa Rica (Krugman et al., 1992) and Manitoba (Ateah, 2002) bear the same tendency towards an intergenerational transmission of favourable attitudes towards corporal punishment. Among other factors that are likely to influence one’s attitudes towards corporal punishment, belief in authoritarian control strategies (Susman, Trickett, Iannotti, Hollenbeck, Zahn-Waxler, 1985) as well as the value that is accorded to corporal punishment (Crouch and Behl, 2001) have both been linked to an increased child abuse potential.

Obviously, there are many other factors besides experiencing corporal punishment that might influence the adoption of favourable attitudes towards the method. For instance, recent research suggests that affective and cognitive processes anchored in the experience of being treated harshly in childhood (e.g., remembrance of pain associated with violence and abuse, schemas, attributions, information processing,
perception of self as a victim or not, feelings of insecurity, need for control, hostility, etc.) could act as important mediators or moderators of the link between childhood experiences and adult attitudes (Gagné et al., 2007). Finally, the Swedish ban on corporal punishment has shed light on the relationship between attitudes towards corporal punishment and its use, suggesting that changing parental beliefs may have some impact on parental behaviours (Durrant et al. 2003).

Drawing from the same database used in the present study, Despatie (2005) isolated the factors that appeared to be directly linked to the use of corporal punishment. One of her research hypotheses postulated the existence of a direct association between the fact of experiencing corporal punishment as a child and university student’s intention to use it as parent. Moreover, she postulated a direct proportional relationship between the fact of being subjected to corporal punishment and the probability to later express positive attitudes towards its use. Finally, this last hypothesis wasn’t supported as the results demonstrated that the frequency of received punishment was not significantly correlated to the expressed intention to use corporal punishment. The study’s conclusion is that, despite the frequency of experienced corporal punishment episodes, what predicted most the intention to use such a technique was the existence of a favourable or unfavourable opinion towards corporal punishment. As she put it: “the opinion one has towards this practice seems to play a preponderant role in determining student’s intention to resort to corporal punishment” (Despatie, 2005, p. 124).

Bower and Knutson (1996) contended that even the association between stress and physical child abuse proposed by stress theory may be moderated by the parents’ level of belief in the value of corporal punishment. More specifically, high level of stress can lead to child abuse only when associated with high levels of beliefs in the value of corporal punishment. In their attempt to identify factors that could mediate the intergenerational patterns of abuse, Bower-Russa et al. (2001) have ascertained a causal link for the development of disciplinary practices. More specifically, college students’ personal experiences with corporal punishment were associated with a decreased tendency to view that particular form of discipline as inappropriate. Moreover, a history of severe corporal punishment, failure to acknowledge an abusive history when it had occurred, and adult attitudes regarding corporal punishment were associated with selecting more punitive disciplinary strategies when individuals were faced with child non-compliance in an analog parenting task.

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6 as translated from the original French document
More recently, Bower-Russa (2005) focused on exploring whether and to what extent the disciplinary attitudes per se play a role in mediating the association between disciplinary history and disciplinary responding. After controlling for measurement error, she found that more than 50% of the association between disciplinary history and parenting responses could be attributed to the mediational effects of attitudes.

4.2.2. Age of the parent

With respect to age, it is generally considered that younger parents are both more likely to use corporal punishment and to use it more frequently than older parents (Day et al., 1998; Giles-Sims et al., 1995; Straus and Stewart, 1999; Wissow, 2001; Xu et al., 2000). These findings may be consistent with a large body of literature on the relation between youthfulness and violence (Sampson and Laub, 1993), as well as specifically between youthfulness and intrafamily violence (Connelly and Straus, 1992). A lack of experience with children and knowledge about developmental stages may be accountable for this relation. For instance, age-appropriate child behaviours like “wanting to eat at other times than at mealtime” or “not learning quickly enough” were reported as prompters for corporal punishment use by a 90% of a sample of low-income adolescent mothers of toddlers (Culp et al., 1999). Besides the lack of experience with children, other explanations such as poor situational judgment, greater alcohol use and more economic stress experienced by younger parents may be linked to use of corporal punishment (Ellison et al., 1996; Straus, 1991).

4.2.3. Gender of the parent

Several studies have revealed that gender disparity in parental use of corporal punishment exists. In the 1975 Family Violence Survey, more mothers than fathers reported having used physical means of correction, both minor and severe. Surveys of parents from the community suggest that mothers are more likely than fathers to resort to corporal punishment and that this pattern is also valid for cases of less severe instances of corporal punishment (Straus et al, 1998, Wolfner and Gelles, 1993). Most studies indeed report that the gender of the parent is often linked with use of corporal punishment, with mothers reporting more frequent use (e.g., Day et al., 1998; Nobes et al., 1999; S. Jackson et al., 1999; Straus and Stewart, 1999; Xu, Tung, and Dunaway, 2000). Most research findings confirm previous research showing younger mothers to use corporal punishment more frequently, though no
other demographic variables were significantly related to spanking, including race, partnership status, education and income (Combs-Orme, and Cain, 2008). However, doubts have not completely been shunned since data inconsistencies have been reported after the 1985 NFVS (National Family Violence Survey). Upon analyzing the conflicting results of the 1985 survey, Wauchope and Straus (1999) have concluded that the results seem to suggest that previous claims about differences by the sex of the caretaker with respect to corporal punishment use were unsubstantiated. When factors such as time spent with children, and amount of responsibility taken for child rearing are considered it appears that gender of parent is no more a determining factor. Indeed, Margolin (1992) suggests that once the amount of responsibility taken by mothers for childcare is statistically controlled for, fathers are more likely than mothers to use corporal punishment. Likewise, Strauss and Donnelly (1993) have argued that given the fact that mothers spend disproportionately more time with their children than fathers it is normally ensued that they will have more opportunities to use corporal punishment.

### 4.2.4. Race and ethnicity

The idea that corporal punishment may have dissimilar effects in families of different racial–ethnic backgrounds has been largely explored but it seems that to date, the research results remain inconclusive. One possible explanation could be the confusion often made between ethnic differences and cultural differences in parenting values and styles (Mosby et al., 1999; Whaley, 2000). Indeed, research on parents’ ethnicity, defined as a *heritage based on nationality, language, and culture* (Betancourt and Lopez, 1993: p. 629), has produced contradictory findings. Although some authors (Giles-Sims et al., 1995; Loeber et al., 2000; Pinderhugues et al., 2000; Straus and Stewart, 1999) have demonstrated that African American and Hispanic American parents use corporal punishment more often than do European American parents, other studies have came to either radically different or diametrically opposed conclusions (Strauss, 1994; Escovar, 1985). According to Strauss (1994), and Escovar and Escovar (1985), it seems that European Americans spank the most while Hashima and Amato (1994) and Wissow (2001) argue that Hispanic Americans and Asian Americans spank the least. Others still have found no differences in frequency of use of corporal punishment between ethnic groups. For instance, in a study using structural equation modeling, McLeod et. al (1993) have concluded that “poor children appear to experience the same parenting
disadvantages regardless of race, at least with respect to the frequency of spanking and emotional responsiveness” (p. 361).

Other comparative studies have reported lower prevalence and chronicity rates for spanking among Hispanic than among Anglo parents (Straus and Camacho, 1993). Along the same line, using the Cultural Variation Model, a study of parenting practices lends some support to the differences in parental child-rearing values and behaviours among White, African American, Hispanic, and Asian American parents. Accordingly, Asian American mothers and fathers tend to use spanking more often than do White, African American, and Hispanic mothers and fathers (Julian, McKenry, and McKelvey, 1994). Studies of African American mothers found wide variations in parent’s use of and attitudes towards corporal punishment (Kelley et al., 1992). They reported using corporal punishment infrequently while the use of reasoning and other child-oriented techniques appeared to be used more frequently (Bluestone and Tamis-LeMonda, 1999). Lassiter (1987) has reported that, among African American parents, an attitude towards spanking and harsh methods of discipline is more favoured. The author further explains that this propensity observed among Black population of parents is the result of a legacy of slavery and the Black experience in the rural South of the 1940’s. The stress of living, the harsh reality of their experience as well as their vision about respect to authority, obedience and endurance as main assets of a successful Black adult in a White-dominated society, are factors that are likely to render them more susceptible to using corporal punishment. However, a study analyzing data from the 1975 National Family Violence Survey, found no difference between Black and White parents in their approval of spanking or slapping a 12-year old child (Cazenave and Straus, 1990). The authors further suggested that perhaps, when considering the relationship between race and corporal punishment, focus should be shifted towards other possible intervening factors such as, for instance, the age of the child. Nonetheless, after controlling for other variables, Straus and Mathur (1996) found that significant correlation between race and corporal punishment is consistent with the evidence that African Americans endorse corporal punishment more strongly than other ethnic groups.

Despite the fact there is conflicting evidence regarding disciplinary styles in Black families, and without overlooking the fact that variation in discipline practices exist both between and within ethnic groups (Parke and Buriel, 1998), a fair amount of evidence suggests that Black parents tend to be more power-assertive and punitive
when all the socioeconomic status variables are statistically controlled (McLoyd et al., 1994). Perhaps, among other unaccounted for factors responsible for the observed interracial disparities in frequencies of corporal punishment use, religion might be considered as a possible mediating factor that is likely to obscure the real relationship between race and frequency of corporal punishment use.

4.2.5. Religion and Religiosity

Among some of the more conservative forms of North American Protestantism, corporal punishment is strongly advocated. One of the explanations brought forth to explain this tendency is that fact that the Conservative Protestant favour a literal interpretation of the Bible which in certain paragraphs recommends the use of force in disciplining children. This tendencies are often summarized with the "Spare the rod and spoil the child" aphorism which is an adaptation of a set of verses coming from King Solomon's book of Proverbs.

In the field literature, affiliation to a Christian Protestant group professing conservative religious beliefs is frequently associated with more frequent use of corporal punishment (Day et al., 1998; Ellison, Bartkowski, and Segal, 1996; Gershoff et al., 1999; Giles-Sims et al., 1995; Stolley and Szinovacz, 1997; Xu et al., 2000). Over the last decade, this distinctive style of Conservative Protestant parenting has attracted considerable scholarly attention (Grasmick, Bursik and Kimpel 1991, Lienesch 1991; Ellison and Sherkat 1993; Bartkowski 1995; Bartkowski and Ellison 1995; Ellison 1996; Ellison and Bartkowski 1997; Ellison, Bartkowski and Segal 1996a, 1996b; Wilcox 1998). A solid body of research unanimously suggests that Conservative Protestants are more likely than other parents to value obedience from their children and to support the use of corporal punishment to discipline youngsters (Ellison and Sherkat 1993a, 1993b; Grasmick, Bursik and Kimpel 1991). Moreover, Conservative Protestant parents are more likely to continue the practice of spanking up to the preschool and school-age (Ellison, Bartkowski and Segal 1996a, 1996b).

Carey (1994) and Greven (1990) have also noted that parental reliance on physical discipline is deeply rooted on religious affiliation. More specifically, parents within religious denominations subscribing to a literal interpretation of the Bible are more likely to value the use of corporal punishment than those parents with nonliteral views (Wiehe, 1990). Two particular studies are relevant to this respect (Ellison and Sherkat, 1993; Wiehe, 1990). In the first study, Wiehe (1990) compared members of
several denominations classified as biblical literalists (Baptist, Church of God, Holiness, Nazarene, and Pentecostal) with nonliteralists (Roman Catholic, Christian/Disciples of Christ, Presbyterian, Episcopal and Methodist). The results bear evidence that the literalists are significantly more likely to approve of corporal punishment than nonliteralists. This was true even when controlling for gender and education. In a second study, Ellison and Sherkat (1993) analyzed the 1988 General Social Survey data, and revealed, after elaborate analyses, that there is a positive relation between Conservative Protestantism and support for spanking. This relation is further mediated by other variables as such: the belief in the Bible as the literal word of God, the conviction that human nature is evil and sinful, and the idea that sinners must be punished. These relation remained stable even were several sociodemographic variables including race, sex, age, education, income, number of children, whether one was a native Southerner, and whether one was a rural native were included in the explanatory model. Latest research on the same issue has yet again confirmed the strong relationship between being a Conservative/fundamentalist Protestants and physical punishment of children and that this relationship was stronger for Conservatives than for any other Christian groups (Grogan-Kaylor, Otis, 2007; Socolar, Cabinum-Foeller and Sinal, 2008).

However, there is a small body of evidence indicating that parents’ religious affiliation affects parenting in a distinct manner regardless the specific religious affiliation. In that respect evidence was presented to demonstrate that parents’ religious affiliation is associated with child-oriented discipline (Kelley et al., 1992) and with positive parent–child relationships (Wilcox, 1998).

The possibility that parents’ religious affiliation might act as a moderator for the effects of corporal punishment on children has also been considered. On that matter, two studies have examined whether parents’ perceptions of the effects of corporal punishment on their children are dependent on the religious affiliation. Indeed, Conservative Protestant parents attributed fewer negative consequences to corporal punishment than did parents of other religious affiliations (Gershoff et al., 1999). Also, a second study has revealed the fact that Conservative Protestants were less likely to report any harmful effect of corporal punishment on their children than were parents of other religious denominations (Ellison, Musick, and Holden, 1999).

Although, to date, little is known about the influence exerted by the family’s religious beliefs on its parenting style it has been widely demonstrated that
Conservative Protestants are significantly more likely to rely on corporal punishment than any other religious group of parents.

4.2.6. Emotional State of the Parent

It is generally considered that the emotions experienced during the immediate time frame of punitive parents-children interactions may influence the way in which parents perceive and react to their children's misbehaviours. Several studies agree that corporal punishment is used more often when parents experience a series of negative emotions such as anger and frustration. For instance, it was demonstrated that if their emotional arousal is too strong, parents tend to be less able to regulate their emotions and behaviours (Vasta, 1982). The general tendency is for highly emotionally aroused parents to resort to power assertion techniques as educational responses (Pinderhughes et al., 2000). Also, frustration and hassles in daily interactions with the children are known to predispose parents to violently react (Wissow, 2001).

Ateah and Durrant (2001) further found that parental anger following the child’s transgression predicted parental use of corporal punishment while Strauss (1996) established that 44% of a random sample of 1003 mothers from two Minnesota cities admitted that over half of the corporal punishment used was triggered by losing control of their emotions. Finally, it was demonstrated that parents’ susceptibility to react vengefully is not evenly distributed along the time of a day. For instance, Holden (1995) has determined that spankings are most likely to occur between 5 p.m. and bedtime (Holden et al., 1995). Whether or not parents’ use of corporal punishment is accompanied by a display of a negative affect, it is commonly agreed upon that when the use of such a technique comes in as an emotional response; anger is the affect that can most frequently lead to corporal punishment (Vasta, 1982; Alvy, 1987).

4.2.7. Parental style

Use of corporal punishment is considered as one element, among others, that characterize a larger parenting style. As Darling and Steinberg (1993) have suggested, parents’ decision to use corporal punishment is merely a function of their overall parenting style. Consequently, it has been claimed that one cannot hope to correctly assess the deleterious effects attributed to corporal punishment as long as other aspects of negative parenting style are not taken into consideration (Darling...
and Steinberg, 1993; Straus and Mouradian, 1998). Indeed, corporal punishment has been negatively associated with parents’ self-reported rates of reading to, playing with, and hugging their children (Wissow, 2001) and positively associated with the use of other negative techniques such as yelling or threatening with the use of physical force (Wissow, 2001).

The idea has been advanced that parents’ overall parenting style can buffer possible negative effects associated to the use of corporal punishment. According to some (Darling and Steinberg, 1993; Kuczynski and Hildebrandt, 1997), parental style is hypothesized to change the nature of the parent–child relationship or the child’s willingness to be socialized. Research results seem to support the aforementioned hypotheses as it has been demonstrated that when used in a “warm context”, corporal punishment is more likely to achieve positive outcomes (Grusec and Goodnow, 1994). Conversely, when corporal punishment occurs in the context of an overall negative parenting style, it is associated with child negative behaviours and experiences (Campbell and Frabutt, 1999). However, the idea that a warm climax coupled with corporal punishment use may have beneficial outcomes remains debatable as it has been previously suggested that a loving parent that resorts to corporal punishment may convey a highly confusing message that may result in the loss of self-esteem and distress in children (Turner and Finkelhor, 1996).

As with all other factors, studies of parental style as associated to the use of corporal punishment generates conflicting results. For instance, one study failed to find any interaction between maternal nurturance and use of corporal punishment in predicting children’s antisocial behaviour (Straus and Mouradian, 1998). In another longitudinal study of criminality, however, it was demonstrated that, regardless parental warmth, corporal punishment by mothers and fathers during childhood predicted whether boys would latter commit serious crimes at the age of 30 and beyond (McCord, 1997). Finally, a third study seems to reinforce the idea that parental support does not moderate the relationship between frequent corporal punishment and adolescents’ level of distress. Instead, a mitigating effect was found to be present but only for cases of moderate to low levels of corporal punishment (Turner and Finkelhor, 1996).
4.3. Characteristics of the child

4.3.1. Behaviour

Parents’ use of corporal punishment appears to be greatly dependent upon the type and severity of children’s misbehaviours, or to put it more exactly, on the attributions that parents, based on their belief system, make about their children’s behaviours (MacKinnon-Lewis et al., 1994; Nix et al., 1999). With respect to parenting, Belsky (1984) considered that undesirable child behaviour is likely to render the task of parenting more difficult and challenging. Upon analyzing a set of child characteristics such as activity level, disabilities, aggressiveness and type of behaviour, Strauss (1991) has come to the conclusion that all of the above-mentioned factors were related to the use of physical punishment by parents. In the field literature, behaviours as diverse as self-endangerment (Durrant, 1994), antisocial acts such as harming another child (Holden, Coleman, and Schmidt, 1995), violating property rights, breaches of convention such as children’s refusal to clean up their rooms (Durrant, 1994) were identified as possible behaviours that parents associate with the need for corporal punishment. In addition, parents who believe that a child misbehaves intentionally are more likely to utilize corporal punishment than those who believe that the child’s behaviour was unintentional (Rose-Krasnor, Durrant, and Broberg, 1997). It was also shown that when the child is invested by parents with the awareness of his own rule violations, capacity to act appropriately and responsibility for his misconducts, there is a higher probability for parents to resort to power assertive techniques such as corporal punishment (Dodge, Bates, Pettit, and Zelli, 2000). What is more, attributing faultiness to a certain behaviour can make the difference between mild forms of corporal punishment (e.g. hitting with bare hands) and harsh corporal punishment (e.g., hitting with an object such as a belt; Rodriguez and Sutherland, 1999).

Different types of misbehaviour elicit different responses from parents. From this perspective, self-endangerment, acts such as harming another child and violating property rights of others have been more associated with corporal punishment use than breaches of convention, such as children’s refusal to clean up their rooms (Durrant, 1994). Likewise, parents are more likely to resort to harsher instances of corporal punishment when the child’s behaviour is deemed a threat to his own or others’ safety (e.g., Catron and Masters, 1993; Flynn, 1998; Socolar and Stein, 1995).

Parents’ assessment of the effectiveness of corporal punishment was found to vary according to the type of transgression. Thus, this type of punishment is seen as more
effective at suppressing perceived misbehaviours involving safety (e.g., running away from a parent in a crowded parking lot) than at preventing children from moral disobedience (e.g., hitting a friend) or transgressing social norms (e.g., interrupting a parent on the phone; Gershoff et al., 1999). This observation seem to correspond with children’s views as they also tend to perceive corporal punishment as being more justifiable for cases of self-endangerment as compared to situations when punishment was triggered by simple disobedience (Catron and Masters, 1993). Also, knowingly disobeying a parent after having being reprimanded is the type of behaviour that is very likely to elicit the harshest use of corporal punishment (Gershoff, Miller, and Holden, 1999; Holden, Miller, and Harris, 1999).

4.3.2. Age

In 1957, Levin demonstrated that an overwhelming majority of parents (99%) have spanked their preschool aged children at least once. Notwithstanding, the question of age and how it relates to the amount of corporal punishment received has scarcely been investigated. The few studies that have made systematic age comparisons in relation to corporal punishment have found that spanking of children is at its peak when children are between 2 and 4 years of age (Straus, 1991; Wauchope and Straus, 1990). After this age, though at a slow rate, a steady decrease is observed. Nonetheless, Strauss and Donnelly (1993) found that among a nationally representative sample of 6002 American couples who participated in the National Family Violence Resurvey (1985), half of the subjects recalled that they were still been spanked during their early adolescent years, namely when they were 13 and 14 years of age (Straus and Donnelly, 1993). However, according to Straus and Stewart (1999), as children age into adolescence corporal punishment tends to drop off steeply.

Indeed, several other studies have confirmed that parents tend to view corporal punishment as most appropriate for children of preschool age and least appropriate for infants and children age 8 years and older (Day et al., 1998; Flynn, 1998; Rohner et al., 1991; Socolar and Stein, 1995). Catron and Masters (1993) have reported that children of 4 and 5 years of age are more acceptant of receiving corporal punishment as opposed to their older counterparts of 10 to 12 years of age. Surveying a sample of university students, Flynn (1998) found spanking of children aged 3 to 4 years and 7 to 8 years is more acceptable than spanking of teenaged children. Flynn (1998) has
also suggested that parents’ dosage of corporal punishment is dependent upon their perception of the child’s age related cognitive ability to process the disciplinary message implied by the punishment as well as on children’s ability to self-regulate their behaviour.

Child’s age has not only been linked to the frequency of corporal punishment, the severity of corporal punishment has also been linked to the age of the child. From this perspective, it has been observed that more severe forms of corporal punishment (i.e., hitting the bottom with an object; slapping of face, head, or ears; pinching) were most frequently distributed within the bracket situated between 5 and 8 years of age. The other two age brackets considered less at risk for corporal punishment in this study were 0 to 4 years of age and 9 to 17 years old (Straus and Stewart, 1999). It is interesting to note that as compared to the previously cited study (Strauss, 1991) were the risk for receiving corporal punishment was considered at its peak for children situated within the 2 to 4 years of age bracket, in the most recent study of Strauss and Stewart (1999) children of ages between 0 and 4 years were found to be less at risk for corporal punishment. This apparent contradiction may be in part accounted for by differences in choices of age brackets considered for research from one study to another. Thus, the inclusion of children aged from 0 to 2 years of age in the same age bracket with children of 2 to 4 years of age may have produced as a result an overall reversal of the general trend observed during the 1991 study. In other words, since infants are among the group of children that are less likely to receive corporal punishment (Rohner et al., 1991; Socolar and Stein, 1995), their arbitrary inclusion in the same age bracket with older children (2 to 4 years of age) has obscured the reality, namely infants and toddlers are two diametrically opposed age groups in terms of amount of corporal punishment received.

4.3.3. Gender

Findings concerning gender differences in parents’ use of corporal punishment are mixed. For some, it appears that even though boys are spanked more often than girls, the difference is small (Graziano and Namaste, 1990; Straus and Gelles, 1990). According to Lytton and Romney (1991), the theory of differential socialization of children is only confirmed for non-Western countries were corporal punishment is more frequently meted out to boys than to girls by mothers and fathers. As far as North America is concerned, they found no significant difference between sexes regarding the amount of corporal punishment received. The same lack of child
gender differences in parental corporal punishment has been reported in a plethora of other studies (e.g., Holden et al., 1995; Kelley, Sanchez-Hucles, and Walker, 1993; Strassberg et al., 1994; Stattin, Janson, Klackenberg-Larsson, and Magnusson, 1995; Vlasis-Cicvarica et al. 2007).

However, despite a trend arguing for equality in methods of bringing up boys and girls, in the United States, boys appear to be subjected to more corporal punishment. General population surveys (e.g., Straus and Gelles, 1990; Wolfner, and Gelles, 1993) indicate that boys are somewhat more likely than girls to be the target of parental child abuse. Likewise, Maccoby and Jacklin (1974) reported that boys received more corporal punishment than girls, a statement reiterated in subsequent studies (e.g., Rohner et al., 1991; Giles-Sims et al., 1995; Day et al., 1998; Straus and Stewart, 1999; Mahoney et al., 2000).

Among the explanations given for this observed discrepancy is the fact that parents often have gender-based beliefs and expectations about their children, as a result of which they react differently to the same behaviour depending on the gender of the child exhibiting it (Huston, 1983). It has also been contended that boy to be less compliant than girls which leads to their greater subjection to corporal punishment (Ruble and Martin, 1998). What is more, a study of a community of Chinese parents in Hong Kong has shown that that children’s age interacted with children’s gender to influence parental use of corporal punishment. In particular, rates of parental corporal punishment were higher among boys than girls only in children aged 5 to 12 years, but no child gender difference was found among infants, toddlers, and adolescents (Tang, 2006).

4.4. Mediators associated to the use of corporal punishment

Many studies support the idea that corporal punishment per se is not pernicious for the later adjustment and well-being of the child. According to the proponents of this idea, conditions that are immediately associated with the use of such a technique can make the difference between abuse and effective punishment. These conditions are largely presented in the literature supporting the use of corporal punishment and are commonly referred to as mediators.

Wissow (1996), for instance, presents a list of conditions that must be met for any form of discipline to be effective, especially corporal punishment. Specifically, it needs to be carried out by an adult with an affective bond to the child, it should be consistent and immediate to the behaviour needing change, it must be perceived as
“fair” by the child, tailored according to the developmental stage and temperamental structure of the child and ultimately its goal is to lead to self-discipline. Likewise, Domjan (2000) contends that in order for a punishment to be effective it must satisfy the three following criteria: it must occur immediately after every transgression, be intense at least for the first transgression and not be associated with a discriminative stimulus (e.g. a parent). Published guidelines for spanking were found in two books (Dobson, 1992; Rosemond, 1994) and one magazine article (Trumbull and Ravenel, 1998). Such recommendations, besides the fact that are based on personal opinion, are also in stark conflict with fundamental learning principles. First, it is advised that the child should not be spanked after each occurrence of the transgression. Second, although it was recommended that punishment must be immediate in order to be effective, it has been admitted that real-life exigencies might sometimes preclude the immediate delivery of a spank (e.g., if the transgression occurs in public or if the parent is overly angry and needs to calm down before spanking; Trumbull and Ravenel, 1998). Also, Dobson (1992) advocated making sure that the spank is painful, though it remains unclear just how intense the spank needs to be in order to be effective in suppressing undesired behaviour. Third, Rosemond’s (1994) recommendation of spanking without warning may be the closest approximation of the absence of discriminative stimulus condition. Finally, in what may sound more like a recipe for injury and abuse than for effective parenting, Dobson (1992) advised parents to escalate the conflict in the case of a strong-willed child in order to “outlast him and win” (p. 71).

One of the most commonly researched mediators of corporal punishment is the parental acceptance-rejection of children. This concept has generated a whole theory (PARTheory) which postulates that perceived parental acceptance and rejection universally predicts the adjustment of children and adults (Rohner, 1990; Rohner, Khaleque and Cournoyer, 2005). Accepting parents are defined as parents who show their love and affection towards their children either physically (e.g. kissing, hugging, caressing) or verbally (e.g. compliments and praising). Conversely, parental rejection is shown in four ways that range from more manifest and objectively measured forms to more subtle types of rejection. The first is coldness and lack of affection which can be easily described as the exact reverse of warmth and affection. The second type of rejection takes the shape of hostility (i.e., feelings of anger or resentment towards child) and aggression (verbal and physical; e.g., saying cruel remarks to their child, hitting, kicking, pushing). The third is indifference (lack of
concern or interest for the child) and neglect (physical or remoteness from the child) while fourth form is undifferentiated rejection in which neglect, indifference, aggression or lack of affection are not clearly demonstrated but leave the child feeling not cared for or unloved, nonetheless (R. P. Rohner et al., 2005).

PARTheory contends that the effects of parental rejection can be very serious as they can extend from childhood into adulthood (Khaleque and Rohner, 2002). More specifically, the theory relates parental rejection with seven behavioral and personality dispositions, which include (a) hostility, aggression, passive aggression, and problems with management of hostility and aggression; (b) dependence, or defensive independence; (c) impaired self-esteem; (d) impaired self-adequacy; (e) emotional instability; (f) emotional unresponsiveness; and (g) negative worldview.

The research assessing the scope and applicability of PARTheory has confirmed its validity for a wide variety of children and adolescents of varying ages, genders, races and cultures (Khaleque and Rohner, 2002). An illustrative example is the Khaleque and Rohner’s (2002) meta-analysis of 43 studies that have found that one’s adjustment is directly related to one’s experience of parental acceptance or rejection regardless race, gender, or culture. They found that this relationship is even stronger for youths than adults, given the expected attenuating effect of family influence as one develops from childhood to adulthood. Moreover, research has shown that the interplay between corporal punishment and acceptance-rejection may affect children’s well-being. For instance, Rohner, Kean, and Cournoyer (1991) found in St. Kitts, West Indies, that severe physical punishment, when equated with parental rejection produces more substantial negative effects. It is important to note that this effect occurred independently of the youths’ endorsement or rejection of corporal punishment as a form of discipline. The results of their study also revealed that perceived parental acceptance (versus perceived rejection) served as an important mediating link between corporal punishment and adjustment. That is, higher levels of corporal punishment were associated with perceived parental rejection which, in turn, was associated with negative adjustment.

These findings seem to be confirmed by a second study (Rohner et al., 1996) on a poor biracial community of African Americans and European Americans that demonstrated that perceived justness of corporal punishment was associated with poor adjustment only when children perceived these behaviors to be forms of parental rejection. Research supporting the notion that the effects of corporal punishment are epiphenomenal to broader parenting styles has tested whether the
relationship between adjustment and harshness or justness of corporal punishment is mediated by the perceived level of parental love and acceptance. To that effect, Larzelere, Klein, Schumm, and Alibrando (1989) found that the amount of corporal punishment received in adolescence negatively predicted self-esteem but that the association became nonsignificant after controlling for the amount of positive communication in the parent–child relationship. The idea that when corporal punishment is delivered within a generally nurturing parental orientation may foster encouraging developmental outcomes was cross-culturally validated by another study on Taiwanese parents that showed that parents’ use of moderate and extreme forms of corporal punishment is more likely, in the absence of parental warmth of involvement, to predispose children to engage in anti-social behaviour (Simons, Wu, Lin, Gordon, and Conger, 2000).

Mathurin et al. (2006) have found cultural acceptance of corporal punishment is another important mediating factor in the relationship between punishment variables and personality adjustment. Their results showed that more severe forms of punishment were only related to negative personality dispositions (e.g. aggression, negative self-esteem, negative self-adequacy, emotional instability, emotional unresponsiveness, and negative worldview) in the case of boys, and not at all for girls. Furthermore, the boys and girls scoring highest on the sum of punishment received variable displayed poorer personality adjustment, were more emotionally unstable, and were more hostile than those scoring low to moderately high on that variable. The underlying factor accounting for this result according to the study is that cultural acceptance of corporal punishment led many youths to overlook the importance of more severe forms of punishment. That is to say, a youth “beaten” with a belt in St. Croix, U.S. Virgin Islands may perceive this form of punishment quite differently from a youth in a culture such as Sweden, where corporal punishment is outlawed. However, it appeared that when the parents of St. Croix employed a great variety of punishments, their children were more likely to experience more adjustment difficulties even when the children themselves judged the punishment to be appropriate.

Children’s interpretation of punishment is also mediated by the way they perceive their caregivers. In this context, the finding of Rohner et al. (1991) and Rohner, Bourque, and Elordi (1996) provide evidence that youths’ perceptions of parental acceptance and rejection serve as an important mediator between corporal punishment and personality adjustment. The results of structural equation modeling
suggest that physical punishment is associated with children's maladjustment only if punishment is seen by youths as a form of caretaker rejection. Another family factor that may influence the effects of corporal punishment on children is the gender of the punishing parent. Research on this question has demonstrated a relationship between parental gender and externalizing problems in children. In a meta-analysis of studies on parental caregiving and child externalizing behavior, Rothbaum and Weisz (1994) found that mother’s quality of care giving was usually associated to the absence of externalizing behaviors. Since it was acknowledged that the impact on children may vary based on the gender of the punishing parent, research has examined parents separately when studying parent variables. For example, it was shown that the impact of parent support on child outcomes differed depending on the gender of the punishing and supportive parent. Namely, mothers’ use of corporal punishment was associated with more child depression regardless of how much support fathers provided to children, whereas father support in the context of mother punishment did not buffer children from depressive symptomatology (Harper et. al, 2006). Although, the reason for this gender effect is yet insufficiently documented in the field literature, this study have suggested that differential attributions for mother and father corporal punishment and support impacted risk for depression and aggression (Harper, Brown, Arias, and Brody, 2006). Several other factors have been indicated as mediators in the relationship between corporal punishment and children’s outcomes such as: race (Baumrind, 1972; Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh, 1987; Heffer and Kelley, 1987), frequency of punishments (e.g., Larzalere, 1986), parental monitoring (Spencer, M. B. et al, 1996), perceived normative levels of corporal punishment, (Turner and Muller, 2004), and parental anger (Agnew, 1983; Straus and Mouradian, 1998).

Despite the fact that there is an abundance of studies analyzing the role of numerous mediators in the relation between punishment variables and future adjustment of the child, few studies are dedicated to the study of the role of mediating factors in the relationship between corporal punishment and intent to use it as an adult. Therefore the interest of identifying the elements that act as mediators between stable variables (e.g. sex, age, religion, country of origin) and frequency measures (e.g. number of punishing agents, numbers of age groups the subjects have received punishments, means of administration of CP and frequency of punishments), on one side, and the intention to use corporal punishment, at the other side, appears to be relevant.
4.5. Type of parents

Most of the studies presented have isolated factors that are related to the use of corporal punishment, but little is known about the effect of different types of parents on the use of corporal punishment. Once concluding that factors as parental income, education, and age were not significantly related to use of spanking in a representative sample of 2,017 parents with children younger than three, Wissow (2001) turned his attention to identifying groups of parents that had clearly different disciplinary approaches. After performing a cluster analysis using six items concerning discipline and four items concerning nurturing parent-child activities, he discerned four main clusters of parents. Cluster 1 also labeled low-interacters makes up an estimated 22% of the parents and contained the smallest proportion of parents who said they have ever spanked (36%) or yelled (34%) at their children. Within this first group, more than 80% of parents report playing and hugging their children although fewer than half report engaging in any of the other disciplinary or nurturing interactions. As for theirs socio-demographic characteristic, this is an ethnically diverse group with 20% Hispanics, 11% African Americans, and 65% Whites. Also, 60% of the cluster’s subjects were men. Finally, though not a particularly affluent group they are not the poorest of the four clusters.

In contrast, cluster 2 that Wissow called high interacters, largely consisted of parents reporting they were engaged in all the disciplinary and nurturing interactions (with the exception of hitting). This group covers nearly half (47%) of the survey participants with two thirds of them (67%) admitting they have spanked or yelled (62%) at their children. Cluster 2 parents were mostly women (68%), largely Whites (81%), living with a partner (87%) and of moderate to upper income. The third cluster (called those who spank in the context of poverty and the stresses related to single parenthood) consisted of 53% of women; it was composed of parents with children 18 to 36 months old, and represented only 7% of the survey’s parents. Conversely, it had the highest proportion of parents (93%) reporting that they spank or yell at their children (88%). A small proportion of parents within this group were involved in nurturing activities as reading to their children (3%), listening to music with their children (57%) which according to the author, may be indicative of this group’s relatively low level of education (20% with less than a high school education) and low income. The ethnic composition of cluster 3 is very similar to that of cluster 1 as far as ethnic diversity is concerned. Finally, cluster 4 included the remnant of 23% of the parents with a large majority of them (78%) having
spanked or yelled at their children (66%). This group labelled by Wissow (2001) the affluent, depressed disciplinarians was the most likely to use time out procedures (94%) and engaged in relatively low amounts of nurturing activities such as reading (31%) and listening to music (3%). Cluster 4 is mainly composed by men (61%), 79% of them are White, 9% are single parents and only 15% of them reported having incomes of less than 20,000$ a year. The characteristics of Cluster 4 seem to be driven by men who are the family’s disciplinarians but who have relatively little other interaction with their children.

To sum up, Wissow’s study on a national sample of parents of young children describes two main portraits of spankers; the average spanker as well as the above average spanker. According to him, spanking appears to be used in a variety of combinations with other forms of child parent interaction and in different socioeconomic settings. If average spankers use this method in conjunction with a relatively higher use of other nurturing interactions, above average spankers, report less reading, listening to music, playing and hugging and a less than average use of other disciplinary strategies. That is, the use of spanking is negatively associated to the parent’s use of alternative disciplinary and their involvement in nurturing interactions with children. Moreover, it seemed that the highest reported proportions of parents spanking their children represented the two extremes of the population in terms of income and ethnic composition.

What is remarkable about Wissow’s (2001) clusters analysis and relevant for the present study is this original approach that emphasizes the “spanker” rather than attempting to perform a straightforward factor analysis.

4.6. Research issue
Several decades of research on disciplinary attitudes in the general U.S. population indicate high rates of acceptance and approval of corporal punishment by parents. Considering the negative developmental findings associated with the use of corporal punishment, numerous studies have attempted to pinpoint those beliefs and behaviours that are indicative of a parent’s risk to corporally punish a child. Prior research has linked the recourse to corporal punishment to a wide variety of factors that can be either pre-existing, such as a parent’s own childhood experiences (Graziano, Hamblen, and Plante, 1996), level of knowledge about child development (Graziano et al., 1996), socioeconomic level (Daro, 1988), education level (Ateah and Durrant, 2001), religious ideology (Ellison, Barkowski, and Segal, 1996), or
constitute situational factors that occur in the immediate time frame surrounding the behavioural transgression, such as the type of transgression (Holden, Coleman, and Schmidt, 1995) and the parent’s affective state (Durrant, 1994). Research has also concentrated on the characteristics of the family that might affect the likelihood that parents use corporal punishment. Thus, family size, (Flynn, 1994; Hashima and Amato, 1994; Sampson and Laub, 1994; Pinderhughes et al., 2000; Xu et al., 2000), the quality of the parents’ romantic relationship (Pinderhughes et al., 2000; Xu et al., 2000), parent’s marital status (Loeber et al., 2000) are all said to be factors that increase the likelihood of using corporal punishment and resorting to child abuse.

Bower and Knutson (1996) demonstrated that the history of family violence may serve to legitimize the use of specific acts of corporal punishment in later disciplinary situations. In other words, individuals are less likely to classify a potentially injurious form of corporal punishment as abusive if they have experienced it as a child. Thus, Butain-Ricklefs et. al (1994) as well as Rodriguez and Sutherland (1999) found that the type of corporal punishment privileged by a parent can be predicted by determining the type of corporal punishment the respondent was most subjected to as a child. Many other researchers suggest the same conclusion (Bower and Knutson, 1996; Bower-Russa et al., 2001).

In the same vein, in a study of a cohort of Mexican mothers, Corral-Verdugo and Frias-Armenta (1995) contended that child-rearing practices have an important influence on the development of one’s disciplinary beliefs. Their findings point also to the role of beliefs in producing an immediate effect on the use of corporal punishment. Mothers manifesting beliefs towards the educational value of corporal punishment reported corporally punishing their children. Furthermore, the study showed that the more “abusive” the mother the more likely she was to report higher levels of these beliefs. Additionally, it has appeared that abusive mothers were influenced by their beliefs and not by their socioeconomic level (Corral-Verdugo and Frias-Armenta, 1995).

Socolar and all (2005) suggest that situational factors in which the discipline occurred are playing a symptomatic role for the majority of types of discipline and modes of administration used by parents while, Bower-Russa (2005) provides preliminary support for the notion that family history appears to play a critical role in shaping disciplinary attitudes and indicate that such disciplinary attitudes may serve as a critical pathway by which a punitive disciplinary history influences disciplinary strategies used as an adult (p. 278).
Present research on attitudes is based on a social-cognitive model that stipulates that:

...transgenerational patterns of abuse may reflect a tendency for the experience of punitive punishment to influence the beliefs that those punitively punished children develop regarding the appropriateness and effectiveness of various types of disciplinary strategies (Bower-Russa, 2005: p. 273).

As it appears thus far, the vast majority of studies on corporal punishment have looked only at the simple linear relation between corporal punishment and some set of outcomes without considering the possibility that an observed relation between corporal punishment and a certain outcome might actually be mediated by a third variable. Research studies evaluating mediation effects of third variables on the relation between corporal punishment and child outcomes are relatively recent. Basically, the plethora of studies inscribed in this specific trend show that the apparently direct association between corporal punishment and future adjustment and behaviours is reduced significantly or even disappears when one controls for the mediating (i.e., indirect) influence of a third variable. Though often confused with moderation or with an indirect effect, mediation is distinct from both and addresses the mechanism by which independent variables influence dependent variables (Baron and Kenny, 1986). As defined by Baron and Kenny (1986) a moderator is a third “variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable” (p. 1174).

In their meta-analysis of the existing literature on corporal punishment, Gershoff (2002) and Benjet and Kazdin (2003) suggested that research efforts should concentrate on the study of individual and combined influences of third variables in explaining the effects of corporal punishment. Moreover, they pointed out a number of variables that could act as mediators such as family structure, socioeconomic status, child gender, and parental warmth. Gershoff (2002) proposed a process context model whereby children’s perception of corporal punishment is one such factor that needs to be considered. Several other studies, have considered parental attitudes and the role that they may play in parental disciplinary responding (Bower-Russa et al., 2001; Bower-Russa, 2005; Rodriguez and Sutherland, 1999).

Within the context of research on mediation processes two distinct directions have emerged. While a large number of studies has focused on testing possible mediation effects that might intervene in the relationship between corporal punishment variables and youth’s adjustment, a second part of the research has concentrated on
examining factors that might play a mediating role in the relationship between corporal punishment variables and future behavioural responses.

Within the first major topic, corporal punishment is thought to be associated with negative or positive effects, both depending on the conditions in which it occurs (Larzelere, 2000; Rohner, 2006). Moral and religious principles have often inspired such research to the extent that, in some cases, the influence of such beliefs has decreased the relevance of empirical evidence as the basis for drawing conclusions about the effects of punishment. As for the second major topic, researcher are mainly supporting an anticorporal punishment view arguing that all forms of corporal punishment—under all conditions—have detrimental consequences for short-term and long-term developmental outcomes (Gershoff, 2002; Holden, 2002; Straus, 1994). These two directions of research are briefly discussed below.

Most of the research circumscribed to the first direction of study evaluates the association between corporal punishment (predictor variable) and youths’ adjustment (dependent variable), as mediated by perceived parental acceptance-rejection (R.P.Rohner, 1990; R.P.Rohner, Khaleque, and Cournoyer, 2005). Larzelere, Klein, Schumm, and Alibrando (1989) have also considered the possibility that the relationship between adjustment and harshness or justness of physical punishment might be mediated by the perceived level of parental love and acceptance. Research on this issue by Rohner et al. (1991) found in St. Kitts, West Indies, that although the harshness of caregiver punishment correlated very strongly with the level of maladjustment expressed by 349 Kittitian subjects aged between 9 and 16 year old (r = .57, p < .001), harshness of caregiver punishment by itself made only a modest direct contribution to variations in youths’ adjustment. In effect, it was shown that the generative mechanism through which corporal punishment made much of its contribution to youths’ adjustment was the perceived caregiver acceptance-rejection. In a second early study of this kind, performed on a sample of 281 American youths, ages 8 through 18 years, Rohner et al. (1996) concluded that after controlling for the influence of perceived caregiver acceptance-rejection, perceived harshness and unjustness of punishment did not make significant contributions to youths’ adjustment. More recently, Matos and Rohner (2004) found in a study of 94 Puerto Rican youths that, after controlling for the influence of perceived caregiver acceptance-rejection, perceived unfairness of punishment and the caregivers’ use of explanation did not make significant contributions to the youths’ adjustment. Further, Mathurin et al. (2006) have suggested that cultural acceptance of corporal
punishment is another important mediating factor in the relationship between punishment variables and personality adjustment. In the same vein, mediators like perception of the caregiver (Rodriguez, 2006), gender and race of the punishing agent (Deater-Deckard et al., 1996; Mahoney et al., 2000), frequency of punishments (Larzelere, 1986), parental monitoring (Spencer, M. B. et al, 1996), perceived normative levels of corporal punishment, (Turner and Muller, 2004), and parental anger (Agnew, 1983; Straus and Mouradian, 1998) were all considered as mediators in the relation between punishment variables and adjustment.

The second major research topic is concerned with the study of the role played by mediating factors in the relationship between corporal punishment and future behavioral outcomes. This type of research has elicited a relatively smaller body of research. For instance, victims' cognitive appraisals of their own abusive experiences have been investigated as a potential mediating factor with regard to the perpetuation of an abusive cycle (Kelder, McNamara, Carlson, and Lynn, 1991; Knutson and Bower, 1994). An interesting fact was revealed through a study of Bower and Knutson (1996) that accredited the idea that the relation between attitudes towards corporal punishment and the intention to use it as a parent was mediated by the perception of oneself as having been victimised by the parents. More specifically, the research suggests that exposure to a range of potentially injurious disciplinary strategies and failure to label those experiences as abusive may have an important impact on adult attitudes regarding the use of corporal punishment, and hence, on risk for later abusive behaviour. A survey undertook in Macedonia, confirmed the proposal that consciously, many children may justify their parents hitting them for their own good. However, the study indicated that this belief does not have a protective effect when harsh or frequent corporal punishment is involved (Sebre et. al, 2004).

Also, a significant literature has focused on parental attitudes and the role that they may play in parental disciplinary responding. For instance, Bower-Russa et al. (2001) have shown that college students’ attitudes regarding disciplinary practices were influenced by disciplinary history, and both history and attitudes were significant predictors of disciplinary responses in a parenting analogue task. Further, Rodriguez and Sutherland (1999) have demonstrated that these associations are not unique to college students. Using a sample of New Zealand parents, it was shown that parents’ disciplinary history was associated with the frequency of use of such strategies with their own children. Though neither Bower-Russa et al. (2001) nor
Rodriguez and Sutherland (1999) explored the mediating role of attitudes, these two studies suggested the possibility that attitudes mediate transgenerational patterns of abuse. Indeed, using a sample of 459 university students between the ages of 18 and 20 years (91%), the Bower-Russa (2005) study has finally proven in a straightforward manner the fact that the association between disciplinary history and disciplinary responses is mediated by attitudes. However, the structural equation modelling employed in the aforementioned study only acknowledged the existence of a partial mediation process with more than half of the association between history and responses accounted for by attitudes. One explanation for the fact that her final model accounted for only 20% of the variance in parenting disciplinary responses resides in the way disciplinary attitudes were assessed. Namely, in the Bower-Russa (2005) study, disciplinary attitudes were assessed focusing on respondents’ ratings of the appropriateness, harshness, and abusiveness of specific disciplinary behaviours. Thus, composite attitudinal scores were averaged across corporal punishment items to yield disciplinary attitudes scores in which higher scores reflected ratings of events as more abusive. By contrast, in the present paper subjects’ attitudes towards corporal punishment were divided in 3 distinct items that were obtained following a factor analysis of a set of eleven underlying dimensions. Moreover, after separately analyzing the 3 attitudinal dimensions thus obtained, it appeared that only positive and negative attitudes towards corporal punishment mediated the relationship between punishment variables and intention to use corporal punishment. As for ambivalent attitudes towards corporal punishment it is likely that other factors not included in the explanatory model such as child temperament, parent personality and cognitive style, the family system and the larger social context (Belsky, 1993) might also play a role in determining a certain parental disciplinary responding.

Despatie (2005) studied the relation between corporal punishment variables and the intent to later use it as a parent. This study is particularly relevant for the present research as it draws its results from the same database. Her explanatory model of the intention to use corporal punishment included a set of three variables referred to as control variables (being an active member of a religious group, sex of the respondent, country of origin) independent variables (frequency of received punishments, positive attitude towards corporal punishment, negative attitude towards corporal punishment, ambivalent attitude towards corporal punishment) and dependent variable (intention to use corporal punishment). These variables were all included in a model of logistic regression designed to test possible patterns of relationships.
between independent variables and subjects’ intention to use corporal punishment. Mainly, the study is consistent with previous research (Durrant et al., 2003; Ateah and Durrant, 2005) in saying that punishment variables such as frequency of received corporal punishment, number of punishing agents and the nature of received punishments bear only weak correlations with intentions to use corporal punishment once attitudes towards corporal punishment are controlled for. However, it was shown that the more severe, longer and varied instances of corporal punishment received, the more likely it was for the subject to manifest her intention to later use it as a parent. On the other hand, it was suggested that severity of corporal punishment is negatively associated to the intention to later use this technique. The study has shown that the frequency of punishments received as a child does not explain the latter use of corporal punishment as a parent. Despite the fact that her research did not specifically address the issue of mediation, Despatie (2005) has suggested that positive/negative opinion towards corporal punishment, rather than the frequency of received punishments, were better predictors of the intent to use corporal punishment as a parent. Also, consistent with the results of the present study, Despatie (2005) showed that ambivalent attitudes are not significantly correlated with intentions to use corporal punishment. These observations corroborated with her final observation that the correlations found do not necessarily attest the existence of a causal link between the dependent and independent variable have inspired the subject of the present research.

4.7. Concluding considerations
Drawing from the same dataset used by Despatie (2005), the present papers is committed to studying a set of reflexive variables such as attitude towards corporal punishment, perceived reasons for corporal punishment, reasons for corporal punishment as given by the punishing agent, style of corporal punishment and their mediating role in the relationship between corporal punishment variables and intention to use corporal punishment. Namely, it is suggested that the four aforementioned variables play a crucial role in shaping the subject’s intention to later use corporal punishment as a disciplinary method. In so doing, structural equation modeling will be employed in order to separate potential mediators that might explain the relation between objective variables and intention to use corporal punishment. Moreover, it is contended that among the separated mediators, the
mediating role of attitudes towards corporal punishment is paramount in the relationship between objective variables and intention to use it.

Finally, while there is an abundance of studies in the field literature on isolated factors accounting for a certain attitudinal outcome such as age, sex, the type of misbehaviour that triggered the punishment and the socio-demographic status of the parents, little is known about the person behind these factors. Therefore, the present paper will attempt to fill this gap by drawing an approximate composite portrait of the person likely to use physical correction as a future parent. In addition, since the obtained results support the proposed conceptual model wherein reflexive factors are better predictors than objective variables with regard to the outcome variable, cluster analysis will be used as a complementary confirmatory strategy. More specifically, by identifying commonly occurring combinations of a set of critical variables, this approach will reveal whether the clusters differ or not on variables that were previously identified as mediators by using SEM.

4.8. Research hypotheses

1. The relationship between objective variables (e.g. religion, age, sex, country of origin, frequency of corporal punishment, number of punishing agents, number of age groups for receiving punishment, type of corporal punishment, reasons given/perceived for corporal punishment) and intent to later resort to corporal punishment (C.P.) is mediated by the subject’s attitudes towards C.P.;

2. As a corollary to this, it is suggested that the more subject perceives past use of C.P. as justified the more she is inclined to employ it as a future parent;

3. Each of the independent variables considered for study bear significant correlations with mediating variables which, at their turn, are significantly correlated with the outcome variable (intention to use C.P.);

4. Since attitudes play a paramount role in shaping intention to use C.P., it is expected that when independent variables and reflexive mediators are included in the same analysis, the former tend to have more influence over the formation of clusters than the latter do.
CHAPTER 5: Methodology
5.1. Brief description of the chapter

In this methodological chapter the main hypotheses and study objectives will be presented. Also, a description of the sample, as well as a presentation of the main procedural steps that have been pursued will follow. In order to test the validity of our propositions, all hypotheses will be statistically translated and analyzed. For this purpose, several statistical methods will be employed and explained. Finally, upon analyzing the data, key conclusions of the study will be advanced and future study directions will be offered. Since an extensive description of the sample and results showing correlations between variables are available in Despatie’s (2005) study, only the most relevant characteristics that might be indicative of some new patterns of results will be tackled in this paper.

5.2. Objectives and research hypotheses

General objective

The aim of the present study is to understand the mediating role of reflexive variables such as: attitudes towards C.P., reasons for being punished as perceived by the recipient of C.P., reasons for C.P. given by the agent; the style of C.P. in the relationship between a set of objective variables such as: sex of the respondent, country of the respondent, actual age of the subject, religious affiliation of the subject, means of administration of CP, number of punishing agents, frequency of punishments, age span the subject received C.P. on one side and the intention to use C.P. as a disciplinary method on the other side.

Specific objectives:

1. Describe the set of variables that are of interest for our study. Specifically, the study will consider three main types of variables: objective variables (stable variables: sex of the respondent, country of birth, actual age, religious affiliation and frequency measures: means of administration of CP, number of punishing agents, frequency of punishments, age span the subject received C.P.), mediating variables (perceived reasons for C.P., reasons for C.P. as given by the punishing agent, style of C.P., attitudes towards C.P.) and the outcome variable which is the intent to use C.P.

2. Identify potential mediators that might explain the relation between independent variables and attitudes towards C.P.

3. Verify whether there is a relationship between objective variables and intention to use C.P.
4. Examine to what extent that relationship between independent variables and intention to use C.P. is mediated by reflexive variables.

5. Attempting to outline distinct groups of subjects by employing cluster analysis and identifying commonly occurring combinations of critical variables.

5.3. Justification of the quantitative choice

The present study draws from an existing database created by Prof. Dianne Casoni of the Université de Montréal in collaboration with one of her master students; Caroline Despatie. The dataset served as a starting point and source of inspiration for the paper entitled: *Portrait des experiences et des opinions d’étudiants universitaires à l’égard de la punition corporelle* that was in partial fulfillment of her Master’s degree in criminology. Inspired by her study, the first of its genre in Québec, as well as by the suggestions for possible further research directions offered therein, we have seized the opportunity to further the research findings in order to achieve a deeper understanding of this rich and vast database. The present study uses a statistical approach to describe and identify causal explanations between phenomena. In other words, our set of variables will represent numerical representations and manipulations of observations for the purpose of describing and establishing relationships between several aspects of the reality that they are reflecting. All the data will be thus reduced to a set of objective figures as we are interested in classifying features, counting them, and constructing more complex statistical models in an attempt to realise an accurate prediction and generalization of the results obtained.

5.4. Choice of the sample

The choice of the population for this study is originated in the desire to replicate studies having been done in Western Canada and U.S. One of the advantages of studying a student population consists in limiting the effects of the social desirability bias. That is to say, by their status, the participants will be less likely to underreport episodes of C.P. as they are no more recipients of C.P. nor are they parents employing it upon their kids. From this point of view we expect a higher level of objectivity as subjects are half-way situated between the two main categories of the actors involved in our study: children and parents. In addition, provided that student and other pre-parent populations show high degrees of concordance with parent populations in their attitudes regarding disciplinary acts (Bower and Knutson, 1996;
Portwood, 1998) and have not yet had to function in a parenting role, such pre-parent groups offer an important opportunity to investigate original patterns of association between disciplinary history, attitudes and intentions.

5.5. Sample
The study is based on a probabilistic sample of 2142 university students chosen randomly in order to gather information about their own experiences with C.P. as children. The sample consists of 70.2% women and 29.9% men. A great majority of them (56.8%) are aged between 18 and 21 years. As for the rest of them, 30.1% are aged between 22 and 25 years of age, 6.8% between 26 and 30 years and finally 6.3% are 31 years of age and older. It is noteworthy to mention that only 5.7% of subjects are themselves parents. For 84.3% of them Canada represents their country of birth while a proportion of 15.7% reported having been born outside of Canada. As an interesting finding, 80% of participants have reported at least one episode of C.P. during their childhood (Despaties, 2005).

5.6. The instrument
A questionnaire was conceived by Dr. Dianne Casoni, the supervisor of this project, professor at the École de Criminologie of the Université de Montréal. The tool was designed in the light of the main theoretical concepts existent in the field literature. It is important to mention that to date no other similar questionnaire to assess experiences regarding C.P. for a French-speaking population is available. This survey consists of 13 multiple choice questions. The other 10 questions are specifically designed for subjects having reported at least one episode of C.P. Specifically, the 4 first questions of this second part explore details pertaining to the participants’ experience with C.P. such as the age of onset, the relation with the punishing agent and the frequency of C.P. The following questions assess the context of the targeted acts and the reasons given by the punishing agent to justify his/her behaviour. In the next two questions, the respondent was asked to recall his past emotional reactions to C.P. and attributions regarding the causes and the purposes of the C.P. The students were then asked about their own present attitudes towards C.P. and invited to express their intentions, as parents, regarding the use of such a disciplinary method.

7 58 students were removed from the database due to a great number of non-responses
8 the students of this sample come from the Université de Montréal
Finally, the last section of the instrument is composed of a set of 9 questions designed to gather information about the respondents’ sociocultural and demographic status (such as age, sex, religion, home country, parents’ home country, marital status, and number of children).

The respondents were given the possibility of choosing as many of the statements proposed as wished, and they had the possibility to formulating their own options when unsatisfied with the suggested choices. It is also important to mention that a pilot survey was previously performed upon a small number of students (Despatie, 2005) in order to make sure all the questions are sound and clear and thus, that any potentially ambiguous questions are eliminated.

5.7. Statistical analyses

Since the main goal of this paper is to isolate potential mediators that might explain the relation between objective (independent) variables and the intention to use C.P., three types of variables were included in the analysis: distal (stable and frequency measures), mediating and outcome variables. The terms distal and mediational derive from Baron and Kenny (1986). The basic idea is that a mediating variable explains some or all of the shared variance between a distal variable and an outcome of interest since it connects the distal variable with the outcome. The distal variable is something that is far removed from the outcome in terms of causal influence.

Specifically, in the dataset, there are two types of distal variables: stable variables (sex, place of birth, religion, and age) and frequency measures (frequency of C.P., means of administration of C.P., number of objects and number of punishing agents).

For the purpose of the present paper the distal variables will be referred to as objective variables. Furthermore, this set of variable is further compounded by two other subsets of variables: “stable variables” and “frequency measures”.

The mediating variables considered in the model consist of subjective experiences and states. These two subtypes will be generically referred to as reflexive variables. In the present study, potential mediators include the reasons for C.P. (own and agent’s), type of C.P., and the participants’ attitudes towards C.P. The basic idea implied is that a mediating variable explains some or all of the shared variance between an objective variable and an outcome of interest. The objective variable is something that is far removed from the outcome in terms of causal influence; the mediating variable connects the objective variable with the outcome.
Finally, the third type of variable included in the paper is the outcome variable. In other words, it is the final effect (fully or partial mediated) that will be tested. This variable is also referred to as the dependent or responding variable.

In order to answer the aforementioned objectives, the resulting data base will be analyzed using the SPSS 11.0\(^9\) and AMOS 6\(^{10}\) for running the Structural Equation Modeling (SEM) analysis. First of all, descriptive statistics will be performed to get a general idea about the sample structure as well as to make sure no variables are constants and that there is enough variability in the variables to use them for correlational and SEM analyses. Further, bivariate analyses will bring forth possible correlations existing among different variables. This stage of the analysis is of vital importance as this is the point where key variables that will be included in the final explanatory model are selected, thus responding to the study’s first and second objective.

For the purpose of organizing the data by creating new variables with better explanatory power, a factorial analysis will be performed. This will also help in the preparation of the database for further modelling purposes by reducing a larger number of variables that might preclude modeling to a smaller number of variables that are more effective in confirming the latent variables modeled by SEM. Viewed from this perspective, factor analyses constitute a preparatory stage in the larger context of the structural equation modeling design. Specifically, four sets of reflexive measures were analyzed separately: (1) reasons for being punished as perceived by the recipient of C.P.; (2) reasons for C.P. given by the agent; (3) type of C.P.; and (4) attitudes of the participants towards C.P.\(^{11}\).

In order to address the third research objective which consists in verifying the relationship between objective variables and intentions to use C.P. a SEM analysis will be performed. Based on the two previous steps wherein measures of experiences and attitudes were combined into a more parsimonious set of multi-item scales through the use of factor analysis (step 1) and that variable satisfying the criteria for mediation established by Baron and Kenny (1986) were identified (step 2), the final stage of the analysis can be completed. The fit of a model in which the relationship of objective variables with the intention to use C.P. is entirely mediated by reflexive variables (the fourth specific objective), can be tested.

\(^9\) Statistical Package for Social Sciences 11.0 is a software designed for analysing the statistical data

\(^{10}\) AMOS 6 is an easy-to-use software package intended for structural equation modeling. AMOS stands for Analysis of Moment Structures and has been adopted by SPSS as the structural equation modeling component of its suite of statistical software.

\(^{11}\) This item was adopted from Despatie (2005)
Ultimately, the fifth research objective will be addressed by performing a cluster analysis. More explicitly, the subjects will be regrouped according to observed differences pertaining to variables such as: number of punishing agents, means of administration of C.P., frequency of received C.P., reasons for C.P. given by the agent, religion, attitude towards C.P., age span during which the subject received C.P. (age span) and type of C.P. The aforementioned variables along with the four cluster solution were finally selected as exploratory analyses shown that this combination of variables expressively allowed for a four cluster solution with meaningful distinction between groups that were however lost when fewer clusters were used. Indeed, when five or more clusters were utilized, the additional clusters were extremely small (n < 18).

5.8. Descriptive statistics
For purposes of comparison with other studies, and to ensure that the variables in this study exhibit variability, descriptive statistics were computed for each variable. For expediency reasons and given the fact that a thorough sample description has already been performed (see Despatie, 2005) redundancy will be avoided by focusing only on those features of the sample that are of special interest to this present study. Consequently the following will be further described: sex of the respondent, country of the respondent, actual age of the subject, religious affiliation of the subject, means of administration of C.P., number of punishing agents, frequency of C.P., age span during which the subject received C.P., reasons for C.P. as perceived by the subject, reasons for C.P. as given by the punishing agent, type of C.P. and intention of the subject to use C.P. as parent.

5.9. Objective variables
5.9.1. Demographics of the sample
At the level of the sample 70.2% of students are women as opposed to 29.9% which are men. A great majority of them (56.8%) are aged between 18 and 21 years. As for the rest, 30.1% are aged between 22 and 25 years of age, 6.8% between 26 and 30 years old and finally 6.3% are 31 years of age and more. Furthermore, 84.3% were born in Canada while a proportion of 15.7% were born outside Canada. Only a small fraction of the sample (5.7%) declared being active members of a religious group while 94.3% of the subjects declared having no connection with any form of organized religion. In decreasing order, the religious denominations of the subjects
are the following: Catholicism (68.1%), Protestantism (23%), Islam (5.2%), Judaism (1.5%), Buddhism (1.5%) and finally one subject chose not to disclose his religious affiliation.

Table I: Socio-demographic characteristics of the sample

<table>
<thead>
<tr>
<th>Socio-demographic variables</th>
<th>Descriptive statistics</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of sample</td>
<td>Number of subjects</td>
<td>of Total number of subjects</td>
<td></td>
</tr>
<tr>
<td>Actual age of the respondent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-21 years old</td>
<td>56.8</td>
<td>1188</td>
<td>2091</td>
<td></td>
</tr>
<tr>
<td>22-25 years old</td>
<td>30.1</td>
<td>630</td>
<td>2091</td>
<td></td>
</tr>
<tr>
<td>26-30 years old</td>
<td>6.8</td>
<td>142</td>
<td>2091</td>
<td></td>
</tr>
<tr>
<td>31 years old and over</td>
<td>6.3</td>
<td>131</td>
<td>2091</td>
<td></td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>29.8</td>
<td>622</td>
<td>2085</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>70.2</td>
<td>1463</td>
<td>2085</td>
<td></td>
</tr>
<tr>
<td>Active member of a religious group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5.7</td>
<td>119</td>
<td>2089</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>94.3</td>
<td>1970</td>
<td>2089</td>
<td></td>
</tr>
<tr>
<td>Respondent’s country of origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>80%</td>
<td>1631</td>
<td>2040</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
<td>409</td>
<td>2040</td>
<td></td>
</tr>
</tbody>
</table>

5.10. Frequency measures

5.10.1. Frequency of C.P.

Amongst the 2142 members subjects of the sample, 20% (n=248) had never experience any form of C.P. For that particular reason, these subjects will be further excluded from future analyses. For the purpose of the present study only those members of the sample having admitted that they have at least once during their
childhood had been subjected to C.P. (80%, n=1437) have been considered. Out of these 1437 subjects that form the sample of the study, 10.8% (n=185) of respondents declared having experienced a single episode of C.P. during their childhood. 38.5% (n=660) declared between 2 and 5 episodes during their childhood, 20.2% (n=346) have recollections of 6 to 10 episodes, while another 15.3% (n=262) have reported having experienced several such episodes per year.

Given the fact that the subjects having been reported greater frequency of C.P. are less numerous, case were regrouped in order to increase the subject distribution for each variable. Consequently, 7.5% of all subjects (n=127) having been subjected to C.P. once or twice per month, 5.9% of those (n= 100) declaring a frequency of C.P. at a rate of 3 to 4 times per month and finally, a small 1.9% of the subjects (n=33) that have declared a higher frequency rate of C.P. were identified. Among this last group, 2 subjects declared receiving several such C.P. experiences daily, 1 subject reported one experience daily while the last 30 subjects reported several such episodes of C.P. experiences per week.

5.10.2 Number of punishing agents
In order to arrive at this variable, an addition of 9 original answer choices pertaining to the persons administering C.P. has been performed (see the choice of answers for question number 3, Annex I). As a result, almost half of the sample members 56.7% (n =972) have been punished by a single agent and 28.8% (n = 616) of the subjects indicated the existence of two punishing agents. The subjects with more than two punishing agents represent only a small fraction of the sample. Indeed, only 5.5% (n= 95) of the subjects pointed out to the existence of three punishing agents while 1.7 % (n = 30) of them designated a number of four to six punishing agents.

5.10.3 Age span
As with the previous variable, another addition of a set of 5 dichotomic variables pertaining to different age groups during which subjects received C.P. was performed (see the choice of answers for question number 2, Annex I). The results show that 71.5% (n =1217) of the sample indicated a single age group while C.P. occurred during 2 age groups for 15.2% (n= 259) of the sample, three age groups for 7.2% (n= 123) of them and for four and five age groups for 3.1% (n=53) and respectively 2.9% (n=50) of the sample.
5.10.4 Means of administration of C.P.

After additioning the dichotomic variables resulting from the choices for the 7th question (see the Annex 1) a new variable named *means of administration of C.P.* has been created. In the present sample, the great majority of respondents designated the use of a single manner of C.P. (82.9%, n=1412) while only 13.3% (n=226) of the subjects remembered having been punished in two different ways. Finally, for 3% (n=51) of the students were used three different means of C.P. while for a small proportion of them (0.8%, n=14) C.P. was administered in four to seven different manners. Since the survey has only specified the hand as a possible part of the body to be used for administering C.P., it is logically inferred that, excepting those subjects that have indicated the fists as a manner of C.P., the remainder of the subjects have been punished through the use of objects and therefore, according to the judgment of the Supreme Court of Canada, it can technically be considered as an excessive use of power.

5.11. Mediating variables

The following set of four reflexive measures was included in the analyses: (1) students’ attitudes towards C.P., (2) reasons for being punished as perceived by the subject; (3) reasons for C.P. as given by the agent; and (4) the type of C.P. In order to obtain these measures four specific questions were introduced in the questionnaire. In order to reduce the numerous variables obtained to the multiple choices, a set of underlying dimensions was isolated through the use of factor analysis. In the following analyses, all factors that satisfied Kaiser’s criterion (i.e., had Eigen values greater than one) were retained. In order to increase the interpretability of the factor solution, a Varimax rotation to simple structure was utilized (Harman, 1976).

5.11.1. Subject’s Attitude towards C.P.

The factor analysis of items assessing subjects’ attitudes towards C.P. yielded three dimensions with Eigen values greater than one. These three dimensions accounted for 46% of the variance of the items. The factor loadings from the Varimax rotation are presented in Table II. Factor one has high loadings on items that indicate negative attitudes towards C.P. Factor two has high loadings on statements that offer justifications for C.P. Factor three loads on items that reflect a mixed attitude towards C.P. These factors will be labelled Negative, Positive and Ambivalent.
attitudes towards C.P. Scale scores were computed for each of these dimensions by averaging the items that comprise each factor.

Table II: Varimax Rotation of Subjects Attitudes towards C.P. *

<table>
<thead>
<tr>
<th>Original items</th>
<th>Factor solution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Method that teaches violence</td>
<td>Factor 1: Negative attitude</td>
<td>0.704</td>
</tr>
<tr>
<td>I would never treat my children alike</td>
<td>Factor 2: Positive attitude</td>
<td>0.689</td>
</tr>
<tr>
<td>Ineffective method</td>
<td>Factor 3: Ambivalent attitude</td>
<td>0.631</td>
</tr>
<tr>
<td>Method that could easily lead to abuse or excess</td>
<td>0.596</td>
<td></td>
</tr>
<tr>
<td>Many other methods are more effective</td>
<td>0.518</td>
<td></td>
</tr>
<tr>
<td>People who use this method are old-fashioned</td>
<td>0.480</td>
<td></td>
</tr>
<tr>
<td>I feel grateful for having been educated that way</td>
<td>0.675</td>
<td></td>
</tr>
<tr>
<td>Reasonable educational method</td>
<td>0.573</td>
<td></td>
</tr>
<tr>
<td>Method preached by our religion</td>
<td>0.564</td>
<td></td>
</tr>
<tr>
<td>Many other non-violent methods are also effective</td>
<td>0.671</td>
<td></td>
</tr>
<tr>
<td>Method to be used as a last resort</td>
<td>0.600</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Extraction method: Principal component analysis, Rotation method: Varimax with Kaiser normalization, Rotation converged in 7 iterations, Analyses are based on cases that have experienced C.P. as a child, and therefore can answer the items pertaining to experiences of C.P.

5.11.2. Perceived Reasons for C.P.

The perceived reasons for use of C.P. by punishing agents during childhood were assessed in question number 5 of the questionnaire and originally consisted of 8 items (Annex 1). To render the answers in a more comprehensible form, factor analysis was performed. The numerous original choices for perceived reasons for use of C.P. yielded four dimensions with Eigen values greater than one. These four dimensions accounted for 63% of the variance in the items. The factor loadings from the Varimax rotation are presented in Table III (loadings lower than .1 in absolute magnitude were not printed to increase the clarity of the table).
All four factors were distinct and interpretable. The first factor, labelled Bad Behaviour, has high loadings on “being punished to induce obedience”, and “being punished due to being undisciplined”. In the second factor, subjects attribute the use of C.P. to the character of the punishing agent and his or her judgment of the subject’s character. This factor is labelled Mean Agent. The third factor, labelled Religion, has high loadings on items reflecting endorsement of C.P. by religious leaders. The fourth factor, labelled Impulsive Agent/Habit has high loadings on items indicating that the punishing agent habitually acted out of impulse when he or she administered C.P. The results of this factor analysis were utilized to compute four summary scale scores. Scales scores were computed by averaging the ratings of items that comprised each of the four factors. Items were scored only on the scale for which they had the highest factor loading; no item was scored on more than one scale. For instance, the first scale (Bad Behaviour) of the factor Perceived Reasons for C.P. was computed as the average of ratings on the two items that loaded highly on the first factor (submission and indiscipline). The second scale (Mean Agent) was computed as the average of the ratings on the two items that loaded highly on the second factor (agent’s bad character and subject bad character). The third scale (Religion) was as the average of the ratings on the two items that loaded highly on the third factor (recommended and religious beliefs). The fourth scale (Impulsive Agent/Habit) was computed as the average of the ratings on the two items that loaded highly on the fourth factor (impulse and habit). The results of the factor analysis are used to determine which items should be scored on which scales.
Table III: Varimax Rotation of Reasons for C.P. *

<table>
<thead>
<tr>
<th>Original items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bad behaviour</td>
<td>Mean agent</td>
<td>Religion</td>
<td>Impulsive agent/Habit</td>
</tr>
<tr>
<td>To make me obey</td>
<td>0.873</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was very undisciplined</td>
<td>0.813</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was considered bad</td>
<td></td>
<td>0.805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malicious agent</td>
<td></td>
<td>0.745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method recommended by our religious leaders</td>
<td></td>
<td></td>
<td>0.741</td>
<td></td>
</tr>
<tr>
<td>Punishing agent’s religious beliefs</td>
<td></td>
<td></td>
<td>0.703</td>
<td></td>
</tr>
<tr>
<td>Impulsive reaction by the punishing agent</td>
<td></td>
<td></td>
<td></td>
<td>0.833</td>
</tr>
<tr>
<td>Method favoured by my entourage</td>
<td></td>
<td></td>
<td></td>
<td>0.459</td>
</tr>
</tbody>
</table>

*Note: Extraction method: Principal component analysis, Rotation method: Varimax with Kaiser normalization, Rotation converged in 5 iterations.

5.11.3. Reasons Given by Punishing Agent

The reasons given to the subjects by the punishing agent justifying their discipline were extracted from the question number 6 of the questionnaire (Annex1). The factor analysis of the 6 original items pertaining to reasons given punishing agent yielded three dimensions with Eigen values greater than one. These three dimensions accounted for 49% of the variance in the items. The factor loadings from the Varimax rotation are presented in Table IV. All three dimensions were distinct and interpretable. The first factor had high loadings on items referring to the agent viewing C.P. as an educational and child-rearing practice. The second factor featured high loadings on items that referred specifically to the bad behaviour of the recipient and the trouble she would have caused according to the punishing agent. The third factor had high loadings for lying and hurting God. These three factors are labelled “Routine education”, “Caused trouble”, and “Lied and hurt God”. The
results of this factor analysis were utilized to compute three summary scale scores, by averaging the ratings of items that comprised each of the four factors.

Table IV: Varimax Rotation of Reasons Given by Punishing Agent*

<table>
<thead>
<tr>
<th>Original items</th>
<th>Factor solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1 Routine education</td>
</tr>
<tr>
<td>A way to educate children</td>
<td>0.733</td>
</tr>
<tr>
<td>I encountered problems in school</td>
<td>0.622</td>
</tr>
<tr>
<td>To prevent me from becoming delinquent</td>
<td>0.617</td>
</tr>
<tr>
<td>Disobedience</td>
<td>0.808</td>
</tr>
<tr>
<td>To keep me on the right path</td>
<td>0.599</td>
</tr>
<tr>
<td>I caused trouble</td>
<td>0.533</td>
</tr>
<tr>
<td>I lied</td>
<td>0.711</td>
</tr>
<tr>
<td>I hurt God</td>
<td>0.505</td>
</tr>
</tbody>
</table>

*Note: Extraction method: Principal component analysis, Rotation method: Varimax with Kaiser normalization, Rotation converged in 5 iterations.

5.11.4. Type of C.P.

The factor analysis of items assessing the type of C.P. is originated in question number 8 of the questionnaire (Annex 1) instrument and yielded two dimensions with Eigen values greater than one. These three dimensions accounted for 49% of the variance in the items. The factor loadings from the Varimax rotation are presented in Table V. The first factor loads on items that reflect an impulsive and out of control type of C.P. The second factor loads on items that reflect a more premeditated and Calculated style of C.P. These factors will be labelled Impulsive type and Calculated type, respectively. Scale scores for these two dimensions of style were computed by averaging the answers to the items that comprised each factor.
Table V: Varimax Rotation of Type of C.P. Items*

<table>
<thead>
<tr>
<th>Original items</th>
<th>Factor solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
</tr>
<tr>
<td></td>
<td>Impulsive style</td>
</tr>
<tr>
<td>Administered in the heat of the moment</td>
<td>0.897</td>
</tr>
<tr>
<td>Immediately after the faulty event</td>
<td>0.893</td>
</tr>
<tr>
<td>Announced and administered another day</td>
<td>0.679</td>
</tr>
<tr>
<td>Predetermined number of blows</td>
<td>0.631</td>
</tr>
<tr>
<td>Announced and administered later</td>
<td>0.630</td>
</tr>
</tbody>
</table>

*Note: Extraction method: Principal component analysis, Rotation method: Varimax with Kaiser normalization, Rotation converged in 3 iterations, Analyses are based on cases that have experienced C.P. as a child, and therefore can answer the items pertaining to experiences of C.P.

Finally, since one of the main goals of this section is to show that there is enough variability in the variables to be further used for correlational and SEM analyses, a table of all descriptive statistics included in our analyses is presented in Annex 2.

5.12 Bivariate analyses

5.12.1. Identification of Objective and Mediating Variables

This second step in the analysis will examine the relationship of objective variables with the intention to use C.P. Analyses also sought to identify potential mediators of the relationship between these objective variables and the intention to use C.P., following procedures established by Baron and Kenny (1986). These criteria for mediation have been widely accepted in research on mediating processes. Basically, their approach for establishing mediation proceeds in four steps:

1. Verify whether there is an effect that may be mediated. In other words, show that the initial variable is correlated with the outcome by using Y as the criterion variable in a regression equation and X as a predictor (estimate and test path c, see figure I).
2. Show that the initial variable is correlated with the mediator. Use M as the criterion variable in the regression equation and X as a predictor (estimate and test path a). At this point the mediator is treated as if it were an outcome variable (estimate and test path a).
3. See if the mediator affects the outcome variable. This time Y is used as the criterion variable in a regression equation and X and M as the predictors (test path b).
At this step it is noteworthy to mention that since the mediator and the outcome may be correlated as they are both caused by the initial variable, it is not sufficient to correlate the mediator with the outcome. Moreover, the initial variable must be controlled in establishing the effect of the mediator on the outcome.

4. Test whether M completely mediates the relationship between X and Y. The condition to be fulfilled is to prove that X no longer affects X when controlling for M (path c’ should be zero) (for more in-depth information on the subject, see Baron and Kenny (1986) and Judd and Kenny (1981).

Figure I: The mediation process

\[
\begin{array}{c}
X \\
\downarrow c \\
M \\
\downarrow b \\
Y \\
\hline
\end{array}
\]

\[
\begin{array}{c}
X \\
\downarrow c' \\
Y \\
\hline
\end{array}
\]

5.12.2. Relation of objective variables to intentions

According to the above-mentioned mediational model proposed by Baron and Kenny, an attempt will be made to identify the relationships between the objective variables and the outcome variable of this study (according to the 1st step of the model proposed by Baron and Kenny, 1986). Specifically, correlational analyses between objective variables (such as frequency of C.P., means of administration of C.P., number of punishing agents, age span of C.P., sex of the respondent, country of the respondent and actual age of the respondent) and the intention to use C.P. as an adult were conducted. The significant correlations between the objective variables significantly associated with the intention to use C.P. as an adult are shown in Table VI. As seen on Table VI, every objective variable, except for the subject’s current age, is associated significantly with the intention to use C.P. Specifically, subjects had stronger intentions to use C.P. as adults with their future children if they had experienced more frequent C.P. as a child, had been punished with a wider variety of
objects, had been punished by a greater number of people, had been punished during a wider age span, were not native Canadians, and were male.

Table VI: Correlations of Objective Variables with the Intention to Use C.P. as parent

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intention to use C.P. as parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of C.P.</td>
<td>.194***</td>
</tr>
<tr>
<td>Means of administration of CP</td>
<td>.085**</td>
</tr>
<tr>
<td>Number of punishing agents</td>
<td>.092***</td>
</tr>
<tr>
<td>Age span</td>
<td>.088**</td>
</tr>
<tr>
<td>Country of respondent (recoded 0 vs. 1)</td>
<td>.109***</td>
</tr>
<tr>
<td>Sex of the respondent (recoded 0 vs. 1)</td>
<td>-.093***</td>
</tr>
<tr>
<td>Actual age of the respondent</td>
<td>.010</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, **p < 0.01 and ***p < 0.001, N= 1437 subjects

5.12.3. Relation of Objective Variables to Potential Mediators

In order for a variable to serve as a mediator between an objective variable and an outcome of interest, the potential mediator must be associated significantly with the objective variable (see 2nd step; Baron and Kenny, 1986). Thus, in this step of the analyses, the association between six potential mediating variables retained for analysis (see step 3), and the objective characteristics were examined. In order to study the association between objective and mediating variables, correlational analyses were conducted.

Correlations of objective variables with the two mediators dealing with perceived and given reasons for C.P. are shown in Table VII. Numerous significant correlations were found between the objective variables and these two potential mediators. Specifically, subjects were more likely to report that the punishing agent acted out of habit and impulse, and justifying their use of C.P. in terms of the subject lying and hurting God, when C.P. was frequent, involved a wider variety of objects, and was administered by a larger number of people. These subjects were also more likely to be immigrants than native-born Canadians. The cumulative pattern of these findings strongly suggest that these two measures of given and received reasons for
C.P. merit further attention as potential mediators of the relationship between objective variables and the intention to employ C.P. as a parent.

Table VII: Objective variables correlated with given and perceived reasons for C.P.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Impulsive C.P.</th>
<th>Lied and hurt God</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of C.P.</td>
<td>.198***</td>
<td>.136***</td>
</tr>
<tr>
<td>Means of administration of CP</td>
<td>.248***</td>
<td>.171***</td>
</tr>
<tr>
<td>Number of punishing agents</td>
<td>.141***</td>
<td>.198***</td>
</tr>
<tr>
<td>Age span</td>
<td>.260***</td>
<td>.143***</td>
</tr>
<tr>
<td>Country of the respondent</td>
<td>.105***</td>
<td>.086**</td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td>.028</td>
<td>-.005</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, **p < 0.01 and ***p<0.001, N= 1437 subjects

Correlations of objective variables with the type of C.P. are shown in Table 8. No significant correlations were found between objective variables and reports that C.P. was administered in the heat of the moment. Accordingly, this reflexive variable was removed from further consideration as a potential mediating variable. By contrast, many significant correlations were found between the objective variables and reports that C.P. was administered in a calculated manner. Subjects were more likely to report that C.P. was administered in this manner if C.P. was frequent, involved a wider variety of objects, and was administered by a larger number of people. These subjects were also more likely to be immigrants than native-born Canadians, and to be male. In view of the pervasive range of relationships between the calculating punitive style and the objective variable, this variable was retained for further consideration as a potential mediator.

Table VIII: Objective Variables correlated with Type of C.P.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Calculated C.P.</th>
<th>Impulsive C.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of C.P.</td>
<td>.108***</td>
<td>.034</td>
</tr>
<tr>
<td>Means of administration of CP</td>
<td>.262***</td>
<td>.018</td>
</tr>
<tr>
<td>Number of punishing agents</td>
<td>.0206***</td>
<td>-.007</td>
</tr>
<tr>
<td>Age span</td>
<td>.089**</td>
<td>.030</td>
</tr>
<tr>
<td>Country of the respondent</td>
<td>0.164***</td>
<td>-.015</td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td>-.080*</td>
<td>.040</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, **p < 0.01 and ***p<0.001, N= 1437 subjects
Correlations of objective variables with subject’s attitudes towards C.P. are shown in Table IX. Objective variables were associated both with positive and negative attitudes on the part of subjects towards C.P. Subjects were more likely to hold positive attitudes towards C.P. if they were frequently punished; C.P. involved a wider variety of objects and was administered by a larger number of people. They were also more likely to be immigrants than native-born Canadians and to be male. Subjects were more likely to hold negative attitudes to C.P. if they had been punished across numerous age groups throughout their life, were native Canadians and were female.

Table IX: Objective Variables correlated with Attitudes towards C.P.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Negative attitudes towards C.P.</th>
<th>Positive attitudes towards C.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of C.P.</td>
<td>.145***</td>
<td>-.026</td>
</tr>
<tr>
<td>Means of administration of CP</td>
<td>.122***</td>
<td>.042</td>
</tr>
<tr>
<td>Number of punishing agents</td>
<td>.151***</td>
<td>.003</td>
</tr>
<tr>
<td>Age span</td>
<td>.127***</td>
<td>.079*</td>
</tr>
<tr>
<td>Country of the respondent</td>
<td>.137***</td>
<td>-.072</td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td>-.123***</td>
<td>.129***</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, **p < 0.01 and ***p<0.001, N= 1437 subjects

5.12.4. Relation of Mediators to Intention to use C.P.

According to the above-presented model (Baron and Kenny, 1986), the third step consists in identifying potential mediators of the relationship between objective variables and the outcome variable. That is to say, the relationship between reflexive variables and the intention to utilize C.P. as parent were examined. At this stage, reflexive variables that were associated significantly with intentions to use C.P. were retained for further consideration as potential mediators. Correlations between potential mediators and the intention to use C.P. are shown in Table X. Significant correlations were found between the intention to use C.P. and a number of the mediators. Subjects who reported a stronger intention to use C.P. were likely to report that the punishing agent used C.P. on them due to impulsiveness that the C.P. was administered in an impulsive, rather than in a calculated manner, and that the subject held negative attitudes towards C.P. Conversely, subjects who intended to use C.P. as parents were likely to report that the reasons given by punishing agents stated that the child had lied and/or hurt God. Subjects also had
stronger intentions to use C.P. if they perceived that it was administered to them in a pre-meditated manner, and if the subject had a positive attitude towards it. Hence, these reflexive variables were retained for further consideration as potential mediators. Since the correlation between Ambivalent Attitudes towards C.P. and Intention to use C.P. was not significant, Ambivalent Attitudes towards C.P. was not used as a mediator and therefore, will not receive further consideration.

Table X: Correlations between Reflexive Variables and Intention to Use C.P.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intention to use C.P. as parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Bad Behaviour”</td>
<td>-.012</td>
</tr>
<tr>
<td>Mean Agent</td>
<td>-.028</td>
</tr>
<tr>
<td>Religious justification</td>
<td>.016</td>
</tr>
<tr>
<td>Impulsive agent</td>
<td>-.090**</td>
</tr>
<tr>
<td>Routine education</td>
<td>.027</td>
</tr>
<tr>
<td>Caused trouble</td>
<td>-.015</td>
</tr>
<tr>
<td>Lied and hurt God</td>
<td>.0121***</td>
</tr>
<tr>
<td>Calculated C.P.</td>
<td>.099***</td>
</tr>
<tr>
<td>Impulsive C.P.</td>
<td>-.089**</td>
</tr>
<tr>
<td>Positive attitude towards C.P.</td>
<td>.629***</td>
</tr>
<tr>
<td>Negative attitude towards C.P.</td>
<td>-.433***</td>
</tr>
<tr>
<td>Ambivalent Attitude towards C.P.</td>
<td>-.003</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, **p < 0.01 and ***p<0.001, N= 1437 subjects

5.13. Multivariate Analyses

This chapter presents the findings of analyses that examined the role of past experiences and attitudes as mediators of the relationship between objective variables and the intention to use C.P. In so doing, the procedures established by Baron and Kenny (1986) were followed. According to them, a mediational model is seen as an explanatory model where the mediator is presumed to predict the outcome. In other words, it was implied that a mediating variable explains some or all of the shared variance between an objective variable and an outcome of interest. When variable X (objective variable) no longer affects Y after M (mediator) has been controlled total mediation is arrived at. In that particular case the path c between X and Y is zero (see figure 1, page 108). Conversely, partial mediation is present in the case where the
path from X to Y is reduced in absolute size but is still different from zero when the mediator M is controlled. From that perspective, the mediator has also been called an intervening or process variable (Baron and Kenny, 1986). These analyses proceeded in three stages. First, measures of past experiences and attitudes were combined into a more parsimonious set of multi-item scales through the use of factor analysis. The second stage permitted to identify variables that satisfied the criteria for mediation established by Baron and Kenny (1986). The final stage tested the fit of an explanatory model in which the relationship of objective variables to the intention to use C.P. is entirely mediated by reflexive variables.

5.13.1. Fully Mediated Model

In order to examine the mediating role of reflexive variables, structural equation modeling (SEM) (Bollen, 1989) was employed. SEM is used to evaluate mediation models, as it permits simultaneous estimation of direct and indirect paths and provide fit indices to determine the strength of a proposed model. The model depicted in Figure II (page 115) was tested. The paths in this model were based on the findings of the correlational analyses presented above. Specifically, where a significant correlation was found between an objective variable and a potential mediating variable, a path was included in the model. Variables that were related to the intention to use C.P. were selected. If one of the objective variables was also correlated with a specific reflexive variable, then it was possible that the reflexive variable mediated the relationship between the objective variable and the intention to use C.P. Therefore, when such correlations were found, a path in the model to test for mediation was included. Further, when a significant correlation was found between a variable and intentions to utilize C.P., a path was included. The model proposes that the relationship of objective variables to the intention to use C.P. is fully mediated by reflexive variables. The addition of paths directly from the objective variables to the intention to use C.P. would not significantly improve the fit of the model. Past subjective experiences of C.P. are thought to influence attitudes towards C.P. The model does not contain any direct paths between the objective variables and the intention to use C.P. Hence, the relationship between objective variables and the intention to use C.P. is fully mediated, that is, completely explained, by the mediating variables. Fit of the model was evaluated using Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA; Byrne, 2001;
Tabachnick and Fidell, 1996). The proposed model provided adequate fit to the data (GFI = .988; CFI = .961; RMSEA = .059) according to criteria established by Hu and Bentler (1999). The regression weights from the mediators to intentions were shown in Table 12. The regression weights and variances in the model implied a certain pattern of covariances between variables. With respect to the fit indices, GFI, values greater than .90 are ideal, with CFI values at or above .95 accepted; RMSEA values are ideally at .05 or below (Byrne, 2001; Tabachnick and Fidell, 1996). Typically, better fitting models produce consistent results across several different indices (Tabachnick and Fidell, 1996). Since the goodness of fit of a model is not determined by the size of path coefficients but by how closely the model predicts the observed covariance between variables, the proposed model is acceptable despite the relatively small size of the path coefficients.

When all of the mediating variables were included in the model, only the attitudinal measures made a significant contribution to the prediction of the intention to use C.P. Past experiences with C.P. did not make a significant additional contribution to the prediction of the intention to use C.P., over and above the variance explained by positive and negative attitudes. This finding, in conjunction with the correlational results reported earlier, suggests that the relationship between experiences of past C.P. and the intention to use C.P. as a parent may be mediated by one’s attitude towards C.P.

The path coefficients linking variables are regression coefficients estimated to provide the best fit to the observed covariances using maximum likelihood estimation (MLE), rather than the ordinary least squares (OLS) method that is common in regression analysis. MLE is preferred over OLS for the estimation of SEM models. Regardless of the difference in how the regression coefficient is estimated in SEM versus OLS regressions, the beta has the same meaning in both types of analysis. Therefore, path coefficients in SEM can be read just as though they were standardized beta weights.

Following Baron and Kenny’s (1986) criteria a set of objective and mediating variables were identified. Whenever a correlation between an objective variable and a mediator was established a path was included in the model. The same algorithm was followed whenever a correlation was found between a mediator and the intention to use C.P. as well as between experiences and attitudes towards C.P.

In order to graphically represent these rules the following diagram of causal arrows was created:
The curved lines ending in two arrows show correlations between stable and frequency variables (i.e.: age span, immigrant, frequency of C.P., number of objects, number of agents, sex of the respondent). The straight lines with an arrow indicate the direction of the effect between independent and dependent variables. The six factors taken in consideration in the model are represented in square boxes in the upper left hand corner of the diagram as it follows: age span, immigrant, frequency of C.P., means of administration of C.P., number of punishing agents, and being a woman. Each of the stable variables and frequency measures had significant path coefficients with one or more mediators. The strength and direction of the path coefficients were consistent with the findings from the correlational analyses.
Table XI: Standardized regression coefficients for the relationship of objective variables to mediating variables and attitudes towards C.P.

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women -&gt; Negative attitudes towards C.P.</td>
<td>.118</td>
</tr>
<tr>
<td>Women -&gt; Calculated C.P.</td>
<td>-.066</td>
</tr>
<tr>
<td>Immigrant -&gt; Positive attitudes towards C.P.</td>
<td>-.099</td>
</tr>
<tr>
<td>Immigrant -&gt; Calculated C.P.</td>
<td>.126</td>
</tr>
<tr>
<td>Immigrant -&gt; Impulsive agent</td>
<td>.064</td>
</tr>
<tr>
<td>Immigrant -&gt; Lied and hurt God</td>
<td>.050</td>
</tr>
<tr>
<td>Age span -&gt; Positive attitudes towards C.P.</td>
<td>.081</td>
</tr>
<tr>
<td>Age span -&gt; Impulsive agent</td>
<td>.186</td>
</tr>
<tr>
<td>Age span -&gt; Lied and hurt God</td>
<td>.071</td>
</tr>
<tr>
<td>Number of agents -&gt; Lied and hurt God</td>
<td>.134</td>
</tr>
<tr>
<td>Number of agents -&gt; Impulsive agent</td>
<td>.010</td>
</tr>
<tr>
<td>Frequency of C.P. -&gt; Impulsive agent</td>
<td>.093</td>
</tr>
<tr>
<td>Number of objects -&gt; Impulsive agent</td>
<td>.158</td>
</tr>
<tr>
<td>Number of objects -&gt; Lied and hurt God</td>
<td>.079</td>
</tr>
<tr>
<td>Number of objects -&gt; Calculated C.P.</td>
<td>.237</td>
</tr>
</tbody>
</table>

Women had significantly more negative attitudes towards C.P. (.118) and were less likely than men to report that they had been the recipients of calculated C.P. (-.066). As opposed to their native Canadians counterparts, immigrants reported more positive attitudes towards C.P. (.099), were more likely to be recipients of calculated
C.P. (.126). They usually had the tendency to explain the received C.P. as the result of the impulsiveness of the agent (.064). The type of motivation they received from punishing agents was mostly religiously based (.050). Positives attitudes towards C.P. were detected to subjects who, throughout several group ages, have been subjected to C.P. (.081). Subjects exposed to C.P. throughout different group ages felt that their C.P. was a result of agent’s impulsiveness (.186) even though they were usually told by punishing agent that the actual reason was “lied or hurt God” (.071). Similarly, subjects punished by many agents were provided with the same type of religious motivation (.134) whereas they were leaning towards seeing the event as a direct result of agent’s impulsiveness (.010).

Moreover, it appeared that the more frequent the C.P. the more likely was the subject to perceive the episodes of C.P. as being the sheer result of agent’s impulsiveness (.093). Subjects who had been punished with a wider variety of objects were also likely to believe that the action was impulsive (.158) and to be told by the agent that they were being punished because they had lied or hurt God (.079). However, they were more likely than subjects punished at many ages and by several agents to report that C.P. was used in a calculated manner (.237). Subjects from this category also displayed positive attitudes towards C.P. (.029).

Furthermore, the mediators had significant path coefficients towards intention to use C.P. and attitudes towards C.P. As it appears from the regression coefficients presented below (Table XII), subjects who were victims of calculated type of C.P. during childhood were more likely to resort to C.P. (.034) than those being punished out of impulse (-.026). Also, intention to use C.P. as a parent was expressed by respondents who after their childhood experiences with C.P. were told by the punishing agent that they have been punished because they had lied or hurt God (.039). A strong predictor for the intention to use C.P. was the direction of attitudes towards C.P. Thus, subjects holding positive attitudes towards C.P. were more likely to use C.P. (.537*) than those displaying negative attitudes towards C.P. (-.226*).
Table XII: Standardized regression coefficients for the relationship of mediating variables to the intentions to use C.P.

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attitude (\rightarrow) Intention</td>
<td>.537 *</td>
</tr>
<tr>
<td>Negative Attitude (\rightarrow) Intention</td>
<td>-.226 *</td>
</tr>
<tr>
<td>Impulsive agent (\rightarrow) Intention</td>
<td>-.026</td>
</tr>
<tr>
<td>Lied/Hurt God (\rightarrow) Intention</td>
<td>.039</td>
</tr>
<tr>
<td>Calculated C.P. (\rightarrow) Intention</td>
<td>.034</td>
</tr>
</tbody>
</table>

Note: * \(p < 0.05\), ** \(p < 0.01\) and *** \(p < 0.001\), \(N=1437\) subjects

As observed thus far, different paths were identified between objective variables and mediators, and between mediators and the intention to use C.P. In the mean time, it has been demonstrated (table VI) that all objective variables, except for the subject’s current age, were significantly associated to the intention to use C.P. These two findings lead to the conclusion that the apparent relationship between reflexive and socio-demographic variables is in fact explained by the mediating role played by ones’ attitudes towards C.P., the type of C.P., the reasons given by agents to justify their use of C.P. and reasons given by subjects to explain their own C.P. Moreover, as indicated by the fit indices of the model, this mediation is deemed complete since none of the objective variables make a significant contribution to subjects’ intention to use C.P. as a future parent when the influence of the aforementioned mediators is partialed out.

Indeed, among the four mediators considered in the model only the attitudinal measure makes a significant contribution to the prediction of the intention to use C.P. as a parent. According to the second research hypothesis, past experiences with C.P. do not make a significant additional contribution to the prediction of the intention to use C.P., over and above the variance explained by positive and negative attitudes towards C.P.

Based on the previously discussed results it can be contended that the more a child perceives this educational method as constructive, justified and with positives consequences for his development, the more he is inclined to endorse its use. More specifically, subjects who have been told by the agent that they were being punished because they had lied or hurt God were more likely to report the intention to use C.P. as compared to those who explained C.P. as the result of habitual impulsiveness on
the part of the agent. Finally, it appeared that the number of agents, ages and objects used in C.P. had a certain influence on perceived and given reasons for C.P. and attitudes towards C.P.

As expected, the major point about the findings, as they resulted from the SEM analysis, is that the mediating variables explain a fair amount of association between the objective variables and intention to use C.P. That is to say, a model containing no direct paths from the objective variables (i.e., ages punished, being an immigrant, frequency of C.P., means of administration of CP, means of administration of CP, number of punishing agents, sex) to the intention to use C.P. fits the data.

A last set of variables not accounted for in the questionnaire might also play a role in the intention to resort to C.P. These variables are sources of variations in the dependent variables that come from outside the model and are referred to as “disturbances”. According to Belsky (1993) these unidentified variables may arise from the exosystem. For instance, the six variables labelled Dist1, Dist2, Dist3, Dist4, Dist5, Dist6 were sources of unaccounted variances on the following variables: Impulsive C.P., Calculated C.P., Lied and hurt God, Positive Attitudes towards C.P., Negative Attitudes towards C.P. and Intentions to use C.P. The most important path was the one observed between the calculated type of C.P. and Dist6 (.954) which suggested that there are many uncontrolled variables absent from the model that might explain why parents used this type of C.P. However, since they were not included in the analysis they will not be graphically represented in the model.

5.13.2. Cluster Analysis

Addressing the fifth research objective cluster analysis was utilized in order to explore the profile of differences between subjects. Cluster analysis helps to identify commonly occurring combinations of critical variables. In the present case these are: Frequency of C.P., Number of objects used for C.P., Number of punishing agents, Frequency of received C.P, Means of administration of CP, Number of punishing agents, Routine education, Lied and hurt God, Impulsive C.P., Ambivalent regarding C.P., Mean agent, Positive attitudes towards C.P., Religious justification, Bad behaviour, Age span, Negative attitudes towards C.P. and Caused trouble.

For that purpose, a K-means clustering algorithm was employed, as this procedure allows the analysis to identify the grouping of K clusters that results in the maximum differentiation of subjects on the clustering variable, without regard to the solution
that was obtained for K-1 clusters (Hartigan, 1975). The K-means procedure is not hierarchical, that is to say it does not attempt to split one of the clusters that was obtained from a solution with K-1 groups. Since the solution is not constrained by the results of analyses with fewer clusters, it can be used to define clusters that provide the optimal solution for a particular number of groupings. In these exploratory analyses, a four cluster solution was selected for consideration. As shown below, the four cluster solution made meaningful distinctions between groups that were lost when fewer clusters were used. When five or more clusters were utilized, the additional clusters were extremely small (n < 18).

One-way analysis of variance was conducted to confirm that levels of the clustering variables differed significantly between the clusters. For each of the clustering variables, significant differences were found between the clusters. This finding is not surprising, since the clusters were formed to maximize differences between groups on these variables. However, this finding does confirm that the procedure succeeded in differentiating groups on all variables as was intended.

In order to interpret the composition of each cluster, discriminant function analysis was employed. In this analysis, the variables that are considered to construct the clusters are now employed to differentiate between the clusters. This approach reveals how the clusters differ on the variables that were employed in the cluster analysis. Discriminant function analysis identified linear combinations of variables that provided the best differentiation between groups (i.e., maximize between group variance on the function and minimize the within-group variance). The composition and meaning of the functions is shown by the correlation of the discriminating variables with the functions (i.e., the structure matrix). Each cluster has a location within the framework of clusters that is shown by the mean score for the cluster on the function. Discriminant scores are standardized with a mean of zero and a standard deviation of one in order to facilitate the interpretation of cluster means (Tabachnick and Fidell, 2001). The discriminant function analysis yielded three significant functions, as shown in Table 13. Wilk’s lambda was statistically significant for all three functions. It is also to be noted that the maximum number of functions is determined by the number of groups minus one. Thus, the analysis has yielded the maximum number of significant functions.
Table XIII: Significant Discriminant Functions

<table>
<thead>
<tr>
<th>Test of functions</th>
<th>Wilks’ Lambda</th>
<th>Chi-Square</th>
<th>df.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 through 3</td>
<td>.084</td>
<td>3535.103</td>
<td>42</td>
<td>.000</td>
</tr>
<tr>
<td>2 through 3</td>
<td>.436</td>
<td>1183.345</td>
<td>26</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.952</td>
<td>69.676</td>
<td>12</td>
<td>.000</td>
</tr>
</tbody>
</table>

The discriminant functions can be interpreted by examining the structure matrix (see Table XIV). This table shows the correlation between the clustering variables and the discriminant functions. In order to increase their interpretability, the functions have been rotated so that each variable has a high loading on one and only one function. The loadings in this table are correlations, whose magnitude will be reported according to the following conventions regarding effect size (Cohen, 1992). Loadings greater than .5 will be labelled high, those between .3 and .5 will be labelled moderate, and those below .3 will be labelled weak. The first function had high loadings for the Frequency of C.P. variable. The second function had a high loading for the Means of administration of C.P., moderate loadings for the Number of agents and for two other measures indicating the reasons given by agents to justify the C.P.: Routine education and Lied and hurt God. This function also had weak loadings for Ambivalent and Positive attitudes towards C.P., and for all four measures of what the subjects themselves gave as reasons explaining why they were receiving C.P. The third function had high loadings for the Number of Ages that the subject was punished, as well as weak loadings for Negative attitudes and Causing trouble according to the agent. These functions will be labelled Frequency of C.P., Number of Objects/Agents, and Chronic C.P., respectively.
Table XIV: Composition of the Discriminant Functions. The Rotated Structure Matrix

<table>
<thead>
<tr>
<th></th>
<th>Function 1</th>
<th>Function 2</th>
<th>Function 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of received C.P.</td>
<td>.975(*)</td>
<td>.103</td>
<td>-.00</td>
</tr>
<tr>
<td>Means of administration of CP</td>
<td>-.082</td>
<td>.752(*)</td>
<td>-.290</td>
</tr>
<tr>
<td>Number of punishing agents</td>
<td>.018</td>
<td>.413(*)</td>
<td>-.111</td>
</tr>
<tr>
<td>Routine education</td>
<td>-.011</td>
<td>.395(*)</td>
<td>-.179</td>
</tr>
<tr>
<td>Lied and hurt God</td>
<td>-.008</td>
<td>.300(*)</td>
<td>-.148</td>
</tr>
<tr>
<td>Impulsive</td>
<td>-.013</td>
<td>.267(*)</td>
<td>.008</td>
</tr>
<tr>
<td>Ambivalent regarding C.P.</td>
<td>-.111</td>
<td>.179(*)</td>
<td>-.094</td>
</tr>
<tr>
<td>Mean agent</td>
<td>.001</td>
<td>.131(*)</td>
<td>-.007</td>
</tr>
<tr>
<td>Positive attitudes towards C.P.</td>
<td>.033</td>
<td>.089(*)</td>
<td>.031</td>
</tr>
<tr>
<td>Religious justification</td>
<td>-.017</td>
<td>.089(*)</td>
<td>.010</td>
</tr>
<tr>
<td>Bad behaviour</td>
<td>.012</td>
<td>.064(*)</td>
<td>-.008</td>
</tr>
<tr>
<td>Number of ages punished</td>
<td>-.142</td>
<td>.300</td>
<td>.913(*)</td>
</tr>
<tr>
<td>Negative attitudes towards C.P.</td>
<td>-.013</td>
<td>-.143</td>
<td>.204(*)</td>
</tr>
<tr>
<td>Caused trouble</td>
<td>.070</td>
<td>-.055</td>
<td>.146(*)</td>
</tr>
</tbody>
</table>

Rotated pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. Variables ordered by size of correlation within function.

Note: * Largest absolute correlation between each variable and any discriminant function

The composition of the clusters can be determined by examining the pattern of scores on the functions for each cluster, as shown in Table XV. Cluster one (n = 206 subjects) also called Inconsistent intensive C.P. cluster had high scores on Frequency of C.P., but average scores on Range of Agents/Objects, and Age Span. The subjects forming this cluster have traversed throughout their childhood a critical period as far as their experience with C.P. is concerned. During this critical period they have been frequently subjected to C.P. by a relatively reduced number of agents using an average means of administration of CP. Once they had passed this critical period, their situation improved as their experience with C.P. has plummeted in frequency, number of agents and objects used for C.P.

Cluster two (n = 99), constantly intensive C.P. cluster has high scores on all three dimensions. Regardless their developmental stage these subjects on this cluster have been constantly subjected to episodes of C.P. by many of agents using a wide range of objects.
Cluster three (n = 312) *Constantly low C.P. cluster* has high levels of Chronic C.P., but only moderately high scores on Number of Agents/Objects, and average scores on Frequency of C.P. The experience with C.P. of the subjects in this cluster was a constant of their childhood, though they may have experienced a relatively low number of C.P. episodes, by few agents and using a relatively low number of means of objects. It appears that parents of these subjects had only used C.P. as a last resort method. Since the reported episodes show a relatively low frequency throughout a long age span, these parents are likely to have resorted to C.P. in a calculated manner motivated by religious reasons.

Cluster four (n = 820) *Random C.P. cluster* has low scores on all three functions; they were rarely subjected to C.P. Most likely, subjects in this cluster have accidentally been subjected to episodes of C.P. that were rather the result of impulsiveness than the effect of a well defined attitude towards C.P.

Clusters two and four represent the extremes of C.P., from pervasive and frequent C.P. in cluster two to rare C.P. in cluster four. Clusters one and three represent two different intermediate patterns of C.P. Subjects from Cluster one were frequently subjected to C.P during a relatively restricted age span, while cluster three was populated with subjects who experienced C.P less frequently during more age spans.

Table XV: The pattern of scores on the functions for each cluster

<table>
<thead>
<tr>
<th>CLU</th>
<th>Cluster Description</th>
<th>Number of Case</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inconsistent intensive C.P.</td>
<td>2.993</td>
<td>.229</td>
</tr>
<tr>
<td>2.</td>
<td>Constantly intensive C.P</td>
<td>2.532</td>
<td>3.947</td>
</tr>
<tr>
<td>3.</td>
<td>Constantly low C.P</td>
<td>-9.729E-02</td>
<td>.739</td>
</tr>
<tr>
<td>4.</td>
<td>Random C.P.</td>
<td>-1.020</td>
<td>-.815</td>
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</tbody>
</table>

Unstandardized canonical discriminant functions evaluated at group means

In addition to differentiating clusters in terms of frequency of C.P., number of agents/objects, and age span, clusters also differed in terms of the reflexive variables also referred to as mediators. The findings suggest that the number of agents and objects used in C.P. may exert an influence on the justifications and subjects’ attitudes towards C.P., albeit a weak one. It appears that when characteristics associated with frequency, number of objects/agents, age spans are included in the
same analysis with reflexive mediators, the former tend to have more influence over the formation of clusters than the latter do. An alternative strategy for analysis in future research would be to form the clusters based only on characteristics associated to frequency, and then employ discriminant function analysis to examine the association between different patterns of C.P. related to frequency and subject’s reflexive condition. In addition, consideration could be given to the possibility that clusters, and their correlates, differ for men and women, hence the need in future research to distinguish them.

5.14. Strengths and limitations of the present study

The current study presents some methodological limitations regarding causal relations between the employed variables. As it can be inferred from visually inspecting the diagram (see figure 1), structural equation modelling in general and the present model in particular, maintains correlational underpinnings, that leaves the possibility for unidentified variables to influence the emergence of the intentions to use C.P. One set of variables included in the model referred to as Disturbances, indicated the existence of uncontrolled sources of variations in the dependent variable that came from outside the model. According to Belsky (1993) these unidentified variables may arise from the exosystem. Specifically, in the SEM diagram there were six such disturbances represented in ovals that acted as sources of variation in the dependent variables from outside the model. For instance, the six variables labelled Dist1, Dist2, Dist3, Dist4, Dist5, Dist6 were sources of unaccounted variances on the following variables: Impulsive C.P., Calculated C.P., Lied and hurt God, Positive Attitudes towards C.P., Negative Attitudes towards C.P. and Intentions to use C.P. The most important path was the one observed between a particular style of C.P. referred to as calculated style of C.P. and Dist6 (.954) which suggested that there are many uncontrolled variables absent from the model that might explain why agents used this type of C.P.

Future studies might benefit from considering factors as religion since it was already determined that affiliation to a Christian Protestant group professing conservative religious beliefs was associated with more frequent use of corporal punishment (Day et al., 1998; Ellison, Bartkowski, and Segal, 1996; Gershoff et al., 1999; Giles-Sims et al., 1995; Stolley and Szinovacz, 1997; Xu et al., 2000). Other factors as diverse as reported mental health issues, cultural influences and the type of attachment to the
punishing agent might also play a role associated to the subject reporting her experiences with corporal punishment.

It should also be mentioned that SEM cannot test directionality in relationships and that the directions of arrows in the present structural equation model represent the researcher’s hypotheses of causality within the system. In addition, the researcher’s choice of variables and pathways were limited by the questionnaire and the data base it collected. Consequently, the structural equation model’s ability to recreate the sample covariance and variance patterns was limited to the choice of variables. Also, it is highly possible that several other models might fit the data equally well.

However, the SEM approach remains useful in understanding relational data in multivariate systems. What differentiates SEM from other simpler, relational modeling processes is its ability to distinguish between indirect and direct relationships between variables and to analyze relationships between latent variables without random error. Whereas most of the studies have looked at the simple association between frequency or severity of C.P. and some developmental outcome without considering the influence of third variables, the present study considered the influence of third variables also referred to as mediators. From this perspective, the use of SEM was highly productive in evaluating a mediation model as it allowed to simultaneously estimate the presence of direct and indirect paths and provided fit indices to determine the strength of the proposed model.

A major problem often observed in a considerable number of studies consists in asking adults to recall their experiences during childhood. That is likely to engender a retrospective recall bias (Widom, 1989; Widom, Raphael, and DuMont, 2004) such as the inability to accurately reflect the true nature of their discipline experiences due to the altering influence of the adults’ memory capabilities, their perceptions, their interpretations or judgments of severity of their discipline or abuse, or their current level of functioning (Widom et al., 2004). On the other hand, research relying solely on children representations of their present experiences with C.P. is exposed to self-report, social desirability biases (Cohen, 1996), and the possibility that children’s responses may have been driven by their desire to avoid being spanked (National Association for Prevention of Child Abuse and Neglect, 1994).

Unlike many of such studies, it could be argued that a major asset of the present project was represented by the inclusion in the sample of subjects that presented the advantage of being neither children subjected to parental authority, nor parents in position of authority with their own children. Based on the results of the current
study, we suggest that a replication using a more-elaborate model incorporating additional factors and a more culturally and religiously diverse sample should be undertaken in the future.

It is important to be aware of the fact that the main goal of the present study was to include a sample that was representative of the university population of Québec. Consequently, limitations exist in terms of ethnic, religious and sex variability as the sample was predominantly composed by 84.3 % native Canadians, 94.3% subjects with no religious affiliation predominantly and included 70.2% females.

5.15. Conclusions and future research directions

Following a long line of research on the mediating processes related to C.P. (Rohner et al. 1991; Rohner, Kean, and Cournoyer, 1991; Rohner, Bourque and Elordi, 1996; Rohner et al. 1996; Deater-Deckard et al., 1996; Simons et al. 2000; McLoyd and Smith, 2002; Lansford, Deater-Deckard, Dodge, Bates, and Pettit, 2003; Matos and Rohner, 2004; Erkman and Rohner, 2006; Rodriguez, 2006), the present paper aimed at uncovering the role of some mediating variables in the relationship between objective variables and intention to use C.P. later as a parent.

The model has successfully demonstrated that the relationship the relationship between experiences of past C.P. and the intention to use C.P. as a parent may be mediated by one’s attitude towards C.P. In addition, past experiences with C.P. were shown to influence attitudes towards C.P. Each of the frequency measures and stable variables had significant path coefficients with one or more mediators. The strength and direction of the path coefficients were consistent with the findings from the correlational analyses.

From a cognitive developmental point of view assumes that cognition is the driving force behind all developmental change and sees behaviour and emotions as mere reflections of the cognitive developmental trajectory, the fact that reflexive factors act as mediators between objective variables and behavioural outcomes comes as no surprise. The results are also consistent with previous research emphasizing the paramount role of attitudes in crystallizing the intention to use C.P. For instance, Ateah and Durant, (2005) found significant positive correlations between favourable attitudes towards C.P. and the frequency of using it while Socolar and Stein, (1995) found that the fact of approving of a certain educative strategy is of greater importance than the level of impulsivity and the emotional state of the parent. The study that alludes most to our subject of interest was the attempt of Bower-Russa et
al. (2001) to identify factors that could mediate intergenerational patterns of abuse. Specifically, they have ascertained an explanatory link for the use of C.P. when the attitude regarding C.P. is influenced by one’s experience of C.P. as a child, which in turn, both history and attitude are significant predictors of the use of C.P. in a parenting similar task.

Similarly, Despatie (2005) isolated factors that might be directly linked to the use of C.P. concluding that what predicted most the intention to use C.P. was the existence of a favourable opinion towards it. However, due to limits in the design method the results were not completely assured and could only limit at the role of attitudes on the intention to use C.P.

The present study drawing from the same database represents a renewed effort at studying the role played by attitudes as mediators in the intention to use C.P. Unlike all previous research on such mediators the results have cast a light on the important role of attitudes as primary mediators in the relation between objective factors and the intention to use C.P. as a parent.

Apart from the vast amount of research suggesting that demographics are important in considering and explaining the various results of C.P. (e.g., Day et al., 1998; Nobes et al., 1999; S. Jackson et al., 1999; Straus, 1994a; Straus and Stewart, 1999; Xu, Tung, and Dunaway, 2000, Culp et al., 1999; Day et al., 1998; Giles-Sims et al., 1995; Kelley et al., 1993; Straus and Stewart, 1999; Wissow, 2001; Xu et al., 2000), the present study demonstrated that these factors, instead of exerting a decisive influence on the intention to use C.P., are merely the fabric that is to be transformed under the critical influence of another set of reflexive variables acting as mediators.

From this perspective, the study’s findings could be easily construed as upholding evidence for the main assumptions of PARTheory on the role of mediating factors in the relation between C.P. and outcomes. Although PARTheory’s proponents (Matos and Rohner, 2004; Rohner et al., 1996; Rohner et al., 1991) have considered a different set of mediating factors (perceived parental acceptance-rejection) they have successfully raised the awareness about the existence of such mechanisms of mediation.

Furthermore, consistent with a plethora of studies contending that attitudes towards C.P. are among the most important predictors of future C.P. use, (Ateah and Durant, 2005; Bower-Russa et al., 2001; Despatie, 2005, Holden and all, 1995; Straus, 1991; Socolar and Stein, 1995), we have been able to demonstrate that, among the four mediators considered in our model only the attitudinal measures made a significant
contribution to the prediction of the intention to use C.P.. As indicated by the model used, past experiences with C.P. did not make a significant additional contribution to the prediction of the intention to use C.P., over and above the variance explained by positive and negative attitudes towards C.P.

In turn, the development of such attitudes towards C.P. is the result of a complex interplay of stable variables (sex, country of origin) frequency variables (age span, number of punishing agents, means of administration of CP, frequency of C.P.) and reflexive variables (impulsive C.P., lied and hurt God and calculated punishment). It also appeared that the number of punishing agents, age span and means of administration of C.P. had a certain influence on reasons for C.P. and attitudes towards C.P. More specifically, subjects who had been punished at many different ages, with a wider variety of objects and by many agents were more likely to exude positive attitudes towards C.P. These results are validated by previous research indicating that the more a subject experienced C.P. during childhood the more she is likely to express favourable attitudes towards it (Athea, 2002; Deater-Deckard et al., 2003; Krugman et al., 1992). In a study of New Zeeland parents, Rodriguez and Sutherland (1999) found that judgments about the severity of C.P. mirrored parent’s own history of receiving such a child, whereas parents’ history and severity judgments reflected the frequency of use of such strategies with their own children.

From a larger theoretical point of view, the traumatic bonding theory that explains family violence in terms of the relationship that develops between victim and abuser could provide some useful insights for the understanding of the underlying mechanisms that might account for the fact that the more a person experienced C.P. as a child the more she is likely to endorse it and use it as future parent. Social and observational learning theory also provides satisfactory explanations for the relationship between being subjected to C.P. and later intention to use it by purporting that behaviours are learned through the mechanisms of modelling and imitation (Bandura, 1973, 1977; Parke and Slab, 1983). Consequently, from the theory’s standpoint when such parents use physical means of controlling and punishing their children, they inadvertently transmit to their children the idea that C.P. is an effective way to get others to behave as they want.

Alternately, the results of the present study are consistent with Bowlby’s attachment theory which suggests that attachment history and current attachment style are important factors that might indirectly account for the relationship between C.P. variables and intention to use it. In other words, due to insecure parent/infant dyads
the child is hypothesized to approach new social relationships in a maladaptive way that can put the child at risk for aggression, as well as dependency, and ultimately, impulse control problems in his later interactions with his own children. Based on the previously discussed results, it was contended that the more one perceives C.P. as constructive, justified and with positives consequences for development, the more she is inclined to endorse its use. Particularly, subjects from our study who have been told by the agent that they were being punished because they had lied or hurt God were more likely to report the intention to use C.P. as compared to those who explained C.P. as the result of habitual impulsiveness on the part of the punishing agent. This result parallels those of other studies that have revealed that many subjects justify their parents hitting them for their own good (Sebre and all, 2004). The relation between favourable attitudes towards C.P. and the intention to use it as a parent is mediated by the perception of oneself as having been victimised by the parents (Bower and Knutson, 1996).

In line with most of the research indicating that minorities and lower-income families are more approving of the use of C.P. and tend to use more C.P. (Baumrind, 1972; Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh, 1987; Heffer and Kelley, 1987) our results point to similar conclusions: non Canadian native subjects reported more positive attitudes towards C.P. and were more likely to have been subjected to it by the hands of a punishing agent acting in a calculate manner. They were also more likely to explain this experience as the result of the habitual impulsiveness of the punishing agent and to having received religiously motivated justifications by the punishing agent.

As for religious justifications to the use of C.P. they have been linked throughout the present study to a wide age span for receiving C.P., a high number of punishing agents, a high number of objects used, a high frequency of C.P. and a positive attitude towards C.P. The sense of the relationship, indicated by our study, between religion and C.P. is in total consonance with the ever growing body of research unequivocally demonstrating the association between religious affiliation and frequent use of C.P. (Day et al., 1998; Ellison, Bartkowski, and Segal, 1996; Gershoff et al., 1999; Giles-Sims et al., 1995; Stolley and Szinovacz, 1997; Xu et al., 2000, Grogan-Kaylor and Otis, 2007; Wildeman, 2008; Socolar and Sinal, 2008). Moreover, a considerable amount of research unanimously suggests that conservative Protestants are more likely than other parents to support the use of C.P. to discipline youngsters (Ellison and Sherkat 1993a, 1993b; Grasmick, Bursik and Kimpel 1991)
and that conservative Protestant parents seem to be more likely to continue with the practice of spanking later along the childhood up to the preschool and school-age (Ellison, Bartkowski and Segal 1996a, 1996b).

The social situational model (Gelles and Cornell, 1985) provided a possible explanation for the observed pervasive pattern of association between the affiliation to a certain religious group and the tendency to use C.P. The model predicts that different practices should emerge among ethnic, religious, and economic groups due to the existence of a cultural norm shared by all members of a religious community that encourages the use of force and violence as a common response to frustration (Coser, 1967).

Finally, among the mediators, an interesting pattern of relationships between attitudes to C.P. and the type of C.P. inflicted on children was found. That is, more negative attitudes to C.P. were found for subjects who explained C.P. as the result of habitual impulsiveness on the part of the agent as opposed to positives attitudes towards C.P. that were detected to subjects who have been frequently subjected to the calculated type of C.P. during their childhood. Interpreting these findings from the social information processing theory point of view, (Crick and Dodge, 1996) which postulates that children approach situations depending on their expectancies that are learned through experience, one could argue that children interpreting received C.P. as acts of aggressions against them are most likely to radiate as a result a general hostility in their interpersonal relations.

Research on intergenerational transmission suggested children were most likely to replicate the same disciplinary methods used by their parents regardless their degree of harshness (Bower-Russa, Knutson, and Winebarger, 2001). In fact, as our findings pointed out, past experiences with C.P. do not make a significant additional contribution to the prediction of intentions to use C.P. Moreover, the S.E.M. model proposed indicated that the mediating variables explained all of the association between the objective variables and intention to use C.P.

Although previous research suggested otherwise (Wauchope and Straus, 1999), the present study demonstrated that important differences by the sex of the respondent with respect to corporal punishment exist. Significant correlations were found between the sex of the respondent and reports that C.P. was administered in a calculated manner. More specifically, male subjects were more likely than their women counterparts to report that C.P. was administered in a calculated manner, and they have also manifested stronger intentions to use C.P. as adults with their future
children. On the other hand, female subjects were more likely than men to express significantly more negative attitudes towards C.P. (.118). Moreover, as suggested by Wissow (2001), consideration should be given to the possibility that clusters and their correlates, differ for men and women, hence the need in future research to form clusters based only on characteristics associated to frequency, and then employ discriminant function analysis to examine the association between different patterns of C.P. related to frequency and subject’s reflexive condition. Based on the results of the current study, we suggest that a replication using a more-elaborate model incorporating additional factors and a more culturally and religiously diverse sample should be undertaken in the future. Finally, we suggest that further research aiming at finding possible avenues for interrupting the intergenerational transmission of corporal punishment should explore the role played by the attributional system of children as mediator in the relationship between punishment variables and adults’ intention to resort to corporal punishment.
References


Annexes
Annex 1: Questionnaire

1. During your childhood do you recall, at least once, having been punished (with the hand or with an object e.g. spanked, slapped, smacked or beaten).

   Yes

   No

   If answered with “No” to the first question, immediately go to the question 11; otherwise continue with the next question.

   For the following question, you may check all the applicable answers.

   2. If responded yes to the previous question, approximately how old were you when corporally punished?

      a) 0-2 years, b) 2-3 years, c)3-5 years d)5-10 years, e) 10 years and more

   3. Who administered the punishments?

      a) father,

      b) mother,

      c) an adult in charge with my care,

      d)a relative, e)brother,

      f) sister, g)my teacher(s),

      h) a religious figure( brother, sister, pastor, reverend, priest),

      i) other..... please specify his title/status.

   4. Approximately what was the frequency of the punishing episodes?

      a ) once,

      b) 2-5 times,

      c)6-10 times,

      d)several times per year,

      e) once a month , f)twice a month,

      g) three times per month,

      h)once a week,

      i) several times per week,
j) once a day,
k) several times per day.

5. In my own view, the corporal punishment was used
a) to make me obey
b) because I was really undisciplined
c) because it was the favoured method at the time
d) because it was recommended by our religious leaders
e) it was a mere impulsive reaction of the punishing agent
f) because it was according to the religious beliefs of the punishing agent
g) because the person punishing me was bad
h) because the person who punished me perceived me as a bad child

6. According to what the person punishing you said, why have you been punished?
a) I disobeyed
b) to prevent me from becoming a delinquent
c) to keep on the straight path (show me the right path)
d) I hurt God
e) I lied
f) problems at school (grades)
g) caused troubles at school (misbehaviour)
h) that was the regular way to educate children

7. The corporal punishments I have received were administered
a) by hand
b) with a belt
c) wooden spoon
d) rod or can
e) fly swatter
f) any handy object  

g) other object ... please specify  

8. Do you think the corporal punishments you have received were administered  

a) in the heat of the moment  

b) immediately after the faulty event  

b) immediately after the faulty event  

c) announced but administered at a later time during the day  

d) announced but administered another day  

e) announced and carried out upon previously establishing the number of blows that I deserved  

9. What do you think was the emotional state of the punishing agent when delivering the chastisement?  

a) acting like he was in control of his/her feelings  

b) lost his/ her temper  

c) other... specify  

10. As a child, what was your reaction toward the received punishments?  

a) I thought they were justified  

b) I was really mad against that person  

c) I was crying  

d) I tried not to cry  

e) I felt guilty for misbehaving  

f) I felt guilty for disobeying to God  

g) I perceived that person as ........  

The following section is to be completed by all subjects  

11. How do you see today the corporal punishment of children?  

a) a reasonable educational method  

b) I am still mad against those persons that have been punished me  

c) a method that could easily lead to abuse
d) I feel grateful for having been educated this way

e) I would never treat my children like that

f) that proves that the people using it are old-fashioned.

g) an ineffective method

h) a method that teaches violence

i) a method recommended by God

j) a last-resort method

k) many other methods are also effective

l) many other methods are more effective

12. As a prospective parent, would you ever consider using corporal punishment?

a) absolutely no

b) probably, occasionally

c) only if I lose my temper

(d) never, I hope

13. If responded a) or b) to the previous question, what type of punishment would you favour?

a) by hand

b) with a belt

c) with a wooden spoon

d) thinking of using a rod or a can

e) thinking of using a fly swatter

f) I would use any object that comes in handy

h) other........specify

Demographics

Actual age: a) 18-21, b) 22-25, c) 26-30, d) 31 and more

Sex of the respondent: male, female

Are you an active member of a religious group? Yes, no
If yes, specify the name of that group......

What is the denominational name?

What is your origin country?

What is your partner’s origin country?

What is your parent’s origin country? Mother...... father....

Are you presently a parent? Yes..., no....

If yes, how many children do you have?
## Annex 2: Descriptive Statistics

<table>
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<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>1.6507</td>
<td>.92272</td>
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<td>Valid N (listwise)</td>
<td>1437</td>
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