

IDENTIFYING CHILD ABUSE: A STRUCTURAL EQUATION MODELING ANALYSIS  
OF HISTORY OF ABUSE AND WESTERNIZATION ON PERCEPTIONS OF ABUSE  
AMONG ASIAN-DESCENT AND EUROPEAN-DESCENT STUDENTS

by

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## Abstract

Structural equation modeling (SEM) analyses were used to explore the relationships among Westernization, histories of child abuse and perceptions of child abuse. Students ( $n=601$ ) from a large Canadian university completed a research questionnaire about personal histories of child abuse and were asked to provide information on what they would consider to be physically abusive or emotionally abusive behaviour. Perceptions of abuse were measured in part through participants' responses after viewing a video with a staged incident of physical abuse and a scenario depicting emotional abuse. The participants were culturally diverse and were assessed both on their ethnicity and their levels of acculturation. A three-factor model was specified for 225 participants. In addition, the model was re-specified and compared across two samples, a Chinese-descent sample ( $n=200$ ) and a European-descent sample ( $n=176$ ). The data suggested that perceptions of abusive behaviour were related to personal experiences with child abuse. This relationship held true for both physical and emotional abuse. Histories of abuse were measured by the Parent-Child Conflict Tactics Scale, the Child Abuse and Trauma Scale and the Parent Discipline Attitudes Survey. Westernization, as measured by generation level, the Vancouver Index of Acculturation and the Filial Piety scale, however, did not predict perceptions of abusive behaviour. Contrary to research findings in Asia, *filial piety* was not significantly correlated with acceptance of physical discipline. The model for physical abuse and the model for emotional abuse were equivalent for the two samples according to multi-group structural equation model constraints. Participants appeared to assess abuse equivalently intra-culturally and cross-culturally. The age of the child being disciplined changed the acceptability of the physical and emotional discipline strategies. Implications for abuse prevention education are discussed.

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## Chapter I

### 1.1 Introduction

Despite growing evidence that child abuse and neglect is a worldwide phenomenon, actual cross-cultural information on child maltreatment is limited (Behl, Crouch, May, Valente, & Conyngham, 2001; Korbin, 1981, 1991; Lieh-Mak, Chung, & Liu, 1983; McKelvey & Webb, 1995). While efforts to define and uncover child abuse began in earnest in Western countries in the early 1960s, child maltreatment in Asian countries was often dismissed as a “Western” phenomenon (Korbin, 1991). Child abuse and neglect, while now acknowledged, still remain relatively unexplored in non-Western societies (T. P. Ho & Kwok, 1991; McKelvey & Webb, 1995; Tang & Davis, 1996). Ideally, distinguishing abusive behaviour from acceptable child rearing practices should be simple and easily translatable across cultures. However, such distinctions often do not hold for homogeneous societies and are considerably more variable when compared cross-culturally. Concepts of acceptable child rearing practice also change over time. Child labour, for example, while once acceptable in Western societies is now considered abusive (Glachan, 1991) and the gradual banning of corporal punishment in North American schools shows how Western values continue to change (Wissow, 2001). The lack of a cross-cultural definition of child abuse prevents the creation of universal standards for child rearing (Korbin, 1991). Without universal agreement, efforts to define and describe preferred child rearing practices are inevitably ethnocentric (D’Antonio, Darwish, & McLean, 1993).

This research project was designed to explore abuse perceptions and experiences within the understudied East Asian population in Canada. Definitions of two types of abuse – physical and emotional – were explored. A review of the current state of knowledge about abuse within East and Southeast Asian communities, with a primary focus on Chinese communities, was conducted. The term Asian incorporates many diverse groups, and previous research has used

this term inconsistently to refer to Chinese, Japanese, Indo-Asian and many other groups. In this dissertation, East Asian refers primarily to those of Chinese descent, whereas Southeast Asian refers to those of non-Chinese descent (e.g., Filipino, Japanese, Korean, Malaysian etc.). The main comparison group for Chinese-descent participants was European-descent participants. Previous researchers have labeled this group as "White" or "Caucasian." This dissertation will use the nomenclature of the original authors when reporting their research findings. A more detailed description of participant ethnicities can be found in Chapter II.

### *Importance of Cross-Cultural Research in Child Abuse*

In the past thirty years Canada and the United States have experienced a large influx of people emigrating from Asian countries. In the 1980s and the early 1990s immigration from Asia accounted for over 50 percent of the total immigration to Canada and over 10 percent of Canada's national growth (Statistics Canada, 1993). The most recent information suggests that over 57% of immigrants now arriving in Canada are from Asia (Statistics Canada, 2003). Since 1971, approximately 36 percent of new immigrants to the United States have been from Asia (U.S. Department of Commerce, 1996). To respond appropriately to child abuse in this diverse multi-cultural North American society, the relationship between ethnicity and child abuse and neglect must be considered (Hong & Hong, 1991; Terao, Borrego, & Urquiza, 2001). However, in many recent studies on child abuse and its sequelae, the ethnic or racial breakdown of the sample is not reported. Not considering race or ethnicity in abuse research could be problematic. For example, studies in the United States have shown that race and socio-economic factors can have a greater influence on the decision to report abuse than the actual severity of the injury (Hampton & Newberger, 1985). Most recent studies on physical and



emotional abuse and its related symptoms do not report the ethnicities of the participants, or, if they do, all participants are analyzed together as if they were one homogenous group.

A recent content analysis of the literature on child maltreatment published between 1977 and 1998 decried the lack of consideration of ethnicity (Behl, et al., 2001). These researchers found that only 6.7% of the 1,133 articles analyzed from the three leading journals on child maltreatment included a focus on ethnicity. While the reporting of the ethnicity of participants was on the rise, 50% of the most recent studies (1995-1998) did not provide demographic information. In addition, approximately 75% of these recent studies did not include ethnicity as a variable in their analyses. In fact, the exclusion of minorities from research has become such a problem that the American National Institute of Health made it a policy that all of their sponsored research include ethnic minority participants and address the issue of potential ethnic differences in their project design (Behl et al., 2001).

Korbin (1981) argues that there are three levels at which culture must be considered when assessing the abuse of children. The first level is normal parenting practices, which vary from culture to culture. Some behaviour that is considered standard in non-Asian societies may be considered abusive in other societies. At the beginning of Jill Korbin's seminal book (1981) on cross-cultural perspectives on child abuse, she provides some concrete examples of Western practices that might be considered abusive to some non-Western societies:

Practices such as isolating infants and small children in rooms or beds of their own at night, making them wait for readily available food until a schedule dictates that they can satisfy their hunger, or allowing them to cry without immediately attending to their needs or desires would be at odds with the child-rearing philosophies of most of the cultures discussed (p.4).

Customs that are abhorred by Western cultures, like female circumcision or clitoridectomies, may not be considered abusive in other societies. In fact, parents in those societies may be labelled as abusive by their community for preventing their children from participating in a rite of passage into adulthood (Finkelhor & Korbin, 1988; Korbin, 1981).

The second level of looking at the abuse of children is the range of behaviours that exceed normal parenting practices, irrespective of the cultural norms. For example, groups may differ on their acceptance of minor physical discipline, but fracturing a child's skull in the process of disciplining her or him will be considered abuse in almost all cultures. No matter the differences in parenting, all cultures will consider behaviours that exceed the range of tolerable parenting behaviours as abusive (Korbin, 1981).

The final level of concern for children's welfare is societal conditions that are often beyond the control of parents. Poverty, nutritional deficits, hunger, poor health care and inadequate housing are examples of conditions harmful to children. These sources of impairment for children, while they may be common within a culture, are distinguishable from idealized child rearing practices or transgressions from the ambit of tolerated parental behaviour (Korbin, 1981).

#### *Under-representation of Asian Populations*

While research on some ethnic groups such as Afro-Caribbean and Hispanic is becoming more prevalent, research on Asian ethnic groups is still quite meagre. There is a sparse amount of research that suggests that child maltreatment occurs across all cultural groups, including Asian. Since reporting of child abuse has not been compulsory in many Asian countries (Hahn & Guterman, 2001; Hesketh, Hong, & Lynch, 2000; Samuda, 1988; Tang & Davis, 1996) researchers suggest that true information on prevalence rates among Asian populations may be understated.

### *Ethnic Minorities May be a Vulnerable Group*

Since rates of childhood abuse are understudied among Asian populations, it is incumbent on researchers who have access to a diverse population to explore these issues cross-culturally. Differences in childhood abuse and trauma experienced must be explored further because to intervene appropriately with children at risk, our definitions of child abuse and neglect must incorporate the perspectives of different ethnic groups (Hong & Hong, 1991; Rao et al., 1992). Professionals who bear the responsibility of intervention will be able to more accurately assess risk and identify a family's weaknesses and strengths, if they are aware of cultural variations in child treatment (Rubin, 1992; Terao et al., 2001). Understanding the pressures on Asian immigrants may be important to consider, as failures within the family structure may be more acute in filial societies where less social support exists to assist children. Bond (1991) suggests that in Chinese societies, children must learn to endure the intolerable because options for survival outside their family of origin are very limited.

Different ethnic groups may be more vulnerable to abuse and less able to get access to support networks and professional help. There is evidence in cross-cultural research that certain ethnic minorities may seek professional help at a rate lower than other groups (Cohen, Deblinger, Mannarino, & de Arellano, 2001). These ethnic-specific responses may increase the risk factors for some groups (Rao et al., 1992). There are suggestions in Rao and colleagues' research that the abuse of Asian victims was more likely to lead to family disintegration. Key Asian family members were less supportive than Black, Hispanic or Caucasian families upon disclosure of abuse. They were the least likely to believe the victims, report the abuse to authorities or to participate in the treatment process. Rao and colleagues suggested that professionals needed to consider this ethnic-specific vulnerability when supporting victims

through disclosure or encouraging them in the treatment process.

Fundamental differences exist between the ideal Asian family unit and Western families. Asian families are more likely to be influenced by Confucian tenets which value family harmony, hierarchy and order above the independence or ambitions of individuals (C. K. Ho, 1990). The notion of *filial piety* is central to the idea of family harmony and will be defined in greater detail in the next section. The family unit, interdependent between generations, is more important than any one individual. An individual's behaviour reflects on the whole family and misbehaviour brings shame (e.g., loss of face) to both past and future generations (C. K. Ho, 1990). There is a fear that revealing abuse will bring disgrace upon the family and therefore there is shame in Asian culture in discussing problems with people outside the family unit (Hahm & Guterman, 2001; C. K. Ho, 1990; Rao et al., 1992; Tang & Davis, 1996). This sense of shame may add to Asian victims' vulnerability when experiencing abuse (Cohen et al., 2001).

Asians in North America traditionally have lower divorce rates and lower rates of help-seeking behaviour. A reluctance to speak out may add to the disadvantage of having fewer outreach services available in these communities. In addition to family unit pressures, there may be a general social pressure on Asians to retain their status as the "model" minority.

## **1.2 East and Southeast Asian Parenting Considerations**

Every culture has its own standards for family organization, values, priorities and parenting practices. *Filial piety*, a moral code governing the behaviour of family members, is a custom paramount in Chinese and Korean culture (D. Y. F. Ho, 1994; D. H. Kim, Kim, Park, Zhang, Lu, & Li, 2000; Tang & Davis, 1996). Confucian philosophy that stresses the importance of the family has been the most influential attitude on Asian culture for thousands of years (Lu & Lin, 1998; Zhang & Bond, 1998). Although Asian cultures vary greatly in terms of race, religion,

language and customs, many share a common influence of Confucian tradition in their socialization. The focus of the following discussion is on Chinese traditions, *filial piety* and *familism*, but the idea that the family is more important than the individual, is similarly important in other Asian populations (e.g., Koreans: Hahm & Guterman, 2001). The intended research sample may also justify a focus on Chinese parenting norms above those of other Southeast Asian cultures. Previous research in this laboratory has revealed that 84 to 90% of the East and Southeast Asian undergraduates participating self-report their ethnicity to be Chinese (Kennedy & Gorzalka, 2002; Kennedy, Samra, & Gorzalka, 2002).

According to *filial piety*, a well-behaved child may add to a parent's status in Chinese society (Lieh-Mak et al., 1983). To raise an 'unfilial' child would be to fail in your filial obligations to your family, past and present (C. K. Ho, 1990; D. Y. F. Ho, 1994; Lieh-Mak et al., 1983). Within Chinese culture parents desire an obedient and ideally successful child to financially support them in their old age. Under *filial piety*, parental authority is indisputable and children are expected to subordinate their interests and wishes to those of their parents (D. Y. F. Ho, 1994; Hong & Hong, 1991; Wu, 1981; Zhang & Bond, 1998). Empirical research in Hong Kong and Taiwan has linked *filial piety* to parenting practices characterized by obedience and a sense of indebtedness to parents (D. Y. F. Ho, 1994).

The ethic of *filial piety*, in addition to being a major influencing factor for over 2000 years, is also one of the broadest reaching parenting philosophies in Asia, with millions of families in different countries striving to honour it (Bond, 1981; Hahm & Guterman, 2001). As a testament to its entrenchment, while North American society has made best selling authors of parenting 'experts' since the 1940s, childrearing practices in Chinese society have remained unexplored and unevaluated (Bond, 1981). The importance of the harmony underlying Chinese values such as

*filial piety* has been reflected in traditional Chinese medicine, in that physical symptoms could be considered caused by social imbalances (J. P. Leung, 1998).

The pattern for discipline under *filial piety* changes as children age. Research in Hong Kong has suggested that the lower rates of child abuse reported for young children may reflect a Confucian tolerance of dependent behaviour (e.g., clinging and crying) until a much later age than in Western parenting (Lieh-Mak et al., 1983). Catering to dependent behaviour in Confucian families may continue until school age (age 5 or 6). Indulging this dependency has been considered the cost necessary to ensure that those children will provide for their elderly parents in their time of need. Adults of all ages in Chinese society demonstrate lenience, indulgence or increased attention towards pre-school children (Bond, 1981). Once children reach school age, however, parenting shifts from indulgence to discipline designed to emphasize obedience and loyalty (Bond, 1981; Lieh-Mak et al., 1983; Samuda, 1988; Tang & Davis, 1996).

Many Asian researchers have suggested that *filial piety* is a key explanation for the acceptance of physical punishment and emotional neglect (Goodwin & Tang, 1996; Hahm & Guterman, 2001; Hong & Hong, 1991; J. M. Kim, 1995; Lieh-Mak et al., 1983; Tang, 1996; Tang & Davis, 1996; Wu, 1981). Parents may feel obligated to use physical punishment or stricter discipline to ensure loyalty, obedience and respect from older children (Lieh-Mak et al., 1983; Samuda, 1988; Tang, 1996; Tang & Davis, 1996). Physical abuse is often precipitated by a perceived need for discipline (Lau & Davies, 1993; Lieh-Mak et al., 1983). As part of the tenet of *filial piety*, parents' authority is supreme and unquestionable (Bond, 1981; Hahm & Guterman, 2001). Parents are considered to own their children and to have the right to punish them without outside interference (Hahm & Guterman, 2001; Tang, 1998). Older children in Hong Kong appear to be at an increased risk for battering due to these Chinese childrearing practices (Hasketh et al., 2000; Lau & Davies, 1993; Lieh-Mak et al., 1983; Tang, 1998). As

children age, parents in Hong Kong apparently use more discipline to retain their authority and to push their children to succeed academically (Samuda, 1988; Tang, 1996).

While originally it was reported that Asian countries experienced lower rates of child maltreatment (Korbin, 1981), researchers are now beginning to suggest that lower incidence rates might reflect the lack of reporting procedures, different cultural attitudes towards identifying severe physical discipline as abuse, and a lower likelihood of seeking help outside the family (Hesketh et al., 2000; Lau & Davies, 1993).

*Familism*, the idea that the family is more important than the individual, is another cultural concept that may explain the greater tolerance of parental authority in Chinese communities (Hong & Hong, 1991). Chinese culture has long supported the collectivistic values of *familism*, which stresses the happiness of the family community over the happiness of the individual (Hesketh et al., 2000; Lu & Lin, 1998). The importance of the harmony of the Chinese or Korean family unit may discourage the seeking of external interventions (Hahm & Guterman, 2001; Hong & Hong, 1991).

### **1.3 Consensual definitions of abuse**

As mentioned above, child rearing practices vary cross-culturally and behaviours that may be standard in one country might be considered abusive in others. Definitions of model parenting practices are culturally bound just as are definitions of what constitutes abusive behaviour. Terao and colleagues (2001) present the example that among Vietnamese families, using a bamboo stick to hit and leave marks on a disobedient child is culturally acceptable. They argue that clinicians regularly must make decisions based on behaviours that could either be construed as a cultural-specific parenting practice or a mild instance of abuse. Gray and Cosgrove (1985) interviewed child protection workers and found that ethnic differences were apparent around the issues of

leaving children on their own. It was recommended that caseworkers be educated about their biases and rely more on assessing the maturity of the child rather than simply considering the child's age.

While researchers cautiously point out the difficulties in creating definitions that are sensitive to social and individual value judgements, professionals in the legal, medical and social systems charged with addressing abuse do need definitions (Portwood, 1999). For example, legal definitions of what constitutes criminal abuse vary widely from country to country as well as state-to-state in the United States (Terao et al., 2001).

While most researchers will agree that abuse can be split into physical, sexual and emotional abuse, one major limitation of previous research is that many studies of abuse within the family are not specific about which abuse is being measured (Claussen & Crittenden, 1991; Edleson, 1999). Definitional problems increase exponentially when one takes into consideration cultural differences in definitions of what constitutes appropriate child rearing practices (Garbarino & Ebata, 1983; Hong & Hong, 1991; McKelvey & Webb, 1995).

Looking at perceptual differences amongst ethnic groups in their perceptions of what behaviour constitutes child abuse is the only way we can hope to develop trans-cultural definitions of child abuse (Hong & Hong, 1991). If research literature does not provide a clear definition of what constitutes abusive behaviour, how will legal and social service agencies ever develop appropriate response protocols to protect children (Cohen et al., 2001; Rubin, 1992; Terao et al., 2001)? Social science researchers should provide a clear operational definition of abuse that will be relevant both trans-culturally and intra-culturally. While protecting children should always be the overriding concern, a balanced society should also not be too quick to condemn practices of minority groups just because they are not the practices favoured by the dominant culture. For example, North American parenting experts have traditionally frowned



upon co-sleeping with young children. Recent medical research has dispelled the myth that sharing a bed with infants is harmful and, in fact, may actually be developmentally beneficial (Dr. P. Huber, personal communication, December 14, 2001). Parenting experts, like most professionals in North America, are largely of European descent and should actively seek to include minority points of view or their social ideals for parenting may be biased (Gray & Cosgrove, 1985).

The move to recognize child abuse and limit physical aggression against children is happening at different rates across the world. The move to ban corporal punishment is an example of global change in tolerated aggression. In Europe, all forms of corporal punishment have been banned in countries like Sweden (Straus, 2000). In North America, corporal punishment is no longer acceptable in schools but is a legally protected right for parents (Wissow, 2001). The international differences in acceptance of corporal punishment can be seen in the controversy surrounding the case of an American teen, Michael Peter Fay, who was caned in Singapore in 1994 for vandalizing cars. There is also a global difference of opinion on schooling of children. In North America, encouraging or allowing your child to drop out of school at an early age is considered a neglect of parental duties. This obligation does not exist in all countries to the same extent that it does, for example, in Canada or the United States.

To prevent physical aggression, or reduce it to the levels accepted now in contemporary North American society, it is incumbent on professionals to reach new immigrants and explain to them the “the cultural patterns, social expectations, child management and laws pertaining to Canadian society” (Leung & Carter, 1983, p. 43).

One obstacle to reaching a goal of being culturally sensitive when interacting with families of different ethnicities is the lack of cross-cultural information on non-Western parenting norms. Rubin (1992) states that the research on ethnic differences in rates of child abuse and parenting

practices is still in its early stages worldwide. We do not know how to advise clinicians to take culture into account when we have incomplete pictures of what those cultural considerations should be (Terao et al., 2001). In addition, very little research has been done to assess whether certain treatment protocols work in different ways with different ethnic groups (Cohen et al., 2001). These researchers also point out that in the few empirical studies that have been done, the results are often questionable, since group sizes are often less than 30 participants, which is too small to permit detection of medium sized effects.

#### **1.4 Emotional Abuse**

##### *Definition*

Emotional abuse has been described as a critical issue in understanding child maltreatment (Claussen & Crittenden, 1991; Hart & Brassard, 1987; Hart, Brassard, Binggeli & Davidson, 2002; Kent & Waller, 1998), as it is inherent in all types of child abuse and some researchers argue that it connects the cognitive, affective and interpersonal problems related to sexual abuse, physical abuse and neglect (Brassard, Hart & Hardy, 1993). Consensus that emotional abuse aggravates other forms of abuse is relatively new (Brassard, Hart, & Hardy, 1993; Gross & Keller, 1992; Rosenberg, 1987).

This relatively new focus on emotional abuse has revealed that research is not as plentiful as in other areas of child abuse (Claussen & Crittenden, 1991; Hart et al., 2002; Mullen, Martin, Anderson, Romans, & Herbison, 1996). Some researchers complain that the exploration of abuse has changed from one focus to another (e.g., physical to sexual to emotional) without subsequent integration of the findings (Rosenberg, 1987).

Another problem with this area of research is that it has proceeded in a slightly haphazard fashion under a wide range of definitions for emotional abuse. Definitions for

emotional abuse vary across both general populations and professional groups that are charged with helping victims (Dubowitz, Klockner, Starr, & Black, 1998; Giovannoni & Becerra, 1979; Hong & Hong, 1991; Ima & Hohm, 1991; Korbin, Coulton, Lindstrom-Ufuti, & Spilsbury, 2000; Portwood, 1999). This dissertation considers emotional abuse as a type of psychological maltreatment that includes various behaviours such as insulting, terrorizing, and exploiting (Hart & Brassard, 1987; Kent & Waller, 1998). Hart and colleagues (2002) described their conceptualization of emotional abuse as follows:

The term *psychological maltreatment* is preferred because it denotes a category that is sufficiently broad to include both the cognitive and affective meanings of maltreatment (psychological) as well as perpetrator acts of both commission and omission (maltreatment). (p. 79).

Emotional abuse is such a broad concept that most articles mentioning it follow the words with explanatory acronyms in parentheses such as psychological abuse, verbal abuse, verbal aggression, psychological damage, or mental injury. Some researchers argue that child abuse should be split into three factors (Briere & Runtz, 1988; Sanders & Becker-Lausen, 1995): physical, sexual, and psychological abuse. Other researchers argue that there are at least four factors: physical, sexual, psychological abuse (or emotional maltreatment) and neglect (Edleson, 1999; Kent & Waller, 1998; Portwood, 1999). This dissertation considers emotional abuse (e.g., insulting, ridiculing) separately from neglect (e.g., loneliness, lack of attention). This separation of emotional abuse from neglect can be seen in the Child Abuse and Trauma Measure developed by Sanders and Becker-Lausen (1995). The original authors developed a neglect subscale, but Kent and Waller (1998) proposed the existence of an independent emotional abuse subscale consisting of unused items from Sanders and Becker-Lausen's scale. Some researchers consider neglect to be a passive form of maltreatment, in that it often consists of failing to parent

appropriately. Other researchers considering neglect cite examples of extreme failure to provide the necessities of life such as food, shelter, medical attention, and affection (Perez & Widom, 1994). The definition of neglect may vary cross-culturally, since it is a parental failing to meet community standards, and standards clearly vary from one community to the next (Dubowitz et al., 1998; Korbin, 1981). Emotional abuse, for the purposes of this dissertation, is considered to be a more active form of maltreatment (e.g., insulting, terrorizing, belittling) than neglect.

While other areas of abuse such as physical assault or sexual abuse have their own definitional issues, it is even more complicated to conceptualize or operationalize non-physical injuries (Rosenberg, 1987; Trocmé et al., 2001). In Canada, for example, emotional abuse is protected against by provincial and territorial legislation, so definitions vary with each statute. In the absence of tangible physical injuries, it is very difficult to determine the line between insensitive parenting and emotional abuse. Determining that line is difficult for clinicians who are trying to balance sensitivity to ethnic differences in parenting practices with ongoing assessment of potential current or future harm to the children (Terao et al., 2001).

A recent study by Korbin and colleagues (2000) asked members of the general public to identify any abusive behaviour that came to mind. Almost all (92.9%) of their responses fell into six summary categories - physical abuse, neglect, inadequate supervision, emotional/verbal maltreatment, sexual abuse, and parental misbehaviour. Physical abuse was mentioned most frequently at 82%. Emotional abuse was mentioned by 43% of the respondents. Without any prompting on definitions of abuse, these members of the general public seemed very concerned about emotional abuse. Sexual abuse, despite its relatively high profile in the media, was only mentioned by 12.3% of the respondents.

Research in North America has revealed that the use of threats or verbal aggression is widespread (Davis, 1996; Hemenway, Solnick, & Carter, 1994; Vissing, Straus, Gelles, &

Harrop, 1991). Verbal aggression is often considered a sub-type of emotional abuse or psychological maltreatment. The verbal aggression that is most studied is the threat of physical aggression or physical intimidation. It has been suggested that North American society tolerates parents using threats of violence or intimidation, as long as that violence is couched in the form of physical discipline. One naturalistic study observing parents in public reported the use of verbal aggression that included threats to spank, hit, punch, hurt, pop or beat children (Davis, 1996). Davis argues that the use of a culturally approved label such as "spanking" legitimized the behaviour. This observational study also found that 50% of the adults who threatened a child went on to hit the child. Straus (2000) argues that to decrease physical aggression, parents have to stop using euphemisms such as 'spank.' Parents would lose the social acceptance of their verbal aggression or physical intimidation if they threatened to "physically attack" or "injure" children who were misbehaving.

### *Sequelae*

The sequelae of emotional abuse appear to be varied and widespread. Identifying the consequences of emotional abuse is difficult since negative consequences may appear slowly at different developmental stages (e.g., impaired emotional, cognitive or social abilities) (Trocmé, MacLaurin, Fallon, Daciuk, Billingsley, Tourigny et al., 2001). Psychological abuse has been linked to low self-esteem (Briere & Runtz, 1990; Gross & Keller, 1992; Mullen et al., 1996); hostility and higher aggression (Nicholas & Bieber, 1996); anxiety, depression, interpersonal sensitivity, and dissociation (Briere & Runtz, 1988); and, shame and anger (Hoglund & Nicholas, 1995). These studies have attempted to isolate the negative correlates of emotional abuse from the sequelae of physical abuse. For example, Hoglund and Nicholas (1995) argued that emotional abuse, but not physical abuse, correlates with higher levels of shame. It has been

proposed that parental emotional abuse relates to hostility specifically because victims develop a sense that other people do not value them or are unlikely to be kind (Nicholas & Bieber, 1996). In that research, no such relationship with hostility was found for physical abuse alone. In another study comparing the sequelae of different types of child abuse, emotional abuse was revealed to double the risk for suicidality and psychopathology (Mullen et al., 1996).

## 1.5 Physical Abuse

### *Definition*

Physical abuse consists of any assault on a child by a caregiver. What constitutes an assault is controversial. Some researchers would argue that any physical discipline can be considered a physical assault (Straus, 2001). Kolko (2002) contends that the definition of physical abuse is a social judgement:

Certainly, whether a given incident under consideration represents physical abuse or just simply an extreme form of parent-to-child discipline (e.g., beating vs. spanking/slapping) is not easy to determine; thus, there are blurred distinctions between abusive and subabusive or nonabusive behavior. (p. 22)

The legal definition of child abuse varies between countries and within countries. In Canada, for example, the very definition of who should be considered a child varies provincially from 16 up to 19. Behaviour that constitutes child abuse is often covered by multiple pieces of legislation. In Canada, some physically abusive behaviours are prohibited under the national *Criminal Code*, whereas others are captured under provincial acts designed to protect children (e.g., *Child Welfare Act*, *Child and Family Services Act*). In British Columbia, the *Child, Family and Community Service Act* (RSBC 1996, Chapter 46) specifies that a child (under the age of 19) needs protection if the child “has been, or is likely to be, physically harmed by the child’s parent”

(Section 13(1)(a)). Physical harm is not defined in this act, however. Police agencies in Canada define physical abuse as “the use of unreasonable physical force on any part of a child’s body that results in non-accidental injury. Examples: pushing, slapping, shaking, punching, burning, biting, choking, kicking” (Royal Canadian Mounted Police, 1995). A major Canadian national incidence survey (Trocmé et al., 2001) outlined the difficulties in finding a definitional consensus:

Definitions have been shown to vary on the basis of differences in legal mandates, professional practices, and social and cultural values. This lack of standards in defining child abuse and neglect has been repeatedly identified as a major obstacle in the development of child maltreatment and practice. Several provinces, such as British Columbia, Manitoba, and Ontario, have taken steps toward setting more explicit criteria for defining abuse and neglect, although the establishment of completely standardized definitions is constrained by the fact that, in practice, judgements about child maltreatment are shaped by a complex array of changing community interests and values.

Trocmé and colleagues defined physical abuse for the Canadian Incidence Study as including three forms of abuse: shaken baby syndrome; inappropriate punishment; and, other physical abuse. Inappropriate punishment was defined as physical discipline “... (e.g., hitting with hand or object) that has led to physical harm, or put the child at substantial risk of harm” (Trocmé et al., 2001, p.30-31). Other physical abuse included physical injury such as intentionally burning a child or “hitting the child in a manner that does not appear to be intended as punishment” (Trocmé et al., 2001, p. 31). Straus and colleagues (2000) maintain that child maltreatment should be measured by the aggressive behaviour perpetrated by caregivers, regardless of whether the child sustained any injuries. For the purposes of this dissertation, a more fluid definition of physical abuse was used. In an attempt to assess as broad a range of potentially abusive behaviour as possible, different types of physical discipline will be explored. Accordingly,

behaviour may be described alternatively as 'physical abuse', 'physical discipline', 'corporal punishment', and 'abusive parenting strategies.'

Spanking, while falling under some research definitions of physical abuse, remains a grey area in North America. It is grey because while only 55% of parents support the idea of spanking, over 90% of parents surveyed still spank (Straus, 2001). The movement away from the use of corporal punishment is happening slowly in North America, with attitudes changing ahead of behaviour. Whereas some countries have banned corporal punishment in homes (e.g., Sweden), it is not illegal to hit one's own child in North America. Spanking is still a widespread practice in North America. Straus (2001) reported that over 94% of American parents hit their young children. When considering more severe forms of physical discipline (e.g., slapping above the shoulders, pinching, hitting with a hard object or shaking a child under age 2) 26% of Americans reported using such methods in the previous year (Dietz, 2000). Another recent representative survey of parents in the United States found that 40% of those surveyed reported spanking their children under age 3. The rates of hitting and slapping increased as the children got older, with 3% reporting this behaviour towards their 6-to-11 month old children but 11% for 2-to-3 year olds (Wissow, 2001).

The use of spanking may be the most important risk factor for physical abuse (Straus, 2000). Dr. Murray Straus, the developer of the Conflict Tactics Scale and a leading researcher on child maltreatment, has criticized the fact that researchers hoping to discover ways to end physical abuse routinely ignore this risk factor. With over 94% of parents engaging in this behaviour and reports that spanking is used multiple times per week, Straus argues that child maltreatment specialists are underestimating the prevalence and chronicity of corporal punishment. Even if the risk factor for corporal punishment is moderate, the prevalence of this risk factor (94%) means it can have a greater impact on public health than a high risk factor with



low prevalence (Straus, 2000). The idea that corporal punishment is a risk factor for physical abuse is supported by Asian research that reveals that child abuse injuries are often the result of culturally acceptable discipline practices applied with excessive force (Samuda, 1988). The low incidence rates of child abuse compared to the high base rates of corporal punishment hamper the utility of this risk factor. As a risk factor, corporal punishment may have excellent sensitivity (i.e., it is usually the precursor to physical abuse) but very poor specificity (i.e., most spankings do not lead to physical abuse).

Another aspect of this risk factor that may prove more helpful is the frequency of corporal punishment. High rates of corporal punishment are correlated with an increased likelihood that corporal discipline will escalate into physical abuse (Straus, 2001).

### *Sequelae*

Children who are physically abused can experience more than injuries and pain (Kloko, 2002). Even corporal punishment that does not exceed accepted cultural norms in North America (e.g., moderate use of spanking) now appears to have negative psychological effects (Dietz, 2000; Straus, 2001). Research on the long-term effects of physical abuse is more prevalent than for emotional abuse (Briere & Runtz, 1990). Physical abuse appears to have a unique relationship with anger and aggression in victims, a relationship that doesn't appear for sexual or emotional abuse (Briere & Runtz, 1990). A history of physical abuse has also been linked to increased mental health issues, eating disorders, depression, suicidality, low self-esteem and marital problems (Mullen et al., 1996). Experiencing childhood physical abuse has been demonstrated to relate to increased rates of suicidality, whereas battering experienced as an adult, was not (Thakker, Gutierrez, Kuczen, & McCanne, 2000). Perez and Widom (1994) reported that physical abuse has been shown to be a predictor of lower IQ and lower academic

performance but the same authors failed to find a similar link between sexual abuse and lower IQ or poor academic performance.

Physical abuse and emotional abuse are often associated (Hemenway et al., 1994). Experiencing both types of abuse appears to compound the potential negative sequelae (Briere & Runtz, 1990; Mullen et al., 1996; Vissing et al., 1991).

### **1.5 Rates of Victimization for East and Southeast Asians**

#### *Emotional Abuse*

There is a relative lack of data on abusive behaviour in non-Western countries for cross-cultural comparisons (T. P. Ho & Kwok, 1991; Lieh-Mak et al., 1983; McKelvey & Webb, 1995, Samuda, 1988). Research into the prevalence of physical and mental abuse in Asian countries is still in its early stages. Studies of early physical abuse did not begin in Hong Kong until 1977 (Lieh-Mak et al., 1983).

Emotional abuse cannot be explored without considering ethnic contexts. The strict child rearing practices in Asia extend from the family into the school setting. For example, it is often considered bad form to praise a child within earshot. If someone were to praise a Chinese student on her high mathematics mark, her parent might respond by saying "Oh, but her science marks need improving." Imbedded in this deflection of a compliment is the notion that bragging attracts bad luck. Bragging about one's children also offends the Chinese-honoured virtue of humility (Bond, 1981). Chinese culture also discourages praising children to their face, out of concern that this will spoil the child. Not only are Chinese parents less likely to praise their children in public, teachers also infrequently praise their pupils (Wan & Salili, 1996). Under *filial piety* teachers also enjoy absolute authority (D. Y. F. Ho, 1994). In Chinese schools, for example, disruptive behaviour is not tolerated and discipline is enforced through striking,

shaming and isolation (Bond, 1991). Reward and punishment strategies in education and child rearing tend to be more strict and authoritarian in Asia than in the West (Bond, 1991; Tang, 1996; Wan & Salili, 1996).

Studies of emotional abuse within Asian communities are relatively rare and information is often only tangential to the focus on physical discipline. The Conflict Tactics Scale (CTS) provides information on verbal aggression and has been used in Asia with adolescents. The CTS verbal abuse subscale revealed that 62.5% of the students in the Hong Kong sample had experienced verbal abuse from their parents in the previous year (Tang, 1996).

Shek (1989, 1993) has studied the relationship between adolescents' perceptions of parental treatment and current psychological well-being. Positive treatment by mothers and fathers was related to positive mental health and negatively related to psychiatric distress among college students (Shek, 1993). However, it is possible that this relationship could go both ways. It has been suggested in historical reviews of Asian parenting that shaming a child, even in public, has been considered a necessary part of discipline (Bond, 1981).

### *Physical Abuse*

Cross-cultural studies of parenting have shown Chinese parents to be fairly warm towards their children but at the same time very restrictive and controlling of their children's activities, speech and friendships (Bond, 1991). Reward and punishment strategies in education and child rearing may focus on physical discipline rather than verbal control (Bond, 1991). Research in Asia consistently reveals that physical punishment is a normal disciplinary strategy (Samuda, 1988; Tang, 1996; Tang & Davis, 1996; Wu, 1981). Samuda's (1988) study of physical abuse in Hong Kong reported that injuries were due to excessive application of culturally acceptable discipline. Research conducted in the past decade has shown that physical

discipline is still the norm in Asia (Tang & Davis, 1996). Whereas data have been collected on battering rates in Hong Kong and Taiwan for a few years, the first studies conducted in Mainland China did not appear until very recently (D. H. Kim et al., 2000; Hesketh et al., 2000). The historical basis for physical discipline is reflected in the Chinese saying, "filial sons are produced from the club" (Bond, 1981). Similarly in Korea physical punishment has been justified by the term *sarangeei mae* or "whip of love" (Hahm & Guterman, 2001). An equivalent Vietnamese saying is, "When you hate them, give them sweetness; and when you love them, give them punishment" (Gray & Cosgrove, 1985). Rates of physical discipline appeared to be very high in and throughout different parts of Asia. In Mainland China, 97% of health professionals assessed stated that physical punishment was widely used in China (Hesketh et al., 2000). Somewhat in contrast to North American health professionals, health professionals in China were less likely to support physical discipline of toddlers (aged 1-3) than for older children. Research in Hong Kong revealed that rates of physical discipline were different than rates reported in the United States, using the CTS scale and similar methodology (Tang, 1998). Children in Hong Kong reported slightly lower rates of minor violence but significantly higher rates of severe violence (461/1,000 in Hong Kong compared to 110/1,000). These rates may reflect the philosophies of *filial piety*, since mitigating factors found in the United States (e.g., parental education, socioeconomic status and marital status) do not appear to have mitigated rates in Hong Kong.

A transcultural study of abuse in Korea and Mainland China revealed similar rates of physical punishment in those two countries (D. H. Kim et al., 2000). For overall rates of family violence, 70.6% of Chinese elementary school students reported experiencing violence, including spanking, in the previous year, compared to 68.9% of Korean students. In China only 22.6% reported experiencing serious violence, as opposed to 51.3% in Korea. They found that

types of violence experienced from teachers varied in severity. Overall rates of corporal punishment were similar (51.1% in China and 62% in Korea), but only 4.1% of Chinese students reported experiencing serious violence, a tenth of what Korean students reported (43.8% reported experiencing serious violence).

Samuda's (1988) survey of 100 university students in Hong Kong revealed that 95% reported that physical punishment was used in their homes, 46% reported being beaten as a form of punishment, and 35% remembered physical punishment as their most painful childhood physical experience. A survey of Hong Kong Chinese college students aged 17 and 18 revealed that 63% experienced verbal abuse, 13% experienced minor physical abuse and 9% experienced severe physical abuse during the previous year (Tang, 1996). A study of 1,142 Korean school children aged 9 to 11 years old found that 58% were mildly battered and 8% were seriously battered in the past year (J. I. Kim & Ko, 1990). In studies of both adolescents and young adults in Hong Kong, Shek (1989; 1993) showed that the respondents' assessments of positive parental treatment styles related to psychological well being. Research in Hong Kong has also been consistent with North American research showing an inverse relationship between child abuse and the amount of social support available to the parental perpetrators. For example, abusers in Hong Kong were found to be suffering from more parental stress and life stress than were non-abusive parents (Chan, 1994).

Research with Chinese parents in North America reported similar disciplinary strategies to those discussed in research conducted in Asia. Hong and Hong (1991), in their investigation of attitudes towards abusive behaviour, found that Chinese participants were significantly less likely to recommend an investigation or to recommend intervention by protective services than were Hispanic or White respondents. Chinese respondents tended to judge parental conduct less critically, particularly for the use of physical force (Hong & Hong, 1991).

The notion that Asian parents indulge their very young children appears to be reflected in a recent study in the United States. In Wissow's (2001) survey of parents, ethnicity was a significant factor in the use of spanking with children under age 3. Only 41% of Asians reported spanking children in this age group, compared with 57% of Whites, 47% of Hispanics and 67% of African Americans. Asian parents reported lower rates of physical discipline for this younger group of children.

## **1.7 Westernization Issues**

### *Acculturation*

As mentioned in the introduction, large numbers of people have immigrated to North America from different parts of the world. North American society is not a homogenous community in terms of ethnicity, values or attitudes. The social history of Canada and the United States has, however, been influenced by the European-descent majority ruling class. Their values and attitudes (referred to simply as Western culture throughout this dissertation) have been reflected in laws, policies and institutions.

A sense of self, as reflected in attitudes, values and behaviours, is intimately tied to a sense of belonging to a particular cultural group. Acculturation refers to changes in this sense of self as a result of exposure to a different cultural group. Ryder, Alden and Paulhus (2000) describe the process of acculturation influencing a sense of self as follows:

When an individual moves from one culture to another, many aspects of self-identity are modified in order to accommodate information about and experiences within the new culture. (p. 49)

Recent calls for increased consideration of ethnicity as an important variable in child maltreatment research, also advocate consideration of acculturation (Behl et al., 2001). Taking

into account levels of acculturation can help determine the most relevant assessment and treatment issues (Terao et al., 2001). Only with large sample sizes of ethnic minority groups can research explore the factors within ethnicity that may account for differences such as acculturation and religious factors (Cohen et al., 2001). For example, acculturation has been shown to account for differences in parenting beliefs above and beyond ethnic differences among Hispanic populations (Acevedo, 2000).

### *Stress of Immigration*

Children whose families have experienced sociocultural and socioeconomic change should be considered to be at potential risk for maltreatment, in part due to the stresses created by a changing cultural context (Roer-Strier, 2001). Moving to a Western culture that does not place the same emphasis on family unity and *filial piety* may lead to increased strain on the Asian family unit. Stress has been shown to increase levels of abuse (Chan, 1994; Garbarino & Ebata, 1983). In addition, families who move from a country where they are the majority to one where they are the minority may experience more social isolation. Research in Asia has shown that abuse is often related to the social isolation of the family (Lieh-Mak et al, 1983), although the causal direction for that relationship may be bidirectional. Another study showed that Asian parents who abused their children reported greater life stress than did nonabusive parents (Chan, 1994). Abusive parents in that study also reported significantly less social support. New immigrants to North America would probably be vulnerable due to less family and social support.

Exploring the relationship of acculturation to abuse may reveal a source of stress unique to the adoption of Western values. Garbarino and Ebata (1983) provided the example of Samoans in Hawaii who seemed to be at risk for an increase in physical abuse. This escalation of physical discipline seemed to be in response to the Westernization of their children which

contributed to the disintegration of traditional family patterns. Research has shown that physical and sexual abuse may be aggravated by family stress due to traumatic events or crises and recent immigrants face the added pressures of language barriers, cultural conflicts, social isolation and financial pressures (Leung & Carter, 1983).

### *"Westernization"*

While the research on abuse in Asia is growing, there is no research to show how emigrating from Asia changes abusive behaviour or attitudes as new North American immigrants become more "Westernized". Previous research into changes experienced by Asian immigrants to Canada has shown that an increased length of residency in North America reduces conservatism in attitudes towards sexual behaviour (Kennedy & Gorzalka, 2002; Meston, Trapnell, & Gorzalka, 1998). Research has also shown that an increased length of residency in Canada affects actual sexual behaviour, leading to a greater variety of types of sexual activity (Meston, Trapnell, & Gorzalka, 1996). Acculturation or adoption of North American values has been shown to influence Asian immigrants' attitudes towards gender roles, career interests and educational attainment (Brandon, 1991; E. J. Kim, O'Neil, & Owen, 1996; Park & Harrison, 1995). Acculturation has also been measured by changes in childrearing behaviour, such as breast-feeding practices (Staples & Mirande, 1980). It remains to be determined whether "Westernization", or an increased length of residency in North America, affects levels of child maltreatment. Use of physical punishment, for example, may decrease as new immigrants are exposed to the predominantly corporal punishment-free education system in North America. The lack of consideration of acculturation or exposure to Western values and its effects on Asian parenting practices must be rectified.



## **1.8 Studying perceptions of abuse**

A lack of consensus on the definition of child abuse is a problem both for researchers and the populations attempting to treat victims (Korbin et al., 2000; Portwood, 1999). Korbin and colleagues (2000) outlined the three different types of approaches that have been undertaken to explore these differences in definition. The first approach has been to formulate theoretical constructions based on information provided in international reports on child abuse or ethnographic presentations of parenting practices in different countries (Garbarino & Ebata, 1983; Korbin, 1981). The second approach is to poll specific ethnocultural groups to detect differences in definitions of abusive behaviour (e.g., Gray & Cosgrove, 1985). The third approach is to present vignettes portraying abusive situations in an attempt to empirically study definitions of child abuse. These vignettes have been presented to lay and professional participants in attempts to consider the effects of ethnicity, socio-economic status, and gender, among other variables (Ahn & Gilbert, 1992; Dubowitz et al., 1998; Giovannoni & Becarra, 1979; Hong & Hong, 1991; Ima & Hohn, 1991). Korbin (2000) outlined the strengths and weaknesses for these three approaches. The first two approaches are rarely subjected to empirical verification. The base information is also often anecdotal or collected from small, non-representative samples. These approaches, however, have emphasized the need to consider cultural differences. The third approach has provided empirical evidence that ethnicity is related to perceptions of child abuse (e.g., Hong & Hong, 1991). The use of vignettes, however, bears the usual limitations of measuring attitudes rather than behaviours (Garbarino & Ebata, 1983).

This study encompassed two, and possibly all three, approaches. It could be argued that in involved a transcultural description of child rearing practices in North America, Hong Kong and Taiwan. Previous research in this laboratory indicates that a sizeable proportion of East Asian students have only been in North America for a matter of months, and therefore, their

experiences and perceptions may be closest to their peers still residing in Asia (Kennedy & Gorzalka, 2002). Research on acculturation conducted at the same university did indeed find that recent Chinese immigrants reported personality profiles similar to those found in Hong Kong, whereas Chinese-descent participants who had been in Canada for a longer time more closely resembled North American personality profiles (McCrae, Yik, Trapnell, Cond, & Paulhus, 1998). For this dissertation, length of residency in North America was measured independently of acculturation. In addition to actual experiences of abuse and family life, perceptions of abuse were measured in two ways. This represents the other two approaches to studying maltreatment. The combination of direct attitude questions and assessment of vignettes incorporated the two distinct methods for measuring perceptions (Portwood, 1999). The presentation of ethnically diverse vignettes, to which participants were randomly assigned, also allowed for a more direct empirical investigation than merely polling general attitudes (Korbin et al., 2000).

There is some evidence that ethnic differences exist in the perception of what constitutes child abuse. Hong and Hong (1991) asked 50 Chinese immigrants to rate the severity of 12 cases of potential abuse. Their responses were compared to 50 White and 50 Hispanic U.S. born participants. Chinese participants judged 7 of the 12 cases to be significantly less severe. Chinese participants were also the least likely to recommend any form of intervention or professional help. In particular, Chinese participants were the least critical of the use of physical discipline by parents. These differences were considered in the context of *filial piety* and *familism* by the authors. One limitation with this research was that the researchers did not compare immigrant Asians to non-immigrant Asians, whereas they specifically excluded any immigrant Hispanics or Whites. Second, they provided no information about the length of time immigrants had been residing in North American culture. Finally, the sample of 50 was small.

In Samuda's (1988) survey of 100 Hong Kong university students, approval ratings for types of punishment were assessed. Only 36% approved of spanking children under the age of 3, whereas 38% approved of ignoring a child and 18% approved of kneeling (a position of humiliation rather than discomfort) as a punishment. Surprisingly, 2% reported approving of beating a child under age 3 as a form of discipline. The Asian trend of disciplining school age children more strictly than pre-schoolers was reflected in the jump to 55% approval of spanking for 5 to 10 year olds. As well, 49% approved of ignoring this age group and 40% approved of forcing children to kneel as punishment. Additionally, 16% of this group reported approving of beating as a punishment. One limitation with this survey is that the author did not poll disciplinary attitudes for older children. Previous research in Asia has demonstrated that older children are more likely to receive physical discipline. A second limitation is that no context was given for this discipline. Providing an example of a transgression that might precede punishment might have evoked higher rates of approval for the use of physical discipline.

### **1.9. Research objectives**

Cross-cultural research on child abuse has to date been limited to presentation of rates of abuse in different cultures. It has not fundamentally explored cross-cultural differences in perceptions of what constitutes abuse. Although Gray and Cosgrove (1985) did interview a handful of people of different races, they did not systematically explore differences in assessing similar parenting disciplinary practices. Research on the acceptance of physical discipline among Asian populations has never directly compared Asian conceptualizations of physical abuse to that of non-Asian groups.

The explanation that philosophies of *filial piety* account for high rates of physical discipline has not been tested within Asian communities. Almost every paper on Asian rates of

child abuse cites *filial piety* as an explanation for the high rates of physical punishment, but this construct has not been empirically tested.

Much of the relatively sparse Asian research on physical discipline merely describes rates of physical discipline and abuse but does not explore whether physical discipline should be considered an appropriate parenting strategy. Evidence of high rates of physical discipline may not necessarily mean a widespread approval rating of the use of physical punishment. Previous research has theorized that the very tenets of *filial piety* suggest that physical discipline is necessary to ensure loyalty, obedience and respect from older children (Lieh-Mak et al., 1983; Samuda, 1988; Tang, 1996; Tang & Davis, 1996).

If *filial piety* does support high levels of physical discipline, it remains to be determined how moving to a Western community, where the physical discipline of older children is less tolerated, may moderate the acceptance of physical discipline. This research explored whether physical discipline and physical abuse are indeed 'culturally relative.'

A history of abuse may influence perceptions of the appropriateness of corporal punishment and the definition of physical abuse. For example, previous research has found that children who experience high rates of physical discipline generally view the use of corporal punishment as more appropriate (Bower & Knutson, 1996; Buntain-Ricklefs et al., 1994; Zaidi, Knutson, & Mehm, 1989) and judge transgressions precipitating corporal punishment as more serious than do non-abused children (Chilamkurti & Milner, 1993). Although there are flaws inherent in the research which originally attempted to identify a causal link between childhood experiences of abuse and abusive parenting practices, that research does still clearly delineate an association between those two variables (Zaidi et al., 1989). A better understanding of the link between a history of abuse and perceptions of abusive behaviour may help to explain why many former victims do not go on to abuse, whereas others do (Bower & Knutson, 1996).

It is very difficult to conclude unequivocally from the data reported to date that the use of physical discipline is higher in Asian societies than in non-Asian societies. Data on physical discipline have been collected on different continents at different times and then compared (e.g., Tang, 1998).

Also not addressed in the literature is the differential age-related use of physical discipline in Asian versus Western societies. Physical discipline is primarily used against pre-school-aged children in Western societies (Straus, 2001; Wissow, 2001) but its use at this age level appears to be low among Asian populations (Hasketh et al., 2000; Lau & Davies, 1993; Lieh-Mak et al., 1983; Tang, 1998). Whether there are ethnic differences in acceptance of physical discipline for different age groups remains unexplored.

The first objective of this research was to examine the relationship of Westernization, as measured by multiple measures, to perceptions of what behaviour constitutes physical and emotional abuse. The second objective was to examine the relationship between history of abuse and perceptions of abusive behaviour. The third objective was to determine whether these two relationships are similar amongst different ethnic groups. This objective was accomplished by conducting multi-group Structural Equation Modelling (SEM) analyses.

The fourth objective was to consider in more detail the nature and relationships of the individual indicators used. For example, this research sought to determine whether there was a positive correlation between *filial piety* and acceptance of physical and emotional discipline. The relationship of acculturation with perceptions of abusive behaviour also was explored. As well, the interaction between the ethnicity of the person assessing abusive behaviour and the ethnicity of the portrayed victim of abuse was considered. The relationship of the age of a child being disciplined and the participant's perception of the appropriateness of physical and emotional

discipline was assessed. Finally, ethnic differences in experiences of physical and emotional abuse are reported.

## Chapter II - Methodology and descriptive results

### 2.1 Methodology for Experiment 1: Cross-cultural perceptions of physical abuse

#### *Participants*

Participants were University of British Columbia (UBC) undergraduate students who volunteered to participate in exchange for one point toward course credit. They were recruited via the Department of Psychology's study board. Ethical approval was granted by the UBC Behavioural Research Ethics Board and the Department of Psychology Subject Pool Committee. Data were collected from 601 participants between March and November 2002.

There are a number of benefits to studying undergraduates. First, while these students are considered adults, most have only recently left home and should recall how it feels to be disciplined (Nicholas & Bieber, 1994). Second, young adults who are unlikely to already be parents may be more forthright in their answers about discipline, since they will not be trying to present a socially desirable image of a 'good parent' (Nicholas & Bieber, 1994). Third, these authors also argue that understanding the perceptions of young adults might help in the development of prevention programs aimed at young adults before they become parents. Finally, studying undergraduates is a convenient sample that allows for more direct comparisons with other studies.

The benefits of assessing university students in Vancouver are threefold. First, the University of British Columbia has a very diverse student population that allowed for the simultaneous collection of information from Asian-descent and European-descent participants. Second, by assessing students who had all passed English as a Second Language requirements prior to entering UBC, reading comprehension or language was not likely to be an issue. Third, this population presents a range of acculturation to North American culture. Previous research

indicates that two-thirds of the Asian population at UBC have emigrated from Asia and one-third were born in Canada (Kennedy & Gorzalka, 2002; Kennedy, Samra, & Gorzalka, 2002).

The limitations of using this population include the standard limitations associated with undergraduate populations. Very few of the participants were expected to be parents themselves, and only 1.3% of the group ( $n=8$ ) reported having children. This limits the generalizability of the findings.

### *Procedures*

Participants completed self-report questionnaires in private and watched a 6-minute video in a small group of ten or fewer. Completed questionnaires were dropped anonymously in a sealed box. Confidentiality was ensured, as no names or student numbers were collected with the data. Participants were asked to sign a consent form before starting the study. They were informed of their right to withdraw at any point without the loss of the course credit. No participants chose to withdraw. They were also informed of their right to skip any questions that made them uncomfortable. A few participants did leave some questions unanswered. Participants took home a debriefing form that was verbally explained to them and highlighted counselling services in case any of the questions had been upsetting to them.

The video contained two vignettes, one instance of physical abuse and one instance of emotional abuse. These vignettes are described in more detail below. To control for order effects, each participant saw one version of the pair of vignettes with either same or different ethnic group actors as determined by randomly generated sequences. The order for the physical versus emotional abuse vignettes being presented first also followed a randomly generated sequence. Further, some participants saw the vignettes after completing the research questionnaire, whereas others saw it before.



Demographic information was collected through self-report methods. Participants were asked to identify their ethnicity, that of their mother and that of their father. In addition to these open-ended questions, an explanation of heritage culture accompanied the Vancouver Index of Acculturation scale (Ryder et al., 2000). The instructions for heritage culture were,

*Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than North American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you **most** (e.g., Irish, Chinese, Mexican, Black). If you do not feel that you have been influenced by any other culture, please try to identify a culture that may have had an impact on previous generations of your family.*

Self-reported ethnicity, which allows for reporting multiple ethnic influences, was compared against this directed ethnic information. The following ethnicities were reported by the participants: 177 reported being of East or West European descent, 309 reported being of Chinese descent, 41 reported being of Southeast Asian descent, 32 reported being of Indo-Asian descent, 2 reported being of Afro-Caribbean descent, 8 reported being of Middle Eastern or North African descent, 6 reported being of Hispanic descent, 9 reported being of First Nations or North American Aboriginal descent, and 17 reported multiple ethnicities that included more than one of the groups just mentioned. The responses were fairly consistent across the open and directed ethnicity questions. While 122 participants did not answer the directed question, less than 3% (n=23) of the whole group reported an ethnicity that differed from their open ended primary ethnicity. The participants who did differ were from two groups. The first group (n=5) had identified their ethnicity to be First Nations but reported a European cultural group to be the one that had the most influence on them. The other participants (n=18) came from the group

that reported multiple ethnic influences (e.g., they self-reported their ethnicity to be Indo-Asian but declared that the European culture of one of their parents had the most influence on them).

The countries of birth of the participants are listed in Table 1. The percentage of participants born in Canada varied significantly for the groups,  $F(8, 593) = 33.93, p < .001$  (European – 85.3%; Chinese – 35%; Southeast Asian – 31.7%; Indo-Asian – 78.1%; Afro-Caribbean – 50%; Middle Eastern – 37.5%; Hispanic – 16.7%; First Nations – 100%; other – 64.7%).

Information on generational levels was collected by asking for the participant's country of birth as well as the country of birth for both parents. For the participants born in Canada, those whose parents had been born elsewhere were called first generation and those who had one or both parents born in Canada were called second generation. The generation levels of those born in Canada were as follows: European - 9.6% first and 75.7% second; Chinese - 32% first and 2.9% second; Southeast Asian – 29.3% first and 2.4% second; Indo-Asian – 79.1% first and no second; Afro-Caribbean – 50% first and no second; Middle Eastern – 25% first and 12.5% second; Hispanic – 16.7% first and no second; First Nations – 100% second; and other – 64.7% second.

For participants not born in Canada, information on how long they had lived in North America and how long they had been educated in North America was collected. Information on religion, language preference and socio-economic status was also collected. This information is presented in Tables 2 and 3. All demographic questions asked can be found in the sample questionnaire in Appendix 3.

Table 1. Countries of birth for participants by ethnic group

<u>European</u>	<u>n</u>	<u>Chinese</u>	<u>n</u>	<u>Southeast Asian</u>	<u>n</u>	<u>Indo-Asian</u>	<u>n</u>	<u>Afro-Caribbean</u>	<u>n</u>
Canada	121	Canada	108	Canada	13	Canada	25	Canada	1
Australia	1	China	21	Germany	1	England	2	Jamaica	1
Austria	1	Hong Kong	95	Hong Kong	1	India	3		
Botswana	1	Indonesia	2	Indonesia	1	Iran	1		
Croatia	1	Malaysia	4	Japan	2	Saudi Arabia	1		
England	3	Philippines	11	Korea	15				
Germany	2	Singapore	3	Philippines	3				
Italy	1	Taiwan	56	United States	1				
Moldova	1	Thailand	1	Vietnam	4				
Poland	2	United States	6	Missing	1				
Romania	2	Vietnam	2						
Russia	2								
Slovakia	1								
Sweden	1								
Ukraine	3								
United States	3								
Yugoslavia	1								
<b>Total</b>	<b>177</b>		<b>309</b>		<b>41</b>		<b>32</b>		<b>2</b>
<u>Middle Eastern/ North Africa</u>	<u>n</u>	<u>Hispanic</u>	<u>n</u>	<u>First Nations</u>	<u>n</u>	<u>Other</u>	<u>n</u>		
Canada	3	Canada	1	Canada	9	Canada	11		
Australia	1	Mexico	4			Germany	1		
Iran	3	Nicaragua	1			Hong Kong	1		
Missing	1					Ireland	1		
						Japan	1		
						Malaysia	2		
<b>Total</b>	<b>8</b>		<b>6</b>		<b>9</b>		<b>17</b>		

Table 2. Demographic information for participants not born in Canada

<u>Group</u>	<u>European</u> n=28	<u>Chinese</u> n=198	<u>Southeast Asian</u> n=26	<u>Indo-Asian</u> n=8
Mean age of arrival in years (± standard deviation)	13.5 (6.9)	10.3 (4.4)	12.8 (5.6)	10.9 (5.8)
Age of arrival in years for lower quartile	8.3	7	8.3	3
Age of arrival in years for top quartile	19	13	15	18
Mean number of years educated in a Western, English-speaking school (± standard deviation)	6.1 (4)	7.7 (3.2)	6.5 (3.9)	2 (2.5)

\*the number of immigrants in the other groups provided ns too small to analyze (6 or fewer)

Table 3. Demographic information by ethnic group\* – religion, religiosity and household income

<u>Group</u>	<u>European</u> n=177	<u>Chinese</u> n=309	<u>Southeast Asian</u> n=41	<u>Indo-Asian</u> n=32
<b>Religious affiliation (%)</b>				
Anglican	4.6	-	-	-
Buddhist	-	16.6	4.9	-
Catholic	19.5	15.6	17.1	-
Christian (unspecified)	21.3	23.4	31.7	-
Christian (other than listed)	8.6	1.6	7.3	-
Hindu	-	0.3	-	19.4
Islamic	0.6	-	-	22.6
Sikh	-	-	-	51.6
None	42	42.5	39	6.5
<b>Religiosity</b>				
% stating that they are not a religious or spiritual person	23.7	16.1	19.5	9.4
<b>Household income</b>				
% under \$50,000 annually	21.8	47	51.3	33.3
% over \$90,000 annually	29.4	7.5	7.7	16.7

\*groups with less than 18 participants were not reported

### *Statistical Analyses*

The complexity of the analyses and the originality of some of the variables required the use of structural equation modeling (SEM) in this dissertation. In this Chapter, the variables used are described and some descriptive results are presented. These results are presented for the sample as a whole ( $n=601$ ); simple analyses of variance differences are presented along with the means. Least square difference post hoc information is also reported to specify which groups differed significantly.

Descriptive results in the following sections are presented separately for groups of the following ethnic descent: European; Chinese; Southeast Asian; Indo-Asian; and other (e.g., Afro-Caribbean, Hispanic, First Nations, Middle Eastern). In Chapter III, a partitioned group ( $n=225$ ) was used for confirmatory factor analysis of the latent variables being used. This inclusion of an independent stage, to specify the measurement model with participants who were not included in the final structural equation modeling analyses, is a conservative step but was undertaken due to the originality of the perceptions of abusive behaviour measures. Data from the remaining participants ( $n=376$ ) were then analyzed in the structural equation models so as to minimize capitalization on chance and to ensure that the SEM models were theory driven not data driven.

### *Westernization measures*

Relatively little research has tried to link the characteristics of decision-makers and their assessments of what constitutes abuse (Portwood, 1998). Definitions of abuse are often used without consideration of the assumptions behind that definition. The professionals charged with identifying abuse (e.g., medical professionals, legal professionals, teaching professionals, etc.) make determinations without considering their own ethnocultural biases (Portwood, 1998). The inclusion of a variable focused on identification with the majority culture, or 'Westernization',

serves to ascertain whether there is a culture specific difference in identifying abusive behaviours which operates above and beyond other personal factors such as ethnic differences or a history of abuse.

### *1. Vancouver Index of Acculturation (VIA)*

The Vancouver Index of Acculturation (VIA) is a bidimensional measure of acculturation developed at the University of British Columbia by Ryder, Alden and Paulhus (2000). The VIA contains 20 items covering 10 domains. Items are written to measure heritage-identity and mainstream-identity comfort levels. The VIA-heritage dimension reveals excellent internal consistency among different Asian samples (Cronbach's  $\alpha = .91$  to  $.92$ ) and high mean inter-item correlations ( $r_s = .52$  to  $.53$ ). The VIA-mainstream dimension reveals excellent internal consistency among different Asian samples (Cronbach's  $\alpha = .85$  to  $.89$ ) and good mean inter-item correlations ( $r_s = .38$  to  $.46$ ). Concurrent validity was established by comparing the scale to seven other measures, including the popular Suinn-Lew Asian Self-Identity Acculturation Scale (Ryder et al., 2000). Significant correlations appeared for all concurrent measures within different samples. Factorial validity was confirmed within different Asian samples.

### *2. Filial Piety Scale (FP)*

Previous research on acculturation and ethnic differences in parenting attitudes has suggested that acculturation alone does not adequately explain differences in parenting beliefs seen across different ethnic groups (Acevedo, 2000). Culturally-based parenting practices may be more resistant to change than other attitudes or behaviours (Acevedo, 2000; Kennedy & Gorzalka, 1999). Since research conducted to date on Asian samples both in Asia and in North America has held *filial piety* to be the foremost influence on parenting practices, the retention of these

beliefs was tested. The Filial Piety Scale (FP) was developed in Hong Kong as part of a movement in Asia to develop indigenous psychological constructs (Zhang & Bond, 1998). The version used in this dissertation is the English translation reported in the 1994 study by one of the original authors, David Yau-Fai Ho. In this paper, he reports that the reliability of the FP has ranged from .45 to .84 with an average alpha of .61, but those reliabilities range over 7 different samples and slightly different versions of the FP. The reliability in the original study of school teachers was .84 (D. Y. F. Ho & Lee, 1974). FP has been used as a measure in North America and other English-speaking areas previously, but only with participants of Asian descent (e.g., Liu, Ng, Weatherall, & Loong, 2000 in New Zealand).

The utility of measuring *filial piety* in non-Asian populations may be debatable. For example, Cheung and Rensvold (2000) claim that *filial piety* is a construct that is more highly elaborated in China than in the West. In contrast to that approach, other literature suggests that *filial piety* is a construct applicable and intrinsic to Jewish culture (Fishbane, 1999). Caution is warranted when interpreting the construct of *filial piety* in reference to non-Asian participants.

### *History of Physical Abuse Measures*

#### *1. Child Abuse & Trauma (CAT)*

Experiences of child physical maltreatment were measured with the Child Abuse and Trauma scale (Sanders & Becker-Laussen, 1995). The CAT scale surveys a participant's history of experiencing different types of abuse including sexual, physical and psychological abuse. The CAT scale includes 38 questions to which the respondents answer either (0) for never, (1) for rarely, (2) for sometimes, (3) for very often, or (4) for always. An overall CAT score can be computed in addition to three distinct, intercorrelated factor scores proposed by the original authors: negative home environment and neglect; punishment; and, sexual abuse. A fourth factor



was also proposed by Kent and Waller (1998), who argued that emotional abuse is a distinct factor, measured by six items not included in the other three subscales plus one item overlapping from the neglect subscale. The CAT has demonstrated strong internal consistency (Cronbach's  $\alpha = .61$  to  $.90$ ) and test-retest reliability ( $r = .71$  to  $.91$ ) (Kent & Waller, 1998; Sanders & Becker-Lausen, 1995). Kent and Waller reported that the emotional abuse subscale was demonstrating concurrent validity with additional measures. Previous research in this laboratory has confirmed this reliability among diverse cultural groups. In our research, the internal consistency coefficients for the overall CAT score were 0.92 for European descent participants ( $n=905$ ), 0.93 for Indo-Asian participants ( $n=213$ ), 0.90 for South-East Asian participants ( $n=234$ ), and 0.91 for Chinese participants ( $n=1361$ ) (Kennedy, Samra, & Gorzalka, 2002). These numbers were similar to the reliability coefficients found by the original authors ( $\alpha = .90$ ) and Kent and Waller ( $\alpha = .90$ ).

The punishment subscale shows lower internal consistency than for the overall CAT score. Previous research in this laboratory found the punishment subscale's internal consistency coefficients to be 0.70 for European descent participants ( $n=1016$ ), 0.65 for Indo-Asian participants ( $n=231$ ), 0.63 for South-East Asian participants ( $n=240$ ), and 0.55 for Chinese participants ( $n=1444$ ) (Kennedy, Samra, & Gorzalka, 2002). These numbers were similar to the reliability coefficients found by the original authors ( $\alpha = .63$ ) but lower than those reported by Kent and Waller in 1998 ( $\alpha = .80$ ).

## *2. Conflict Tactics Scale (CTS)*

An additional measure of childhood maltreatment used was the Parent-Child Conflict Tactics Scale (CTSPC) developed by Straus and his colleagues (2000). The original scale (CTS) has been used in hundreds of publications on child abuse but it was not developed to measure abuse experienced by children. Despite that, its validity has been excellent (Straus et al., 2000). The CTSPC is a modification of the CTS and designed to focus on physical and psychological aggression toward children. The original CTS has been used in Asia with satisfactory reliabilities after translation (Tang, 1996; 1998). The theoretical basis of the CTSPC remains that while conflict is normal, the use of violence to resolve conflict is not (Straus, Hamby, Finkelhor, Moore, & Runyan, 2000).

Four items in the CTSPC ask about the frequency of non-violent discipline, and include questions about such tactics as taking away privileges or being sent to a room. Five items assess psychological aggression experienced and include questions about being terrorized, insulted, or yelled at. Thirteen items ask about experiences of physical assault perpetrated by a caregiver. The Severe Physical Assault subscale includes 9 items which constitute severe physical discipline such as pinching; slapping on the face; head or ear; punching; choking; beating up; scalding or threatening with a knife or gun. These last two subscales (physical aggression and severe assault) were used in this dissertation to measure history of physical abuse.

### *3. Parent Discipline Attitudes Survey (PDAS)*

The Parent Discipline Attitudes Survey (PDAS) is a simple 21 item questionnaire that surveys rates of physical and emotional abuse experienced and was created by Buntain-Ricklefs and colleagues (1994). The authors report a strong internal reliability,  $\alpha = .86$  (Buntain-Ricklefs et al., 1994). It was included in this dissertation as an alternative measure of abuse experienced. It assesses information on injuries and medical treatment.

There are 4 subscale scores on the PDAS. The first is an emotional abuse subscale that includes such items as criticism, ridicule and witnessing other family members being beaten. The use of physical discipline is split into 3 subscales. The first subscale is 'very common' forms of physical discipline including, spanking, being hit with a belt or being hit with objects (e.g., a board, stick, wire). The second subscale is 'common' forms of physical discipline including being pinched, having one's hair pulled or being shaken. The final subscale is 'uncommon' forms of discipline and includes suffering broken bones; being tied-up; being burned; having water or food withheld for more than a day; being bitten; being strangled; having teeth knocked out; being thrown; being locked in an enclosed space or suffering an injury that required medical attention. The authors did not present reliability information for the subscales.

### *Perception of Physical Abuse Measures*

The endogenous target variable in this research was the latent construct of perceptions of physical abuse. It was hypothesized that the exogenous variables (Westernization and History of physical abuse) would predict acceptance of physical abuse. The measures used for the latent variable of perception of abuse are described below.

#### *1. Participant-Defined Abuse (PDA)*

In order to collect information about participants' spontaneous definitions of abusive behaviour, the following open-ended question was asked, "Please name three things that you would consider to be child abuse and neglect." This method of assessing respondent-generated definitions of abuse was adopted from the ethnographic research of Jill Korbin and her colleagues (Korbin et al., 2000). The coding of the free answers was based on their 6 summary maltreatment variables. Most UBC student responses were covered by Korbin and colleagues'

descriptions of the 6 summary maltreatment variables. The first maltreatment variable was physical abuse and covered a wide variety of physical contact. The second maltreatment variable was neglect and included failing to provide the necessities of life. The third variable was inadequate supervision, and although leaving children unattended in a car was not included in Korbin's list, it was coded into this category in our sample. The fourth variable was emotional and verbal maltreatment and covered a wide range of behaviours that fail to meet children's emotional needs as well as active verbal abuse. Restricting a child's activities was included in emotional abuse. The fifth variable was sexual abuse, and sexually related acts, such as exposing children to pornography. The sixth category was parents' misbehaviour and included behaviour such as parents' drug use or parents' allowing children to drink or smoke. The inter-rater reliability for coding these items was high, with kappas ranging from .964 to .988. These highly correlated agreements could be attributable to the comprehensive coding scheme provided by Korbin and colleagues (2000, p. 1517).

## *2. Identification of Physical Abuse*

As argued in Korbin and her colleagues' (2000) analysis of research methodology for identification of abuse, an empirically valid exploration of cultural definitions of abuse can be accomplished by presenting vignettes to diverse populations. Research conducted to date that has analyzed perceptions of abuse through assessments of vignettes has not directly addressed the context of the abuse or the ethnicity of the victim and perpetrator. When people of different ethnicities are given a written summary of an interaction, researchers have no idea whom they are picturing in this situation. Previous research implies or assumes that people of East Asian descent, for example, are imagining an East Asian parent-child relationship when they read an abuse vignette. There has been no research that attempts to address how people judge abuse in

cultures different than their own. This shortcoming can be addressed by holding constant the ethnicity, age, maturity and composure of the child being victimized. To accomplish this in as unambiguous a manner as possible, the vignette was presented as a video enactment of abuse rather than as a written summary. The videos were designed to assess whether Asian students are less likely than non-Asian students to identify negative parent-child interactions as abusive. Chinese-descent and European-descent participants viewed cross-cultural and intra-cultural depictions of physical and emotional abuse. Ethnocultural differences were expected to exist above and beyond differences attributable to a history of child abuse and acculturation.

A video vignette presenting a staged scene of physical abuse was used to measure identification of physically abusive behaviour. In this scene a mother hits her fourteen-year-old daughter with a broom handle on the side of the head following an argument. Please see Appendix 1 for the script of this scene, referred to as the kitchen scene. The vignette development was guided by previous literature on the notion of *filial piety* which suggests that this tenet obliges unquestionable authority to parents, particularly in conflicts over academic achievement (Bond, 1981; C. K. Ho, 1990). The type of physical discipline used (hitting with a broom) was based on a real Vancouver court case (unreported decision, British Columbia Supreme Court, 1997).

This scene was filmed twice, once with a Chinese -descent mother and daughter and once with a European-descent mother and daughter. The actors used in these films did not actually make physical contact in the physical abuse scene. Both fourteen-year-old girls were experienced actresses and recruited through local drama or modelling classes. These films were written, directed and edited by the author. The video stimuli were not professional-quality films but neither were they in the style of 'reality TV' or as if filmed with hidden cameras. The author did not want to alarm participants by making them think that they were witnessing real violence. The

use of films is a logical extension of the written vignettes used by previous researchers since the maturity of the victims and perpetrators involved could be held constant. Adolescent victims were chosen for two reasons. First, consensus on physical abuse is higher for younger victims, whereas adolescent abuse is a more complex issue (Portwood, 1999). Second, previous research among East Asian samples indicates that the use of physical discipline may increase with age (Lieh-Mak et al., 1983; Samuda, 1988; Tang, 1996). It is also in the 'gray zone' of less obvious instances of abuse that we most need information on any consensus (Dubowitz et al., 1998).

Consensus in definitions of the child abuse viewed was assessed through questions written by the author. The questions are similar to those used in other vignette studies (e.g., Hong & Hong, 1991; Portwood, 1998). Opinions as to whether the behaviour demonstrated in the film constituted physical abuse were also accompanied by questions about the necessity of intervention.

### *3. Parenting Strategies Checklist (PSC)*

As a third measure, the author constructed a checklist of parenting strategies (PSC), including the use of corporal punishment. These parenting examples include information on the age of the child being disciplined. Participants were asked to select which strategies they thought were appropriate. Concrete age-appropriate examples of transgressions that may warrant the use of discipline were included:

*All children misbehave or are naughty at times. For example, preschoolers (aged 2-5 years old) may play with the knobs on the stove after repeatedly being told not to. Children (6-10 years old) may ignore their parents' requests to not climb on the stairwell railings despite being asked to get down. Children (11-14 years old) may defy their parents (i.e., ignore their rules) by taking a forbidden or dangerous short cut home from school. Please*

*consider the following parenting strategies in the context of these types of naughty behaviour by the age group indicated in each question.*

These transgressions were specifically designed to be violations of prudential rules or types of behaviour that create a risk to the individual. Previous research has indicated that there is greater consensus on the seriousness of behaviour and use of discipline for prudential transgressions than for social or moral transgressions (Catron & Masters, 1993). This checklist is included to address any potential problems with test-response bias. In case there were ethnocultural biases in test-response patterns, a full complement of measures was included (i.e., open-ended, checklist and Likert measures).

For the purposes of the analyses in this dissertation, physical abuse was separated by age of the child being disciplined: Preschool (aged 2-5); Middle Childhood (aged 6-10) and Early Adolescence (aged 11-14). These age categorizations were based on definitions from the field of child development (Berk, 2003). The items included in the analyses can be found in Appendix 4.

The test-retest reliability for these items was found to be  $r = .72, p < .002$ . The internal consistency of the PSC scale, as reflected in Cronbach's alpha was .83. No single item appeared to increase the alpha significantly if it was deleted. The convergent and divergent validity of the PSC with established measures is reported in Chapter III, where the PSC was correlated with other measures in factor analyses.

#### *4. Perceptions of Punishment and Physical Abuse (PPA)*

The fourth measure, Perceptions of Punishment and Physical Abuse (PPA), gauges acceptance of physical abuse. These items are 5-point disagree/agree questions replicating the physical abuse items from the Child Abuse and Trauma (CAT: Sanders & Becker-Lausen, 1995) punishment subscale. Rather than asking about personal experience (as the CAT does), these items are

rephrased to ask about participants' approval of these types of punishment. Further, 5 of the 6 items are repeated to explore tolerance for the three different age ranges used in the Parenting Strategies checklist. This scale thus has 16 items flowing from the 6 items in the CAT punishment subscale. In addition, 2 items (with versions of each for the 3 age groups described above: Preschool, Middle Childhood, Early Adolescence) were constructed to ask about the appropriateness of withholding food as a means of punishment. Another item (with three age versions) was added to measure threats of violence, which have been identified in recent research as a unique factor in abuse (Davis, 1996). Two items (with age versions) were included to assess non-hitting forms of physical discipline (e.g., biting a child who bites). A final item was added to ask about parenting without the use of physical punishment, thereby removing the largest risk factor in physical abuse (Straus, 2000).

The test-retest reliability for the PPA was  $r = .68, p < .004$ , with two administrations of the scale at least two weeks apart. The internal consistency of the PPA scale, as reflected in Cronbach's alpha was .76. No single item appeared to increase the alpha significantly if it was deleted. The correlation of the PPA scales with other measures is discussed in Chapter III. Convergent validity was established through factor analysis with established measures. The two-factor factor analysis conducted in Chapter III also addresses the divergent validity of this measure. Potential response bias to this Likert-style test has been addressed in multiple ways, including correlations with different types of scales (e.g., open-ended, checklist) and conducting a multi-group structural equation model.

### *5. Parent Discipline Attitudes Survey (PDAS)*

The Parent Discipline Attitudes Survey (PDAS) measures both experience with physical abuse and attitudes towards the strategies experienced (Buntain-Ricklefs et al., 1994). The



acceptance of discipline strategies was included as a measure to determine concurrent validity of the original scales described above. Acceptance of physical discipline is split into three subscales by the original authors: uncommon discipline, common discipline and very common discipline identical to the experience of discipline subscales. Although the original authors reported a high internal consistence for the overall scale ( $\alpha = .86$ ), no information was reported on the reliability or validity for the attitude subscales.

## **2.2 Methodology for Experiment 2: Emotional abuse**

### *Participants and Procedures*

The structure of and theory behind the emotional abuse experiment was almost identical to those of Experiment 1 for physical abuse. Differences in the measures used are highlighted below. Since the data were collected simultaneously with the data in Experiment 1, the descriptions of participants and procedures are identical (please see above).

### *Statistical analyses*

As described in 2.1, data analyses were conducted in steps and with separate groups of participants to minimize capitalization on chance.

### *Westernization measures*

The measures used for Westernization are identical to those used in Experiment 1 (i.e., Vancouver Index of Acculturation, Filial Piety) and described in section 2.1.

## *History of Emotional Abuse*

### *1. Child Abuse & Trauma*

The experience of emotional maltreatment was measured by the emotional abuse subscale in the Child Abuse and Trauma scale (Sanders & Becker-Laussen, 1995). A history of emotional abuse is specifically measured by this subscale (Kent & Waller, 1998). The emotional abuse subscale shows slightly lower internal consistency than for the overall CAT score. Previous research in this laboratory found reliability coefficients for internal consistency for the emotional abuse subscale measured through Cronbach's alphas to be 0.86 for European participants ( $n=1011$ ), 0.86 for Indo-Asian participants ( $n=227$ ), 0.83 for Southeast Asian participants ( $n=242$ ), and 0.81 for Chinese participants ( $n=1420$ ) (Kennedy, Samra, & Gorzalka, 2002). These numbers are fairly similar to the reliability coefficients found by Kent and Waller in 1998 ( $\alpha = .88$ ) who proposed this additional subscale.

### *2. Conflict Tactics Scale*

The Psychological Aggression subscale of the Parent-Child Conflict Tactics Scale (CTSPC) developed by Straus and colleagues (2000) was used in the structural equation model for Experiment 2. The five items measuring psychological aggression included asking the frequency with which participants experienced: "A parent shouted, yelled or screamed at you"; "A parent threatened to spank or hit you but did not actually do it"; "A parent swore or cursed at you"; "A parent called you dumb or lazy or some other name like that"; "A parent said they would send you away or kick you out of the house". Initial examinations of the internal consistency of the Psychological Aggression subscale reported somewhat low internal consistency ( $\alpha = .60$ ). The authors, however, argue that low internal consistency may be due to the fact that the subscales measure relatively rare events and tend to show skewed distributions.

These internal consistency problems were seen with previous versions of the CTS but test-retest reliability indicated a temporal consistency for the subscales (Straus et al., 2000).

### *3. Parent Discipline Attitudes Survey (PDAS)*

The Parent Discipline Attitudes Survey (PDAS) was included as an alternative measure of experienced emotional abuse. The items included in the emotional abuse subscale include: “I was ridiculed in front of others”; “I was criticized/made to feel worthless”; and, “I saw other family members hit/beaten”.

### *Perception of Emotional Abuse Measures*

The endogenous target variable in Experiment 2 was the latent construct of perception of emotional abuse. The measures used for this latent variable are described below.

#### *1. Participant-defined Abuse*

As described in Experiment 1, in order to collect participant-generated descriptions of abusive behaviour, an open-ended question on child abuse and neglect was asked. Korbin and colleagues' (2000) coding of maltreatment variables was used for this measure. Inter-rater reliability was high and discussed previously for Experiment 1.

#### *2. Identification of emotional abuse*

Similar to the measure described above for identification of physical abuse, a vignette of staged emotional abuse was used to measure identification of abusive behaviour. In this scene a mother verbally abuses her fourteen-year-old daughter. Please see Appendix 2 for the script of this scene, referred to as the living room scene. The vignette development was guided by

previous research on the notion of *filial piety* influencing total submission to parents, even in the face of criticism (Bond, 1981). This scene was filmed twice, once with a Chinese-descent mother and daughter and once with a European-descent mother and daughter. Participants were randomly assigned as to which mother-daughter pair that they would be viewing. This determination was independent of the random assignment of video stimuli in Experiment 1.

Consensus in definitions of the child abuse viewed was assessed with questions written by the author. The questions are similar to questions used in other vignette studies (e.g., Hong & Hong, 1991; Portwood, 1998).

### *3. Parenting Strategies Checklist (PSC)*

As a third measure of emotional abuse, the author constructed a checklist of parenting strategies (PSC), including verbal or emotional abuse items. These parenting examples include information on the age of the child being disciplined. Participants were asked to select which strategies they think are appropriate for three separate age groups. The items included were developed from literature on emotional abuse and include indigenous Chinese discipline strategies (e.g., making a child squat as if they were sitting on an imaginary chair). The items included can be seen in Appendix 6.

The test-retest reliability for the measure was  $r = .73$ ,  $p < .003$ , with two administrations of the scale at least two weeks apart. The internal consistency of the PSC scale, as reflected in Cronbach's alpha was 0.83. No single item appeared to increase the alpha significantly if it was deleted. The correlation of the PSC scale with other measures is discussed in Chapter III. Convergent validity was established through factor analysis with established measures. The three-factor factor analyses in Chapter II also addressed divergent validity.

#### *4. Perceptions of Emotional Abuse (PMA)*

The fourth measure, Perceptions of Emotional Abuse (PMA), gauges tolerance of emotional abuse. These items are 5-point disagree/agree questions replicating the emotional abuse items from the CAT emotional abuse subscale. Rather than asking about personal experience (as the CAT does), these items are rephrased to ask about participants' tolerance of these types of emotional abuse. Further, 5 of the 7 items are repeated to assess tolerance for verbal abuse for each of three different age ranges. This scale thus has 17 items flowing from the 7 items in the CAT emotional abuse subscale. In addition, 2 questions (plus one version of each for the 3 age groups) are asked about the effects of verbal abuse on self-esteem. The questions acknowledging the damage of emotional abuse are coded opposite to the items supporting emotional abuse as a normal part of childhood. The entire scale's metric was reversed so that higher scores would indicate higher tolerance for emotional abuse.

The test-retest reliability for the PMA was  $r = .71, p < .007$ , with two administrations of the scale at least two weeks apart. The internal consistency of the PMA scale, as reflected in Cronbach's alpha was .77. No single item appeared to increase the alpha significantly if it was deleted. The correlation of the PMA scale with other measures will be discussed in Chapter III. Convergent and divergent validity was established through factor analysis with established measures. Potential response bias to this Likert-style test has been addressed in multiple ways, including correlating with different types of scales (e.g., open-ended, checklist) and conducting a multi-group structural equation model.

#### *5. Parent Discipline Attitudes Survey (PDAS)*

The Parent Discipline Attitudes Survey (PDAS) is described in the first experiment. It is included as a measure to determine concurrent validity of the original emotional abuse scales

described above. The emotional abuse subscale consists of three items: seeing other family members beaten, criticizing, and ridiculing.

## **2.3 Descriptive results for Experiment 1: Physical abuse**

### *A. Latent variable – Westernization*

#### *1. Vancouver Index of Acculturation*

Two of the variables used to measure Westernization came from the Vancouver Index of Acculturation. Both the heritage scores and mainstream scores are presented for different ethnic groups in Table 4. The  $F$ -values are presented in Table 4 as well. Post hoc comparisons (Least Significant Difference: LSD) indicate that for the Heritage scores the Chinese-descent group reported significantly higher affiliation with their heritage values than the European-descent and Southeast Asian-descent groups. On the Mainstream score, the European-descent group reported significantly higher affiliation with mainstream values than the three Asian-descent groups and the Chinese-descent group reported significantly lower affiliation with mainstream culture than the 'other' group. The strength of association between the mainstream score and ethnicity was significant (Spearman's  $\rho = -.224, p < .01$ ) as was the relationships between the heritage score and ethnicity (Spearman's  $\rho = .102, p < .05$ ). In this sample, the mainstream scores were not significantly correlated with the heritage scores (Spearman's  $\rho = -.038$ ).

Table 4. Means reported on the Vancouver Index of Acculturation

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=42	<i>F</i>
Mainstream	7.72 (1.0)	6.84 (1.1)	7.19 (1.2)	6.92 (1.3)	7.45 (0.9)	9.04** <sup>1, 2</sup>
Heritage	6.46 (1.1)	7.31 (1.6)	6.84 (1.8)	6.85 (1.7)	6.81 (2.3)	18.60** <sup>1, 3, 4, 5</sup>

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Southeast Asian; <sup>3</sup> European significantly different from Southeast Asian; <sup>4</sup> European significantly different from Indo-Asian; <sup>5</sup> Chinese significantly different from Other.

## 2. *Filial Piety*

The Filial Piety scores ( $\pm$  standard deviations) across the 22 items were as follows: Europeans averaged 2.47 (0.50); Chinese averaged 3.23 (0.54); Southeast Asians averaged 3.02 (0.66); Indo-Asians averaged 3.10 (0.55); and, other participants averaged 2.88 (0.57). Analysis indicated that these scores varied significantly,  $F(4, 519) = 49.356, p < 0.001$ . Post hoc analyses (LSD) indicated that the European-descent group described significant lower endorsement of *filial piety* than all the other groups. The Chinese group also reported significantly higher levels of endorsement of *filial piety* than the Southeast Asian or 'other' group.

Since *filial piety* is an indigenous Chinese philosophy, the responses of Chinese-descent participants were considered by length of residency in Canada. The mean for those born in Canada was 3.04 (0.54), the mean for those who arrived in Canada before the mean and mode age of arrival (11-years-old) was 3.30 (0.54), and the mean for those who arrived at or after age 11 was 3.37 (0.50). There was a significant difference among these groups,  $F(2, 304) = 10.64, p < .001$ . Post hoc analysis revealed that the group born in Canada reported significantly lower score than both immigrant groups. Length of residency for immigrants did not lead to significant differences in the Filial Piety score when compared by age of arrival in Canada.

## 3. *Generation level*

A final variable included to measure Westernization is the generation level of the participants. The definition of first and second generation designations was described under the description of the participants in section 2.1 of this chapter. Results are presented in Table 5 by ethnic group. Generation level varied significantly by ethnic group,  $F(4, 595) = 114.96, p < .0009$ , with European-descent participants reporting the lowest percentage of immigrants to Canada. Post



Table 5. Generation level by ethnic group

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=41	<i>F</i>
						114.96*** <sup>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</sup>
Second Generation One or both parents born in Canada	75.7% n=134	2.9 n=9	2.4 n=1	0	51.2 n=21	
First Generation Participant born in Canada	9.6% n=17	32.0 n=99	29.3 n=12	78.1 n=25	9.8 n=4	
Immigrant	14.7% n=26	65.0 n=201	68.3 n=28	21.9 n=7	39.0 n=16	

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> European significantly different from Chinese; <sup>3</sup> European significantly different from Southeast Asian; <sup>4</sup> European significantly different from Indo-Asian; <sup>5</sup> European significantly different from Other; <sup>6</sup> Chinese significantly different from Indo-Asian; <sup>7</sup> Chinese significantly different from Other; <sup>8</sup> Southeast Asian significantly different from Indo-Asian; <sup>9</sup> Southeast Asian significantly different from Other; <sup>10</sup> Indo-Asian significantly different from Other.

hoc analyses indicated that all groups varied significantly from each other except for the Chinese and Southeast Asian groups, which did not vary from each other.

## *B. Latent variable – History of Physical Abuse*

### *1. Child Abuse & Trauma*

The first variable used to measure a history of physical abuse was the punishment subscale score of the Child Abuse and Trauma scale (CAT; Sanders & Becker-Laussen, 1995). In addition to the punishment score, scores for the other factors and the overall CAT score are presented in Table 6. ANOVAs for group differences are presented in Table 6 as well. Post hoc analyses (LSD) indicate that for the overall CAT scores only the European-descent group reported significantly lower rates of abuse than the Chinese and Southeast Asian-descent groups. On the punishment subscale, the European-descent group reported significantly lower scores than all four groups. For the emotional abuse subscale, the European-descent reported significantly lower scores than the Chinese and the 'other' group. For the neglect subscale, the European-descent group reported significantly lower scores than the Chinese and Southeast Asian-descent groups. There were no significant ethnic differences for sexual abuse. The standard deviations for this subscale did not violate homogeneity of variance assumptions so a more liberal ANOVA test was not warranted.

### *2. Conflict Tactics Scale*

The second two variables used to measure a history of physical abuse came from the Parent-Child version of the Conflict Tactics Scale. The scores for having experienced physical aggression and severe physical assaults are presented by ethnic group in Table 7. Table 7 also presents ANOVAs for differences among the ethnic groups. Post hoc analyses (LSD) indicate

Table 6. Disclosure of childhood abuse by ethnic group and as measured by the Child Abuse and Trauma Scale

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=42	F
Composite CAT score 38 items	0.74 (.43)	0.94 (.42)	0.95 (.50)	0.89 (.54)	0.86 (.58)	5.46** <sup>1, 2</sup>
Punishment subscale 6 items	1.23 (.45)	1.51 (.43)	1.48 (.55)	1.52 (.47)	1.39 (.49)	11.48** <sup>1, 2, 3, 4</sup>
Emotional abuse subscale 7 items	1.05 (.64)	1.35 (.65)	1.22 (.70)	1.15 (.70)	1.28 (.78)	5.93** <sup>1, 4</sup>
Neglect and negative home environment subscale 14 items	0.78 (.65)	0.98 (.58)	1.04 (.69)	0.88 (.79)	0.92 (.71)	2.92* <sup>1, 2</sup>
Sexual abuse subscale 6 items	0.08 (.27)	0.14 (1.0)	0.09 (.29)	.014 (.40)	0.15 (.56)	0.21

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> European significantly different from Southeast Asian; <sup>3</sup> European significantly different from Indo-Asian; <sup>4</sup> European significantly different from Other.

Table 7. Disclosure of childhood abuse by ethnic group and as measured by the Conflict Tactics Scale (Parent-Child)

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=42	F
Nonviolent Discipline 4 items	3.54 (0.8)	2.94 (1.0)	2.73 (1.3)	2.78 (1.1)	3.29 (0.9)	14.88** 1, 2, 3, 4, 5, 6
Psychological Aggression 5 items	3.03 (1.4)	3.35 (1.3)	3.42 (1.7)	3.28 (1.5)	3.29 (1.5)	0.16
Physical Assault 13 items	3.06 (2.6)	4.30 (2.7)	4.34 (3.3)	3.03 (2.7)	3.83 (3.0)	6.76** 1, 2, 7, 8
Severe Physical Assault 9 items	0.99 (1.7)	1.87 (1.8)	2.15 (2.4)	1.34 (1.7)	1.60 (2.2)	7.40** 1, 2

Average count for the number of items specified are presented with the standard deviations following in parentheses.

\*  $p < .05$ , \*\*  $p < .001$

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> European significantly different from Southeast Asian; <sup>3</sup> European significantly different from Indo-Asian;

<sup>4</sup> Chinese significantly different from Other; <sup>5</sup> Southeast Asian significantly different from Other; <sup>6</sup> Indo-Asian significantly different from Other; <sup>7</sup> Chinese significantly different from Indo-Asian; <sup>8</sup> Southeast Asian significantly different from Indo-Asian.

that for the non-violent discipline subscale, the European-descent group reported experiencing significantly more of these strategies than the three Asian groups. The 'other' group also reported experiencing more types of non-violent discipline strategies than the three Asian groups. For the physical assault subscale, the European-descent group varied from the Chinese and Southeast Asian-descent groups. The Indo-Asian-descent group reported significantly lower rates of physical assault than the Chinese and Southeast Asian-descent groups. For the severe physical assault subscale, the European-descent group reported significantly lower levels than the Chinese and Southeast Asian-descent groups.

### *3. Parent Discipline Attitudes Survey*

The next three variables measuring a history of physical abuse came from the Parent Discipline Attitudes Survey. This survey presents three physical abuse subscores: experience of uncommon physical discipline; experience of common physical discipline; and, experience of very common physical discipline. Table 8 presents these scores by ethnic group. Table 8 also considers differences in these scores. For the very common forms of physical discipline, the Indo-Asian-descent reported significantly lower rates than the European, Chinese and Southeast Asia-descent groups. For the common forms of physical discipline, the European and Indo-Asian-descent groups reported significantly lower rates than the Chinese, Southeast Asian and 'other' group.

### *C. Latent variable – Perception of Physical Abuse*

#### *1. Participant-Defined Abuse*

The open ended responses to the questions asking for examples of child abuse were coded according to Korbin and her colleagues' (2000) categories described under the measure

Table 8. Disclosure of childhood abuse by ethnic group and as measured by the Parent Discipline Attitudes Survey

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=42	<i>F</i>
Very common physical punishment 3 items	2.50 (2.6)	3.57 (3.1)	3.57 (3.1)	1.81 (2.1)	2.66 (2.8)	5.03** <sup>1, 2, 3</sup>
Common physical punishment 3 items	0.66 (1.4)	1.03 (1.7)	1.03 (1.7)	0.66 (1.2)	1.32 (2.7)	2.70* <sup>2, 3, 4, 5, 6</sup>
Uncommon physical punishment 10 items	0.40 (2.1)	0.57 (1.9)	0.57 (1.9)	0.69 (2.5)	1.80 (7.9)	1.20
Emotional punishment 3 items	1.93 (2.9)	3.40 (3.4)	3.40 (3.4)	2.69 (2.8)	2.00 (2.3)	10.74** <sup>2, 4, 7, 8</sup>

\*Responses range from 0-never to 5-very often.

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Indo-Asian; <sup>2</sup> Chinese significantly different from Indo-Asian; <sup>3</sup> Southeast Asian significantly different from Indo-Asian; <sup>4</sup> European significantly different from Chinese; <sup>5</sup> European significantly different from Southeast Asian; <sup>6</sup> European significantly different from Other; <sup>7</sup> Chinese significantly different from Southeast Asian; <sup>8</sup> Chinese significantly different from Other.

Table 9. Percentage of maltreatment variables described in open-ended question by ethnic group

Summary Variable	Physical Abuse	Neglect	Inadequate Supervision	Emotional or Verbal Abuse	Sexual Abuse	Parents' Misbehaviour	Uncoded	Total
European								
1 <sup>st</sup> response	63.4	11.4	3.4	16.6	2.9	1.7	0.6	100
2 <sup>nd</sup> response	27.4	15.4	5.7	41.7	7.5	2.3	0	100
3 <sup>rd</sup> response	12.7	16.2	7.5	57.7	3.5	1.2	1.2	100
Chinese								
1 <sup>st</sup> response	66.9	10.4	3.7	16.4	2.3	0.3	0.3	100
2 <sup>nd</sup> response	29.2	11.5	5.8	47.1	4.4	1.4	0.6	100
3 <sup>rd</sup> response	12.4	18.1	5.0	55.0	6.4	2.5	0.6	100
Southeast Asian								
1 <sup>st</sup> response	63.4	4.9	0	14.6	12.2	4.9	0	100
2 <sup>nd</sup> response	17.1	12.2	4.9	46.3	7.3	9.8	2.4	100
3 <sup>rd</sup> response	10.5	10.5	5.3	63.3	2.6	2.6	5.2	100
Indo-Asian								
1 <sup>st</sup> response	78.1	6.3	0	12.5	0	3.1	0	100
2 <sup>nd</sup> response	18.8	12.5	3.1	59.4	3.1	3.1	0	100
3 <sup>rd</sup> response	6.5	29.0	3.2	54.8	6.5	0	0	100
Other								
1 <sup>st</sup> response	73.2	9.8	0	17.0	0	0	0	100
2 <sup>nd</sup> response	14.6	14.6	4.9	53.7	9.8	2.4	0	100
3 <sup>rd</sup> response	12.5	30.0	5.0	45.0	2.5	5.0	0	100

descriptions (i.e., physical abuse, neglect, inadequate supervision, emotional abuse, sexual abuse, parents' misbehaviour). Table 9 presents the frequency of responses provided to the three open-ended response questions. Participants were asked for three examples of abuse, so findings are presented under first response, second response and third response.

There were some responses provided that did not fit easily into Korbin's six categories. First, 21 people described locking a child in a room or closet as a form of abuse. Since this involves physical confinement, these responses were included in the physical abuse category. Second, 7 people described parental divorce or being raised by single parents as a form of abuse. These responses were not included in analyses. Three additional responses were not coded for inclusion in the maltreatment scales (e.g., "allowing a television in the home", "pop music"). ANOVA comparisons of the responses selected by the different ethnic groups indicated that in the first and second responses choices, the groups did not vary. For the third response chosen, there was a significant effect for ethnicity,  $F(4, 559) = 2.546, p < .05$ . Post hoc analysis revealed that the Southeast Asian group varied from the four other groups in their response choice.

## *2. Video vignette*

The responses to questions about the behaviour depicted in the physical abuse video vignette are presented in Table 10. Three questions assessing identification of abuse, intervention of authorities and typicality of the scenario are presented. Table 10 also presents ANOVAs considering the differences among the ethnic groups. Post hoc analyses (LSD) indicate that for identification of abuse, Chinese-descent participants were significantly less likely to identify abuse than all other groups except for the Southeast Asian-descent group. The Chinese-descent group also indicated that they were most likely to consider physical abuse a normal family interaction. Post hoc analysis showed that the Chinese group varied significantly from all other groups except



Table 10. Perceptions of physical abuse portrayed in the video vignette

Group	European	Chinese	Southeast Asian	Indo-Asian	Other	F
	n= 177	n=309	n=41	n=32	n=42	
Was this physical abuse?	2.4 (1.2)	2.8 (1.1)	2.7 (1.1)	2.4 (1.1)	2.2 (1.2)	5.42** <sup>1, 2, 3</sup>
If you saw this happen would you report it to the authorities?	3.6 (1.1)	3.7 (0.9)	3.8 (1.0)	3.5 (1.0)	3.7 (0.9)	0.99
[R] Was this interaction typical of most families?	3.0 (1.2)	3.3 (1.0)	2.8 (1.0)	2.8 (1.2)	3.1 (1.1)	3.62* <sup>1, 2, 4</sup>
Video composite score	2.99 (0.8)	3.26 (0.7)	3.08 (0.7)	2.88 (0.7)	3.00 (0.7)	5.18** <sup>1, 2, 3</sup>

1 = strongly agree, 5 = strongly disagree, items marked with [R] were reverse coded.

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Indo-Asian; <sup>3</sup> Chinese significantly different from Other; <sup>4</sup> Chinese significantly different from Southeast Asian.

the 'other' group on the item asking about the typicality of this event. On the overall measure, post hoc analysis indicated that the Chinese group was least likely to consider the behaviour abusive and this difference was significantly different from all the other groups except for the Southeast Asian group.

### *3. Parenting Strategies Checklist*

The average scores for acceptance of these types of physical discipline strategies are presented in Table 11 for the different age groups (i.e., Preschool, Middle Childhood and Early Adolescence). A composite score across the three age groups is also presented in Table 11. Scores for the individual items can be found in Appendix 4. ANOVAs are presented considering ethnic differences. For the Preschool and Middle Childhood items, only the Chinese-descent and the European-descent group varied significantly from each other. Chinese-descent participants endorsed significantly more physically abusive strategies. For the Early Adolescent items, the Chinese-descent reported higher endorsement of physical discipline than the European and 'other' group. On the composite scores only the difference between the Chinese-descent and the European-descent group varied significantly, again with the European-descent group reporting the lowest approval of physical discipline.

### *4. Perceptions of Punishment and Physical Abuse*

Another variable used to measure perceptions of physical abuse was the Perceptions of Punishment and Physical Abuse scale. The subscores for acceptance of physical discipline across the three age groups (i.e., Preschool, Middle Childhood and Early Adolescence) can be found in Table 12. A composite score is presented there as well. The scores for individual items can be found in Appendix 5. ANOVAs are presented considering ethnic differences. For the Middle

Table 11. Physical discipline strategies considered appropriate for separate age groups and the group as a whole (PSC)

Group	European n= 177	Chinese n=308	Southeast Asian n=40	Indo-Asian n=32	Other n=42	F
Preschool group (2-5 years old) 7 items	0.08 (0.2)	0.15 (0.2)	0.10 (0.2)	0.13 (0.2)	0.12 (0.1)	5.88** <sup>1</sup>
Middle Childhood group (6-10 years old) 8 items	0.07 (0.1)	0.16 (0.2)	0.10 (0.2)	0.15 (0.1)	0.12 (0.2)	6.35** <sup>1</sup>
Early Adolescent group (11-14 years old) 6 items	0.05 (0.1)	0.10 (0.2)	0.08 (0.2)	0.05 (0.1)	0.04 (0.1)	3.83* <sup>1,2</sup>
Average across 21 items	0.07 (0.1)	0.14 (0.2)	0.09 (0.1)	0.10 (0.1)	0.10 (0.1)	7.60** <sup>1</sup>

Average approval ratings for physical discipline items across the number of items specified and followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Other.

Table 12. Perceptions of punishment and physical abuse for separate age groups and the group as a whole (PPA)

Group	European	Chinese	Southeast Asian	Indo-Asian	Other	F
	n= 177	n=308	n=40	n=32	n=42	
Preschool group (2-5 years old) 11 items	1.22 (0.3)	1.28 (0.4)	1.27 (0.4)	1.17 (0.4)	1.33 (0.3)	1.76
Middle Childhood group (6-10 years old) 11 items	1.01 (0.3)	1.17 (0.4)	1.22 (0.4)	1.11 (0.4)	1.18 (0.3)	6.59*** <sup>1, 2, 3</sup>
Early Adolescent group (11-14 years old) 8 items	1.14 (0.4)	1.24 (0.3)	1.29 (0.4)	1.27 (0.5)	1.31 (0.4)	3.60* <sup>1, 2, 3</sup>
Average across 31 items	1.16 (0.3)	1.56 (0.3)	1.27 (0.3)	1.20 (0.3)	1.33 (0.3)	4.26** <sup>1, 2, 3</sup>

Average approval ratings for physical discipline across the number of items specified followed by the standard deviations.

\*  $p < .05$ , \*\*  $p < .002$ , \*\*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> European significantly different from Southeast Asian; <sup>3</sup> European significantly different from Other.

Childhood, Early Adolescence and composite scores, the European-descent group considered the significantly fewer physical discipline strategies to be appropriate than all other groups except for the Indo-Asian-descent group.

#### *5. Parent Discipline Attitudes Survey (PDAS)*

This scale splits its acceptance of physical discipline strategies into three groups similar to the experience of physical discipline subscales described above (i.e., uncommon, common, very common forms of physical discipline). The rates of endorsement of these disciplinary strategies are presented in Table 13 by ethnic group. Differences between these groups are considered with ANOVAs which are presented in Table 13. Post hoc analyses (LSD) indicated that for the appropriateness of uncommon abuse items only the European-descent group reported significantly lower acceptance than from the Chinese-descent group. For the acceptance of common discipline strategies, the Chinese-descent group reported endorsing significantly more types than the European and Indo-Asian groups.

### **2.4 Descriptive results for Experiment 2: Emotional abuse**

#### *A. Latent variable – Westernization*

Please see section 2.3 for a description of the measures included in this latent variable (i.e., Vancouver Index of Acculturation, Filial Piety, generation level).

#### *B. Latent variable – History of Emotional Abuse*

##### *1. Child Abuse and Trauma Scale*

The emotional abuse subscale of the Child Abuse and Trauma scale was considered to be one measure of history of emotional abuse. Means on this subscale presented by ethnic groups

Table 13. Approval of types of childhood discipline by ethnic group and as measured by the Parent Discipline Attitudes Survey

Group	European n= 173	Chinese n=305	Southeast Asian n=39	Indo-Asian n=29	Other n=40	<i>F</i>
Very common physical punishment 3 items	1.74 (1.9)	2.10 (2.3)	1.41 (1.7)	1.32 (1.7)	2.05 (2.4)	1.99
Common physical punishment 3 items	0.26 (0.7)	0.63 (1.1)	0.51 (0.9)	0.21 (0.7)	0.50 (1.1)	4.60** <sup>1,2</sup>
Uncommon physical punishment 10 items	0.06 (0.3)	0.46 (1.4)	0.31 (1.8)	0.21 (0.6)	0.14 (0.5)	3.57* <sup>1</sup>
Emotional punishment 3 items	0.34 (0.7)	0.97 (1.4)	0.54 (1.1)	0.24 (0.6)	0.58 (1.0)	9.77** <sup>1,2,3,4</sup>

\*Responses range from 0-never to 5-very often.

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Indo-Asian; <sup>3</sup> Chinese significantly different from Southeast Asian; <sup>4</sup> Chinese significantly different from Other.

can be seen in Table 6. An analysis of group differences revealed significant differences by ethnicity,  $F(4, 580) = 5.93, p < .001$ . Post hoc analysis indicated that the European-descent reported significantly less emotional abuse than the Chinese and the 'other' group.

### *2. Conflict Tactics Scale*

The psychological aggression subscale of the Parent-Child Conflict Tactics Scale was the second experience measure in Experiment 2. The cumulative scores across the 5 verbal aggression items are reported in Table 7. The ANOVA considering ethnic differences revealed that responses did not vary across the groups.

### *3. Parent Discipline Attitudes Survey*

The final measure of a history of emotional abuse is the emotional discipline subscale for the Parent Discipline Attitudes Survey. The scores on this subscale are presented in Table 8 and grouped by ethnicity. Post hoc analyses (LSD) indicated that for emotional abuse items, European-descent participants reported significantly lower rates than the Chinese and Southeast Asian-descent groups. The 'other' group reported significantly lower rates than the Chinese and Southeast Asian-descent groups as well.

## *C. Latent variable – Perception of Emotional Abuse*

### *1. Participant-defined Abuse*

Open-ended responses outlining examples of emotional abuse were coded in the same way as physical abuse responses as described in section 2.3. The percentage of respondents choosing emotional abuse items in their first, second and third responses are presented in Table 9. As discussed above, there were few ethnic differences in the answers generated by participants.

## *2. Video vignette*

The responses to questions about the behaviour depicted in the emotional abuse video vignette are presented in Table 14. Three questions assessing identification of abuse, intervention of authorities and typicality of the scenario are presented. Table 14 also presents ANOVAs considering the differences among the ethnic groups. Post hoc analyses (LSD) indicate that on the item asking about the typicality of this event, the Chinese group agreed at a significantly higher rate than all other groups except the 'other' group.

## *3. Parenting Strategies Checklist*

Frequencies of choosing emotionally abusive parenting strategies are presented in Table 15. The strategies were assessed for different age groups (i.e., Preschool, Middle Childhood, and Early Adolescence) and the subscores for these groups are presented along with a composite score. ANOVAs are presented but none of the ethnic groups differed significantly in their responses. The scores for individual items can be seen in Appendix 6.

## *4. Perceptions of Emotional Abuse (PMA)*

The acceptance of emotional discipline strategies as measured by the Perceptions of Emotional Abuse scale are presented in Table 16. Scores for different age groups (i.e., Preschool, Middle Childhood, and Early Adolescence) and a composite score are presented. Table 16 also presents ANOVA information. For questions about Preschool children, post hoc analysis (LSD) indicates that the Indo-Asian-descent group varied from the other four groups and the European-descent group varied from the Chinese-descent group. The Chinese-descent group varied from the European and 'other' group on the Middle Childhood questions. Across all 17 items, the Chinese-descent group varied from the European-descent and Indo-Asian-descent groups. The



Table 14. Perceptions of emotional abuse portrayed in the video vignette

Group	European n= 177	Chinese n=309	Southeast Asian n=41	Indo-Asian n=32	Other n=42	<i>F</i>
Was this emotional abuse?	1.8 (1.0)	1.9 (0.9)	1.5 (0.7)	1.7 (0.9)	1.8 (1.1)	1.69
If you saw this happen would you report it to the authorities?	4.1 (0.9)	4.0 (0.9)	4.0 (0.9)	4.0 (1.1)	3.7 (1.2)	1.90
[R] Was this interaction typical of most families?	2.7 (1.2)	3.0 (1.1)	2.6 (1.0)	2.5 (1.2)	2.9 (1.3)	3.89** <sup>1, 2, 3</sup>
Video composite score	2.88 (0.7)	2.95 (0.7)	2.67 (0.7)	2.71 (0.8)	2.79 (0.9)	2.12

1 = strongly agree, 5 = strongly disagree.

Items marked with [R] were reverse coded.

Mean scores are followed by standard deviations in parentheses.

\*  $p < .05$ , \*\*  $p < .004$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Indo-Asian; <sup>3</sup> Chinese significantly different from Southeast Asian.

Table 15. Non-physical discipline strategies considered appropriate for separate age groups and the group as a whole (PSC)

Group	European n= 177	Chinese n=308	Southeast Asian n=40	Indo-Asian n=32	Other n=42	<i>F</i>
Preschool group (2-5 years old) 5 items	0.31 (0.2)	0.33 (0.2)	0.26 (0.2)	0.32 (0.2)	0.30 (0.3)	1.10
Middle Childhood group (6-10 years old) 7 items	0.27 (0.2)	0.33 (0.3)	0.23 (0.2)	0.32 (0.2)	0.28 (0.3)	2.00
Early Adolescent group (11-14 years old) 5 items	0.20 (0.3)	0.24 (0.2)	0.18 (0.2)	0.24 (0.3)	0.21 (0.3)	1.32
Average across 17 items	0.26 (0.2)	0.30 (0.2)	0.22 (0.2)	0.29 (0.2)	0.27 (0.2)	2.00

Average approval ratings for non-physical discipline across the number of items specified followed by the standard deviations.

Note: None of the *F*-values were significant.

Table 16. Perceptions of emotional abuse for separate age groups and the group as a whole (PMA)

Group	European n= 173	Chinese n=304	Southeast Asian n=40	Indo-Asian n=32	Other n=42	F
Preschool group (2-5 years old) 7 items	2.22 (0.5)	2.40 (0.5)	2.29 (0.5)	2.01 (0.5)	2.28 (0.4)	6.97*** <sup>1, 2, 3, 4</sup>
Middle Childhood group (6-10 years old) 7 items	2.30 (0.5)	2.46 (0.5)	2.30 (0.5)	2.19 (0.5)	2.42 (0.5)	4.70** <sup>1, 5</sup>
Early Adolescent group (11-14 years old) 7 items	2.77 (0.5)	2.84 (0.5)	2.71 (0.5)	2.76 (0.6)	2.88 (0.5)	1.12
Average across 21 items	2.44 (0.5)	2.57 (0.4)	2.44 (0.5)	2.31 (0.4)	2.54 (0.4)	4.72** <sup>1, 2, 4</sup>

Average approval ratings for physical discipline across the number of items specified followed by the standard deviations.

\*  $p < .05$ , \*\*  $p < .001$ , \*\*\*  $p < .001$ .

<sup>1</sup> European significantly different from Chinese; <sup>2</sup> Chinese significantly different from Indo-Asian; <sup>3</sup> Southeast Asian significantly different from Indo-Asian. <sup>4</sup> Indo-Asian significantly different from Other; <sup>5</sup> Chinese significantly different from Other.

Indo-Asian-descent group also varied from the 'other' group. Scores for individual items used in the PMA scale can be found in Appendix 7.

#### *5. Parent Discipline Attitudes Survey (PDAS)*

The final measure for acceptance of emotional abuse is the emotional abuse scale of the Parent Discipline Attitudes Survey. The average approval ratings across three items are presented in Table 13 by ethnic group. Post hoc analysis (LSD) revealed that the Chinese-descent group reported significantly higher rates of approval than the other groups.

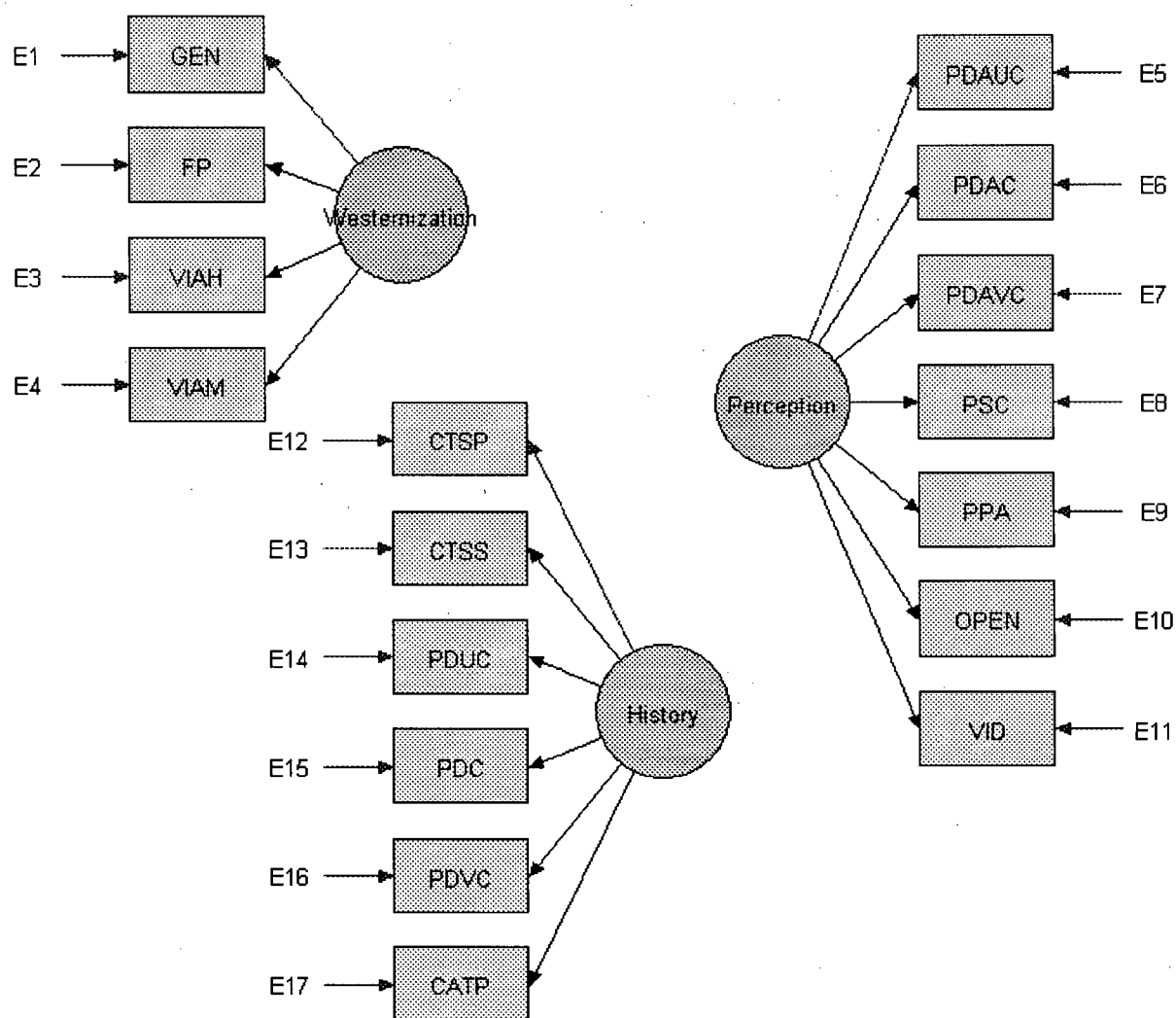
### Chapter III – Results of statistical analyses

As suggested by the description of the latent measures in Chapter II, the data were analyzed using structural equation modeling. Each construct ('Perceptions of Abuse', 'Westernization' and 'History of Abuse') incorporated a factor analysis of the indicators' relationships to their underlying latent factor. These constructs, in turn, were related through a multiple regression akin to path analysis. Based on *a priori* theories, a full latent structural variable model was considered for fit and then compared in multiple-group analyses. The model was analyzed twice with a random sampling of 200 Chinese-descent participants and 177 European-descent participants. The confirmatory factor analysis preceding the structural equation modeling was conducted with a separate sample of 225 participants. It is quite common to conduct the confirmatory factor analysis with the same group used for structural equation modeling. This practice maximizes capitalization on chance, but by taking the more conservative approach of developing factors with an independent sample, this model was less susceptible to being data driven rather than theory driven.

#### 3.1 Experiment 1 – Measurement model

Illustrations of the initially proposed measurement models are presented in Figure 1. Measurement models are conducted to test the validity of the assumption that one underlying factor is being measured by multiple observable indicators. Latent variables are not observable; their measurements are obtained indirectly through manifest variables or indicators. Factor analysis is used to verify that the multiple indicators included are indeed measuring the same underlying latent factor. The factor analysis was conducted in SPSS. The validity assessment of the latent variables' constructs progressed in stages.

Figure 1. Proposed Measurement Models – Experiment 1 – Physical Abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDAUC = PDAS acceptance of uncommon types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, PPA = Perceptions of Physical Abuse, OPEN = open ended questions, VID = Video vignettes, CTSP = Conflict Tactics Scale physical aggression score, CTSS = Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDVC = PDAS experience of very common types of discipline, CATP = Child Abuse and Trauma Punishment score

### *Westernization*

As can be seen in Table 17, in the initial confirmatory factor analysis for the first latent variable, Westernization, all four indicators were found to load on one factor (as judged by eigenvalues above 1 and examination of the scree plot). This factor accounted for 47.3% of the variance. The first two indicators were from the Vancouver Index of Acculturation: a Heritage score and a Mainstream score. The generation level of participants provided the third indicator. Generation levels included: one or both parents born in Canada; participants born in Canada; and, participants not born in Canada. Finally, a Filial Piety score loaded on the same factor. Table 17 presents the loadings in a one-factor model. The consistency of these four indicators carried through the two-factor and three-factor analyses, which are described below (see Tables 18 and 19).

### *Perceptions of physical abuse*

Multiple indicators were used to measure perceptions of what constitutes the physical abuse of children in Experiment 1. This was done for two reasons. The first was that the use of a video vignette was an original approach to measuring perceptions of physical abuse and might benefit from evidence of being correlated with established measures. Conducting data analyses on a latent variable allowed the combination of multiple measurement techniques and procedures in the observed manifest variables or indicators. The second important reason for using latent variables in analyses was that by using multiple types of measures, the problem of response bias was addressed. It is often a pitfall in cross-cultural research using Likert-style response metrics. Accordingly, alternatives to Likert-style attitude surveys (e.g., check lists, open-ended questions) were also included. For the latent variable Perception of Physical Abuse, the one-factor analysis is also presented in Table 17. Seven indicators were initially considered,

Table 17

## One-factor analysis of the Westernization latent variable

Factor	1
Generation	.72
Filial Piety	-.77
VIA Heritage	-.58
VIA Mainstream	.66

## One-factor analysis of the Perception of physical abuse latent variable

Factor	1
PDAS acceptance of common discipline	.59
PDAS acceptance of very common discipline	.79
Parenting Strategies Checklist	.75
Perceptions of Physical Abuse	.45
Video	.58

## One-factor analysis of the History of child abuse latent variable

Factor	1
PDAS experience of uncommon discipline	.68
PDAS experience of common discipline	.74
PDAS experience of very common discipline	.64
Conflict Tactics Scale physical aggression	.93
Conflict Tactics Scale severe assault	.90
Child Abuse and Trauma punishment	.49



including: Parent Discipline Attitudes Survey's acceptance of uncommon physical discipline subscale (PDAUC); Parent Discipline Attitudes Survey's acceptance of common physical discipline subscale (PDAC); Parent Discipline Attitudes Survey's acceptance of very common physical discipline subscale (PDAVC); acceptance of physical discipline in the Parenting Strategies checklist (PSC); the Perceptions of Physical Abuse scale (PPA); the video vignette questions asking whether participants concluded that the hit with the broomstick was abusive (VID); and, the open-ended participant-generated examples of physical abuse (OPEN).

The goal of confirmatory factor analysis is to determine whether all indicators are representing the same underlying factor, therefore only one factor should be present in the data reduction process. Accordingly, two indicators were dropped after the initial one-factor confirmatory factor analysis. The first, the indicator participant-generated examples of physical abuse, was the only item to load on a second factor. This indicator was thus dropped from further analyses. Another indicator - Parent Discipline Attitudes Survey's acceptance of uncommon physical discipline subscale - was also dropped, since it did not load on any factors. As can be seen in Table 17, five indicators loaded on a one-factor analysis: PDAS acceptance of common physical discipline (PDAC); PDAS acceptance of very common physical discipline (PDAVC); acceptance of physical discipline in the Parenting Strategies checklist (PSC); the Perceptions of physical abuse scale (PPA); and the video vignette questions (VID). All five indicators loaded on a single factor which accounted for 41.5% of the variance. These five indicators also loaded strongly and exclusively on their factor in the two-factor analysis with the Westernization indicators. The loadings for the rotated component matrix for Perception and Westernization are presented in Table 18. This two-factor solution was confirmed by looking for eigenvalues greater than 1.00 and an examination of the scree plot. Two rotation methods were used: Oblimin with Kaiser normalization and Varimax with Kaiser normalization. The results were similar and the Oblimin rotation is presented in the following tables.

Table 18

Rotated component matrix for Westernization and Perception

Factor	1	2
Generation	.75	
Filial Piety	-.76	
VIA Heritage	-.61	
VIA Mainstream	.66	
PDAS acceptance of common discipline		.62
PDAS acceptance of very common discipline		.78
Parenting Strategies Checklist		.71
Perceptions of Physical Abuse		.49
Video		.64

When a three-factor analysis was conducted, one change appeared. The indicator Perceptions of Physical Abuse failed to load on any factors and accordingly was not included in the final analysis. The Oblimin rotation for the three-factor solution can be seen in Table 19. Using a three-factor analysis to include only exclusively loading indicators was a very conservative approach to model development because it is reasonable to expect some correlation between the indicators when they are predicted to interact. Model development always involves concessions between presenting simple, clean models versus more complicated models that more closely reflect the intricate nature of observed variables. Conservative measurement model development may reduce the strength of paths seen in the full structural model because more complicated models that allow more indicators to co-vary will generally better fit the data.

#### *History of physical abuse*

Multiple indicators were included to assess a history of physical child abuse. The following variables were entered in SPSS for principle components analysis: Conflict Tactics Scale (CTS) experience of physical assault subscale (CTSP); CTS experience of severe physical assault subscale (CTSS); Parent Discipline Attitudes Survey (PDAS) experience of uncommon physical discipline subscale (PDUC); PDAS experience of common physical discipline subscale (PDC); PDAS experience of very common physical discipline subscale (PDVC); and the punishment subscale of the Child Abuse and Trauma scale (CATP). All six indicators loaded on a single factor which accounted for 55.6% of the variance. The one-factor analysis can be seen in Table 17. These indicators were also included in a three-factor analysis and it was found that four of the indicators loaded strongly and exclusively on their factor. Two indicators, PDVC and CATP, loaded on two factors and not particularly strongly on either factor, so they were not included in the final analysis.

Table 19

Rotated component matrix for Westernization, Perception and History

Factor	1	2	3
Generation	.71		
Filial Piety	-.74		
VIA Heritage	-.56		
VIA Mainstream	.73		
PDAS acceptance of common discipline		.58	
PDAS acceptance of very common discipline		.83	
Parenting Strategies Checklist		.69	
Video		.65	
Conflict Tactics Scale physical aggression			.86
Conflict Tactics Scale severe assault			.88
PDAS experience of uncommon discipline			.72
PDAS experience of common discipline			.74
PDAS experience of very common discipline	.54		.49
Child Abuse and Trauma punishment		.41	.43

The simplified measurement model for Experiment 1 is presented in Figure 2. Twelve indicators load exclusively on three latent variables. The final 12 indicators account for 57.4% of the variance in the three-factor measurement model.

### *3.2 Experiment 2 – Measurement model*

Illustrations of the initially proposed measurement models for Experiment 2 are presented in Figure 3.

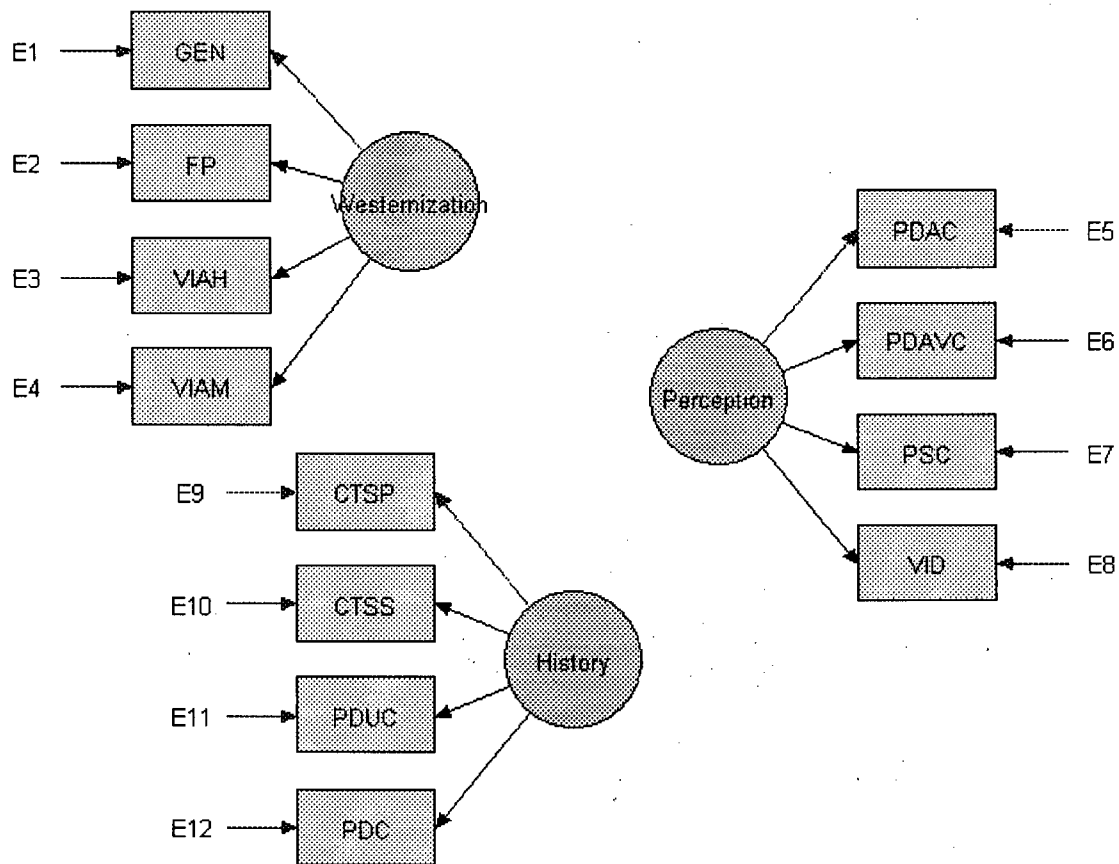
#### *Westernization*

The first latent variable in this experiment, Westernization, is identical to the Westernization variable described in Experiment 1. The loadings of the four indicators (generation level, Filial Piety score, Vancouver Index of Acculturation Heritage score and Vancouver Index of Acculturation Mainstream score) can be seen in Table 17. As with the confirmatory factory analyses in Experiment 1, the four indicators loaded strongly and uniquely on a single factor in the two-factor and three-factor analyses, as can be seen in Tables 21 and 22.

#### *History of emotional abuse*

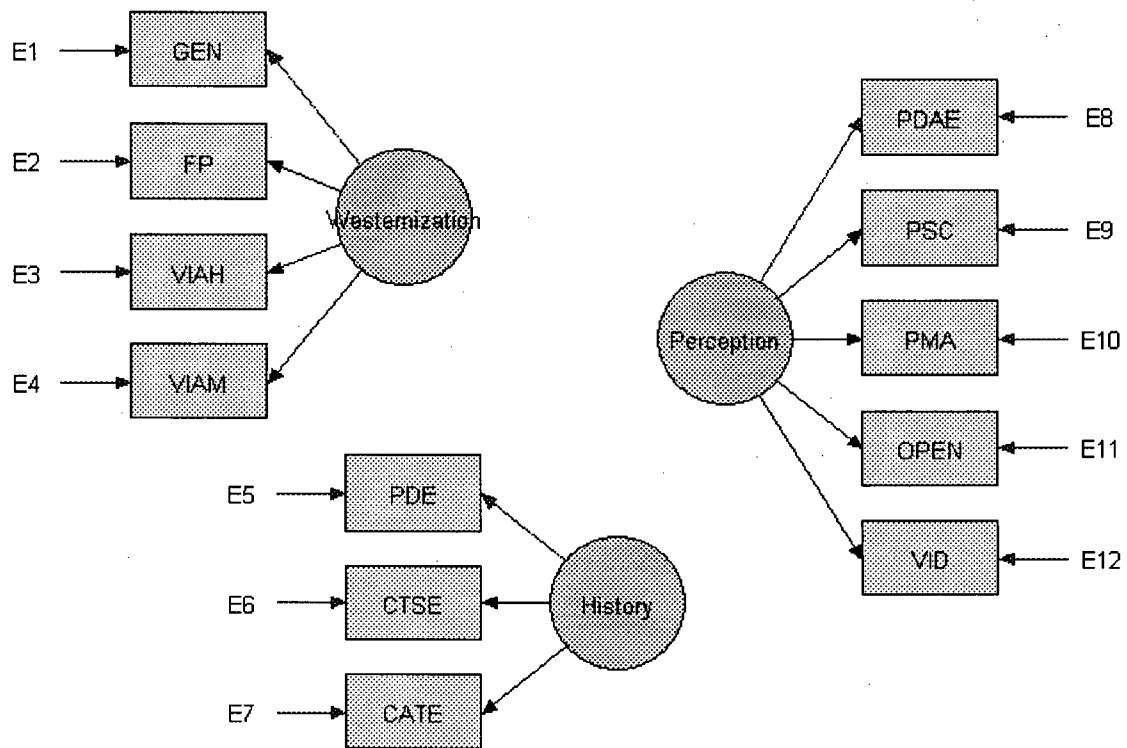
The History of Emotional Abuse latent variable was measured by three different scales. The measures included: the Parent Discipline Attitudes Survey emotional abuse subscale (PDE); the Conflict Tactics Scale subscale for emotional, verbal or psychological aggression (CTSE); and the emotional abuse subscale for the Child Abuse and Trauma scale (CATE). All three indicators loaded strongly on a single factor in the one-factor analysis (see Table 20), two-factor analysis with Westernization (see Table 21) and the three-factor analysis with Westernization and Perception (see Table 22). The two-factor and three-factor analyses used Oblimin rotations with Kaiser normalization, and these results were very similar to the Varimax rotations.

Figure 2. Final Measurement Model– Experiment 1 – Physical Abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, CTSP = Conflict Tactics Scale physical aggression score, CTSS = Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline

Figure 3. Proposed Measurement Model– Experiment 2 – Emotional Abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE – Child Abuse and Trauma Scale emotional abuse score, PDAE = PDAS acceptance of emotional discipline, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, OPEN = open-ended questions, VID = Video vignettes, D3 – Disturbance in the exogenous variable

Table 20

One-factor analysis of the History of emotional abuse latent variable

Factor	1
PDAS experience of emotional discipline	.85
Conflict Tactics Scale verbal aggression	.83
Child Abuse and Trauma Scale emotional abuse	.81

One-factor analysis of the Perception of emotional abuse latent variable

Factor	1
Parenting Strategies Checklist	.76
Perceptions of Emotional Abuse	.66
Video	.67



Table 21

Rotated component matrix for History and Westernization

Factor	1	2
Generation	.72	
Filial Piety	-.76	
VIA Heritage	-.59	
VIA Mainstream	.66	
PDAS experience of emotional discipline		.84
Conflict Tactics Scale verbal aggression		.83
Child Abuse and Trauma Scale emotional abuse		.82

Table 22

Rotated component matrix for Westernization, History and Perception

Factor	1	2	3
Generation	.72		
Filial Piety	-.76		
VIA Heritage	-.59		
VIA Mainstream	.66		
PDAS experience of emotional discipline		.84	
Conflict Tactics Scale verbal aggression		.83	
Child Abuse and Trauma Scale emotional abuse		.82	
PDAS acceptance of emotional discipline		.48	.40
Parenting Strategies Checklist			.69
Perceptions of Emotional Abuse			.76
Video			.65

### *Perceptions of emotional abuse*

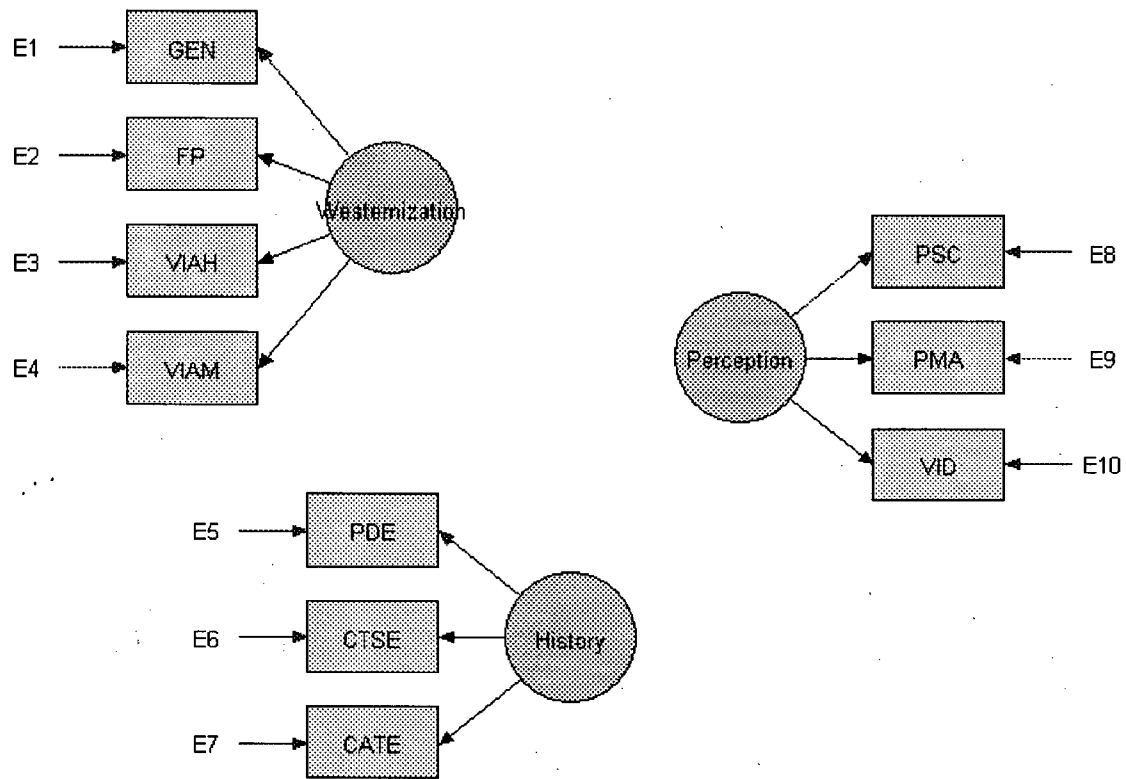
Five indicators were considered for the Perceptions of Emotional Abuse latent construct. These indicators were: Parent Discipline Attitudes Survey acceptance of emotional abuse subscale (PDAE); Parenting Strategies Checklist emotional abuse score across 17 items (PSC); Perceptions of Emotional Abuse scale (PMA); the responses to whether the video vignette depicted emotional abuse (VID); and, open-ended participant-generated examples of emotional abuse. The final indicator, open-ended examples, loaded on a second factor apart from the other indicators so it was dropped from further analysis. The three-factor analysis showed that another indicator, the PDAE, was not loading exclusively on one factor so it was also dropped from the final analysis. The final one-factor analysis can be found in Table 20. The three-factor analysis with an Oblimin rotation that suggested the PDAE was not loading exclusively can be found in Table 22.

The simplified measurement model for Experiment 2 is presented in Figure 4. Ten indicators were used that loaded exclusively on three latent variables. The final 10 indicators accounted for 56.4% of the variance in the three-factor measurement model.

### *3.3 Experiment 1 – Full structural equation model*

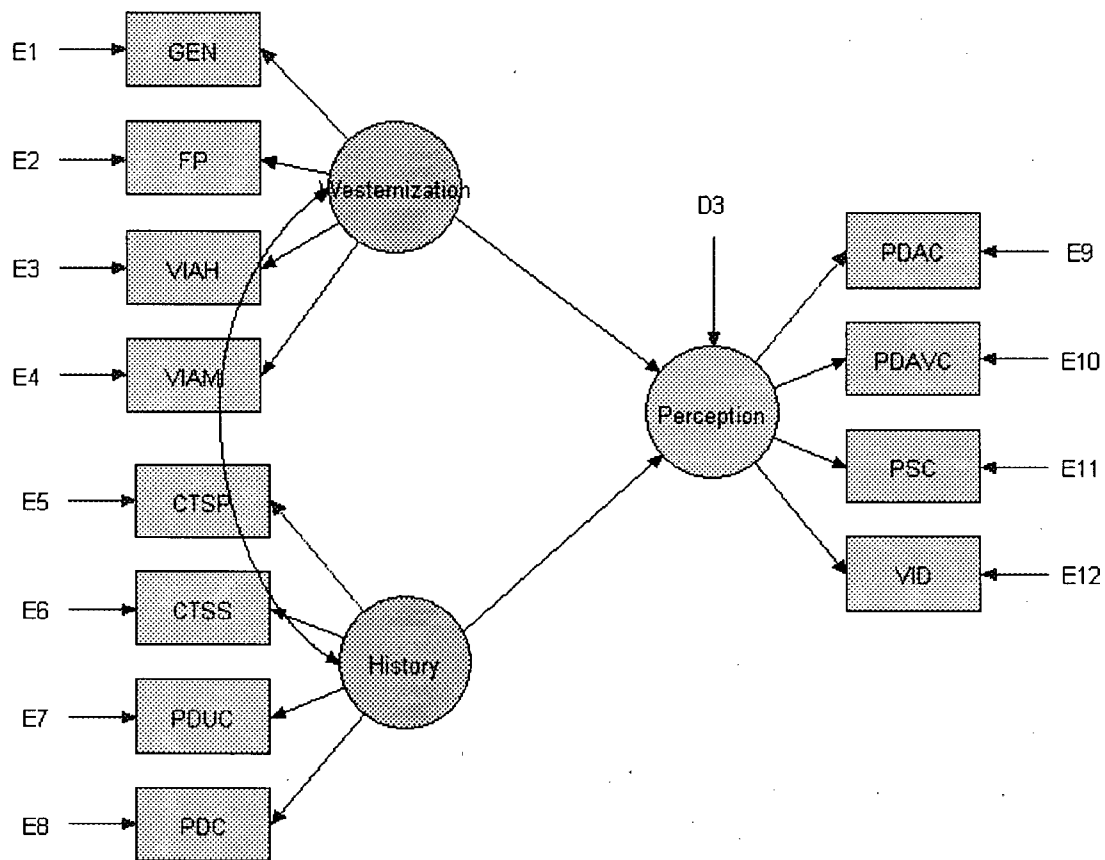
The full structural equation model for Experiment 1, with the measurement models incorporated, can be found in Figure 5. A full latent variable model consists of both the measurement model, representing the association among the latent variables and their indicators, and a structural model that depicts the relationships between the latent variables. Structural equation modeling was done with the EQS program developed by Peter M. Bentler. The underlying latent variables specified on the independent sample were hypothesized to work equally well with two new groups, a European-descent and a Chinese-descent sample. In

Figure 4. Final Measurement Model– Experiment 2 – Emotional Abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE – Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 – Disturbance in the exogenous variable

Figure 5. Full structural equation model 1 – Physical abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS – Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

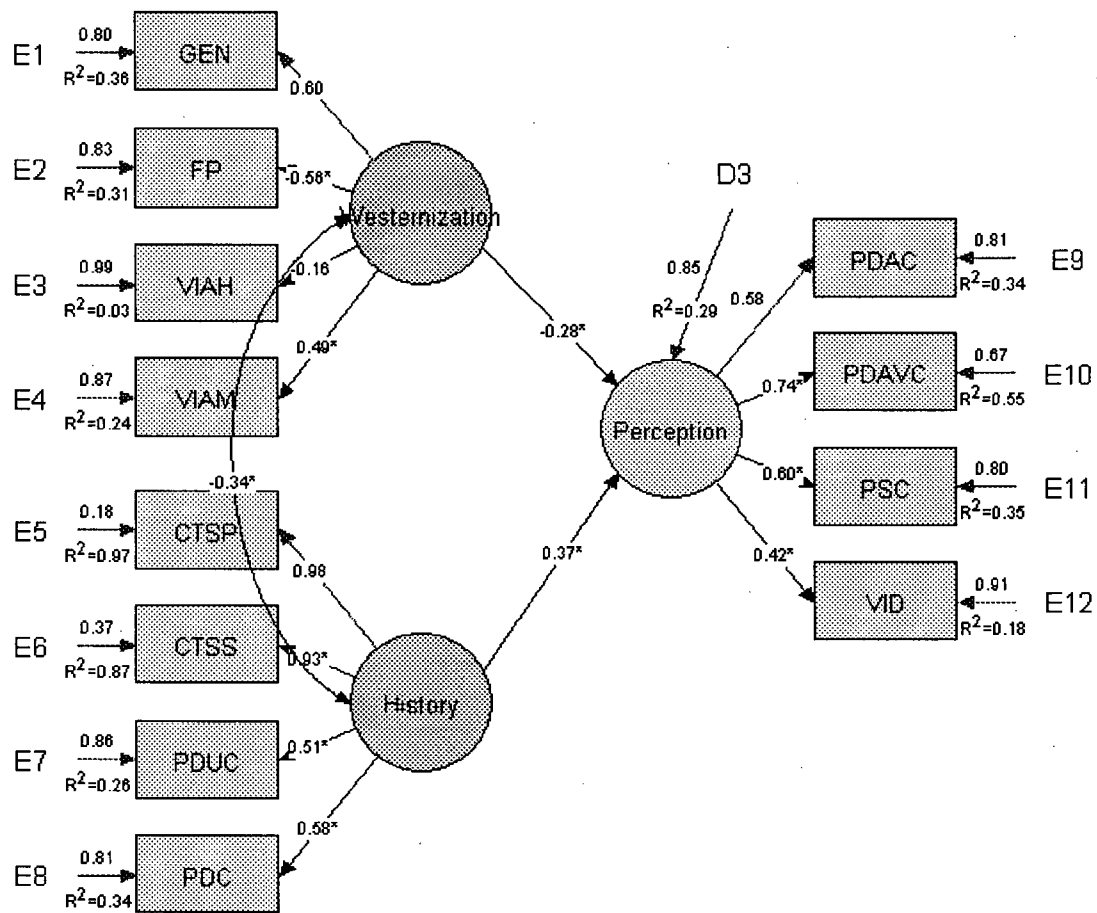
addition, it was hypothesized that two of the factors, Westernization and History of Physical Abuse (History), directly influence the third factor, Perceptions of Physical Abuse (Perception). Model 1 proposed that Westernization and History were both exogenous variables jointly acting on the endogenous variable, Perception. While the exogenous variables may be correlated there is no *a priori* reason to believe that they would act upon each other. This model included 27 free parameter estimates and 16 fixed parameter estimates. This model was overidentified in that the number of parameters to be estimated was less than the number of data points (e.g., variances, covariances of the observed variables) so it had sufficient degrees of freedom to analyze the fit of the model (Byrne, 1994; Klein, 1998).

A strong way to demonstrate cross-cultural differences is to reveal a phenomenon that occurs within one group and then to reproduce the same findings within a different group. To accomplish this goal, the model depicted in Figure 5 was run twice, once with a Chinese-descent sample (n=200) and once with a European-descent sample (n=176).

In addition to the SEM analysis of the models outlined, an extension of SEM - multiple-group analysis - was conducted to test the cross-group equivalence of the reliable measurement parameters, as suggested for cross-cultural research (Cheung & Rensvold, 2000; Little, 2000). This also allowed for simultaneous factor analysis within the specified cultural groups on the measurements being considered.

The first analysis of Model 1 was run for European-descent participants and the standardized paths are presented in Figure 6. To allow for the inclusion of all 176 participants in the analysis, any missing data points were replaced with the series mean. Missing data for either sample (Chinese-descent or European-descent) for any one measure was minor (less than 5%) and the same procedure was followed for the Chinese-descent participants' data. The fit of this model was very close to significance with a Comparative Fit Index (CFI) of 0.892 (a goal fit

Figure 6. Model 1 – European-descent participants – Physical abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS – Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

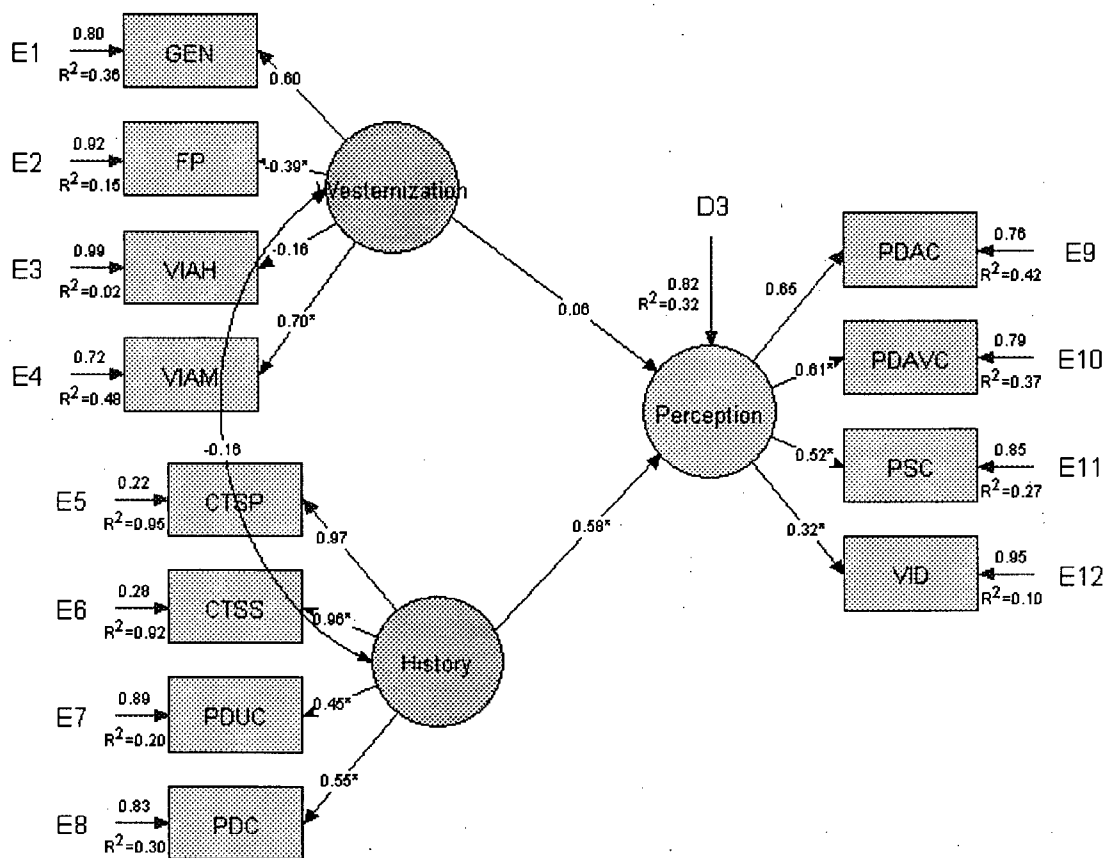
is 0.9 or above) but appeared to be hampered by one factor, the Vancouver Index of Acculturation Heritage score, not loading well on the Westernization factor. There were a number of signs in the EQS output that flagged the exclusion of this indicator. First, the residual between VIAM and VIAH was above 0.2 which could explain why the Average Absolute Standardized Residual (AASR) was slightly higher than the desired 0.05 at 0.052. Any residuals above 0.2 are a concern because they mean that a relationship has not been adequately addressed in the model (i.e.,  $S - \Sigma$ ). Second, the VIAH was not loading significantly on the Westernization factor (-0.159 on F1). Third, the Wald test for dropping parameters suggested that dropping this parameter would significantly improve the chi-square. Dropping an indicator based on data from one sample should not be done lightly. However, the same warning signs appeared in this model with the Chinese-descent sample (see Figure 7), as is discussed below.

Dropping an indicator to improve fit should only be done with *a priori* support. The authors of the Vancouver Index of Acculturation argued that their two scores (Heritage and Mainstream) are indeed orthogonal, and acculturation to North American society does not necessitate the rejection of heritage ideals (Ryder et al., 2000). With that argument in mind, the indicator VIAH was dropped from further analysis and the revised structural equation Model 2 can be seen in Figure 8 following the discussion of the Chinese-descent sample's results for Model 1.

The fit of Model 1 for the Chinese-descent sample was slightly stronger than with the European-descent group. Figure 7 presents the standardized pathways for this sample. For standardized solutions in EQS, variables are transformed in order that their unit variances provide a Wright-like path analysis solution for ease of interpretation (Bentler, 1995). The problems with the VIAH indicator appeared in this model as well, with it failing to load significantly on the Westernization factor. The Wald test for this model also suggested



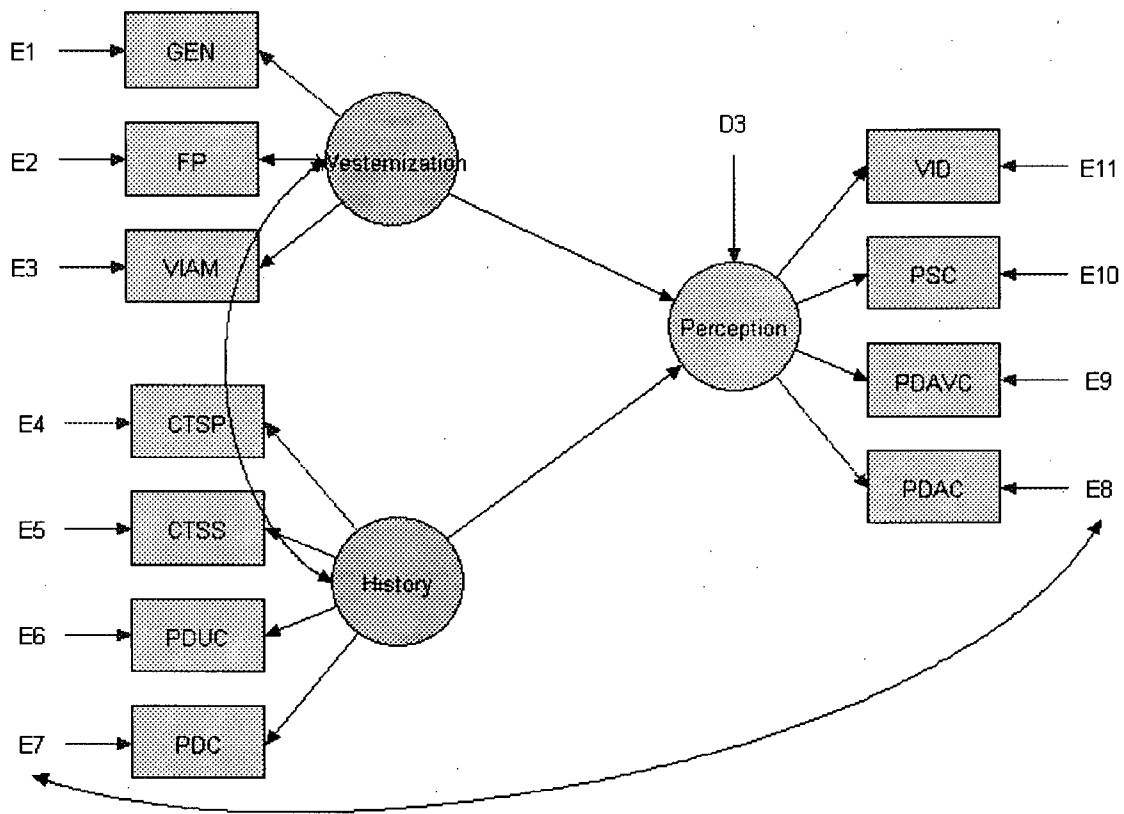
Figure 7. Model 1 – Chinese-descent participants – Physical abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS – Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

Figure 8. Model 2 – Physical Abuse

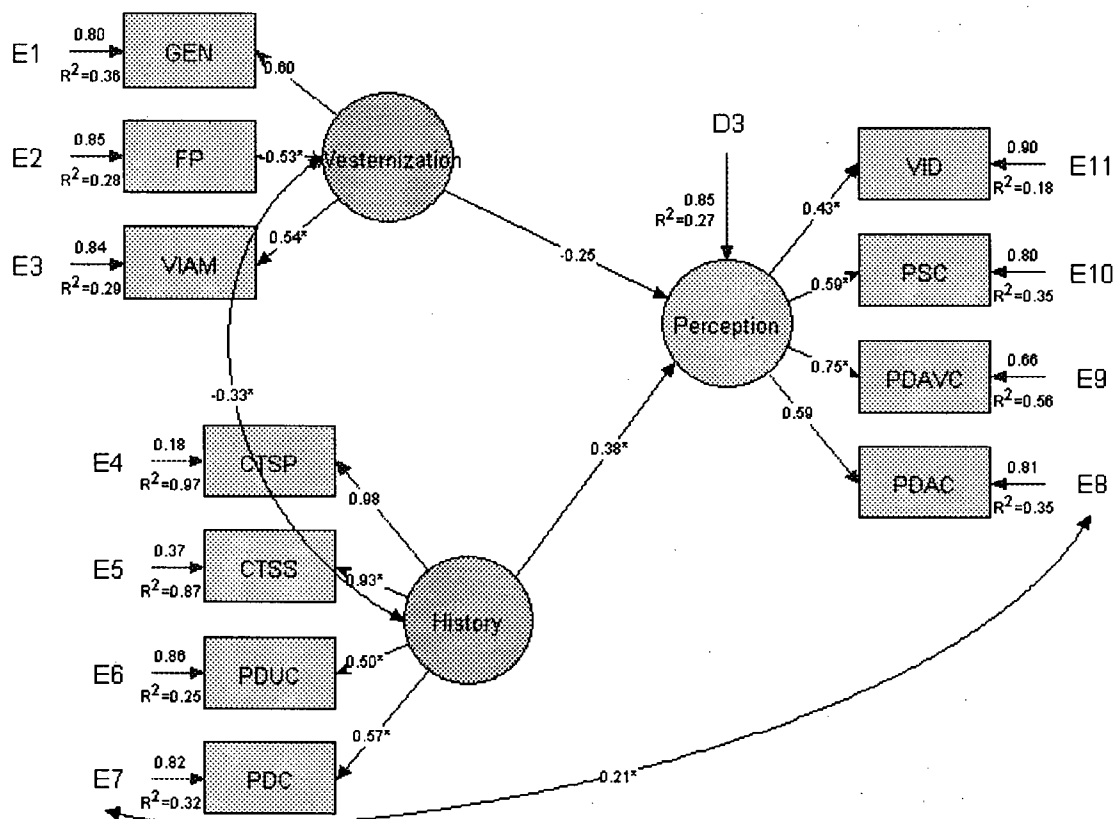


Note: GEN = Generation level, FP = Filial Piety, VIAM = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS – Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

dropping this indicator and an additional problem appeared as there was a kurtosis problem for the VIAH variable within this sample. This analysis also supported the dropping of the VIAH from Model 2. One additional change made to Model 2 was to allow an extra covariance between the errors of PDC and PDAC. These two measures, while loading on different factors, use nearly identical questions to measure the experience of and approval of common physical discipline tactics, such as biting and pinching a child. It is logical that there would be some correlation between the variances of the PDC and PDAC, since they are assessed through a two-part question measure, so a free parameter estimate was added which is indicated by the two-headed curved arrow running between PDC and PDAC on Figure 8. This parameter addition was supported both by the Lagrange Multiplier test in the EQS program and by the residual test which indicated that this residual was varying above the desired 0.2 level, damaging the symmetry of the distribution of the standardized residuals. Large standardized residuals imply model misspecification and are a warning sign that data are not being represented well by the model. This was the only problematic residual in Model 1, other than the VIAH residual co-varying with the VIAM, as mentioned above.

Model 2 was indeed significant for the European-descent participants and can be seen in Figure 9. The CFI was 0.96 so the two changes to the model did improve the fit for this sample and this model now explained 96% of the covariation in the data. The AARP was 0.048 which was below 0.05 as desired. The chi-square was acceptable at 97.10 with 40 degrees of freedom. The chi-square index, while ideally non-significant, was not the primary consideration for rejection of a model in this research. It has been shown in the past few years that chi-square statistics tend to be overly sensitive with large sample sizes, and the rejection of models based on this statistic is overly cautious (Byrne, 1994; Harlowe, 2002). To warrant further investigation of other fit indices, a chi-square result divided by its degrees of freedom should be less than 4 and, ideally, less than 2 (Harlowe, 2002).

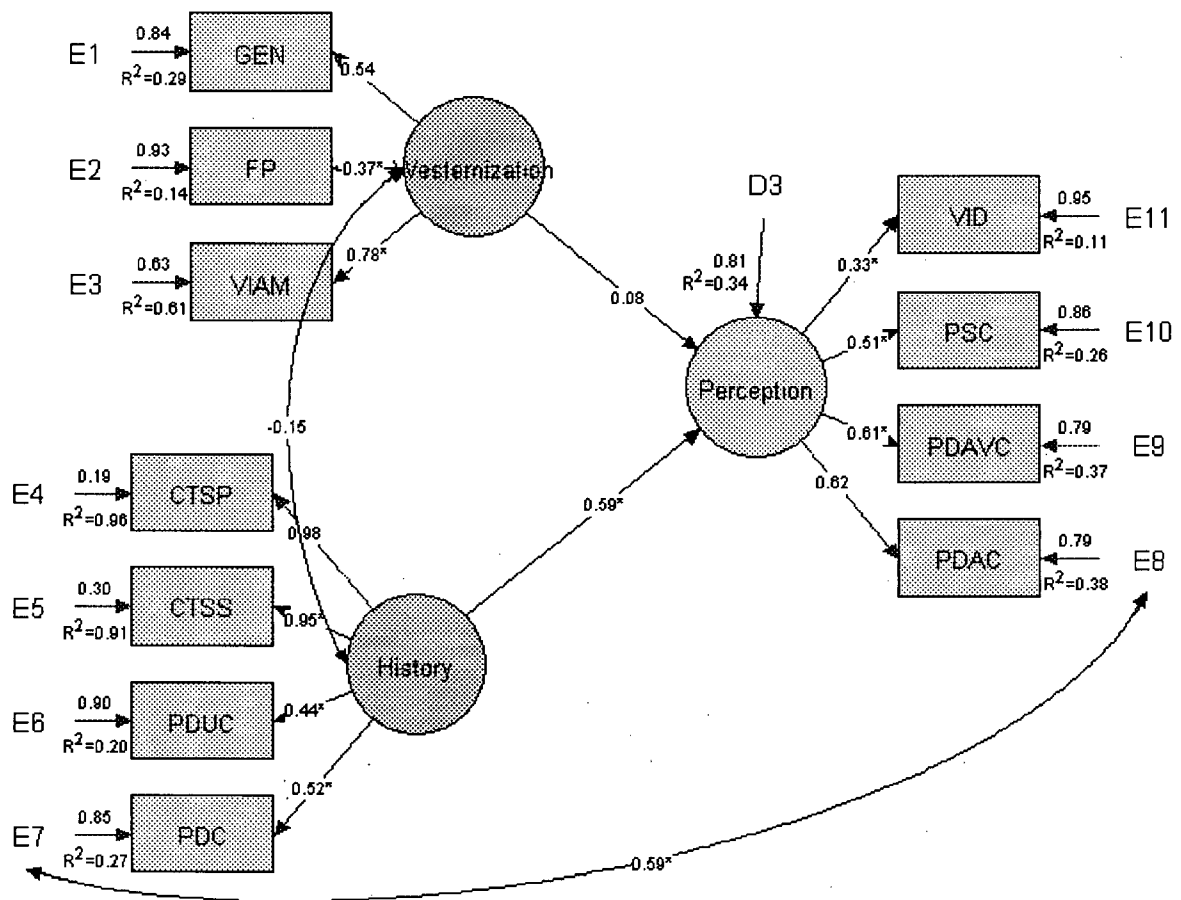
Figure 9. Model 2 – European-descent participants – Physical abuse



Note: GEN = Generation level, FP = Filial Piety, VIAM = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS – Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

Figure 10. Model 2 – Chinese-descent participants – Physical abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAH = Vancouver Index of Acculturation Mainstream score, CTSP = Conflict Tactics Scale physical aggression score, CTSS = Conflict Tactics Scale severe physical assault score, PDUC = PDAS experience of uncommon types of discipline, PDC = PDAS experience of common types of discipline, PDAC = PDAS acceptance of common types of discipline, PDAVC = PDAS acceptance of very common types of discipline, PSC = Parenting Strategies Checklist, VID = Video vignettes, D3 – Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

The revised model was also significant for the Chinese-descent participants and can be seen in Figure 10. The CFI for this model was strong at 0.968 with no residual concerns and an AASR of 0.044. The chi-square statistic was better for this model, at 65.27 with 40 degrees of freedom.

The final test for this model was to run it in a multiple-group structure. A multiple-group structure analyzes data from more than one sample simultaneously. The first step was to constrain the factor regression coefficients between the two groups (e.g., F3, F1 in the European-descent groups is equal to F3, F1 in the Chinese-descent group). Constraining both factor paths produced a significant model (CFI=0.934) with a very strong residual statistic (RMSEA=0.054). The chi-square test was still high ( $\chi^2 = 171.76$  with 82 degrees of freedom) but this test was still susceptible to the large sample size sensitivity mentioned previously, particularly since the sample size is greater than 375. The next step was to increase the constraints between the two models by testing the equality of the factor loadings. All factors that were not set to one in the measurement models were constrained between the two models. This multiple-group structure proved to produce a good model with a CFI of 0.934 and a residual error (RMSEA) of 0.054. The chi-square continued to be high (185.94, 89 degrees of freedom) but still within the SEM rule of thumb that  $\chi^2/df$  should be around 2 and less than 4 to consider the other fit indices.

The similarity in the two models could mean one of two things. Either it indicates that these two samples came from the same underlying population or that the same phenomenon was acting the same way in two different groups. One cannot determine from the statistics which of these conclusions was true. What can be confirmed is that there was no interaction between sample membership and the structural model.

### 3.4 Experiment 2 – Full structural equation model

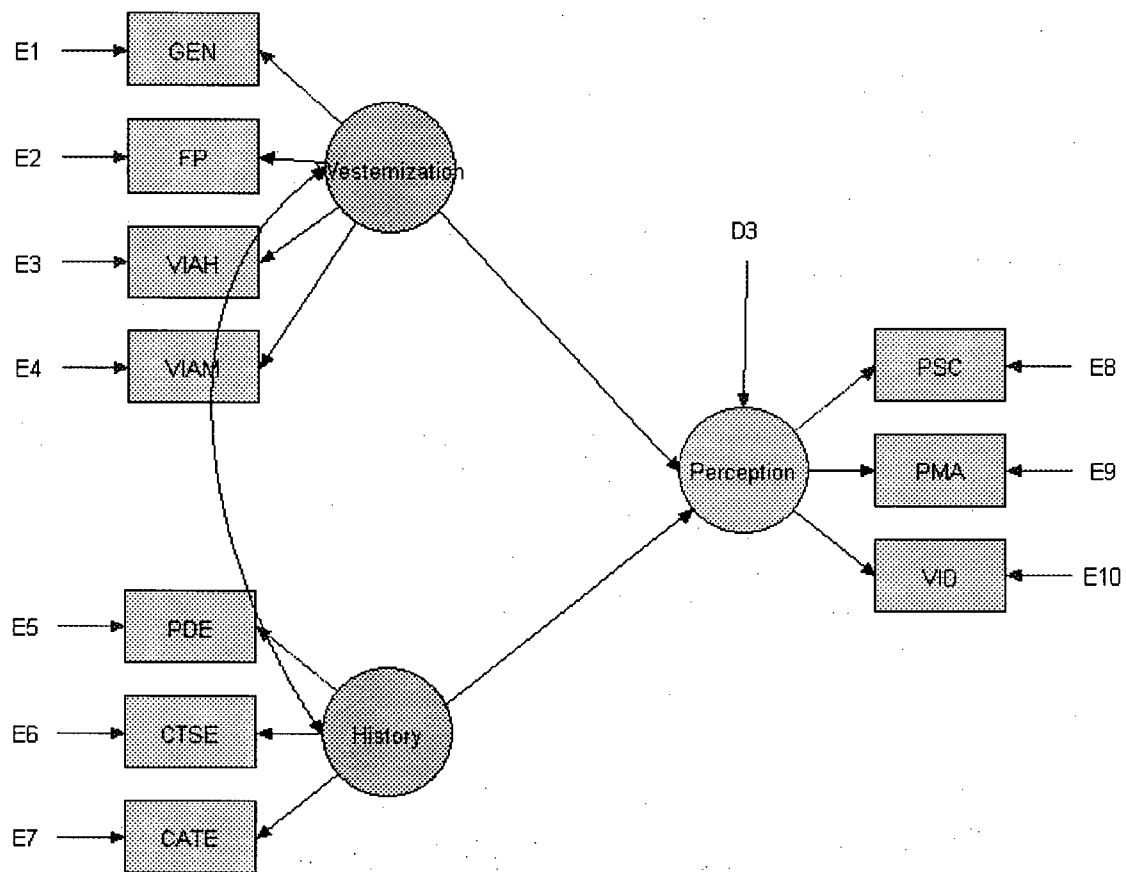
The proposed full structural equation model for the emotional abuse experiment can be seen in Figure 11. This model considered the 10 variables confirmed by the measurement model in section 3.2. As in the previous experiment, the measurement model which was specified on an independent sample was analyzed with two separate samples (European-descent and Chinese-descent) in a full structural model with path regressions. The latent exogenous variables Westernization and History of Emotional Abuse (History) were predicted to have a direct influence on the endogenous latent variable of Perception of Emotional Abuse (Perception). This model included 23 free parameter estimates and 14 fixed estimates, so was overidentified and analyzable.

Figure 12 presents the results for this model when run on European-descent participants. There were no residual issues and an AASR of 0.0475. The chi-square was acceptable at 74.12 with 32 degrees of freedom. The CFI was close to significance at 0.891. There was only one problem with this model, similar to the model in Experiment 1. The VIA Heritage subscale failed to load on the Westernization latent factor (-0.139 on F1) and the Wald test recommended dropping the path between F1 and VIAH.

Figure 13 presents the paths for this model run with Chinese-descent participants. The fit was stronger with this sample with a CFI of 0.908. There were no residual problems and an AASR of 0.0391. The chi-square was less than 2 when divided by the degrees of freedom ( $\chi^2_{(32)} = 55.62$  with 32 degrees of freedom). Similar to the European-descent model, however, the VIAH indicator failed to load on the Westernization variable. Accordingly, that indicator was dropped and the revised Model 2 can be found in Figure 14. The *a priori* support for dropping this indicator and parameter was discussed under Experiment 1 which experienced the same problems with VIAH.

Figure 15 presents the relationships found with the revised model for the European-

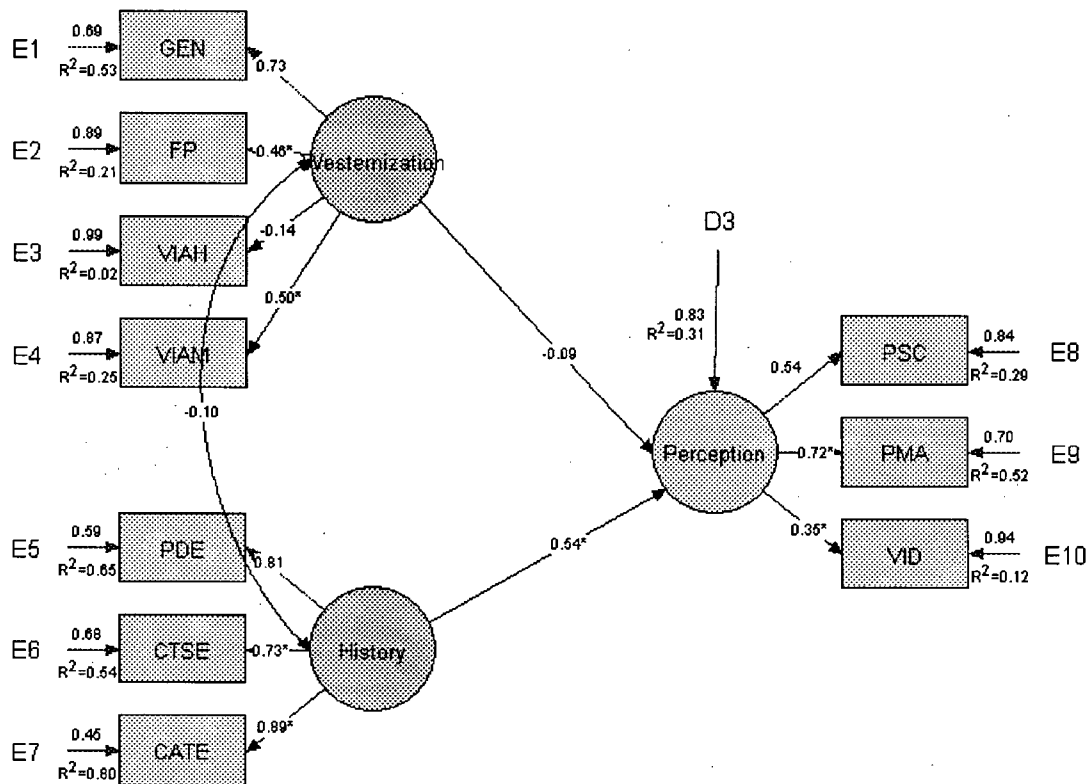
Figure 11. Full structural equation model 1 – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE = Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 – Disturbance in the exogenous variable



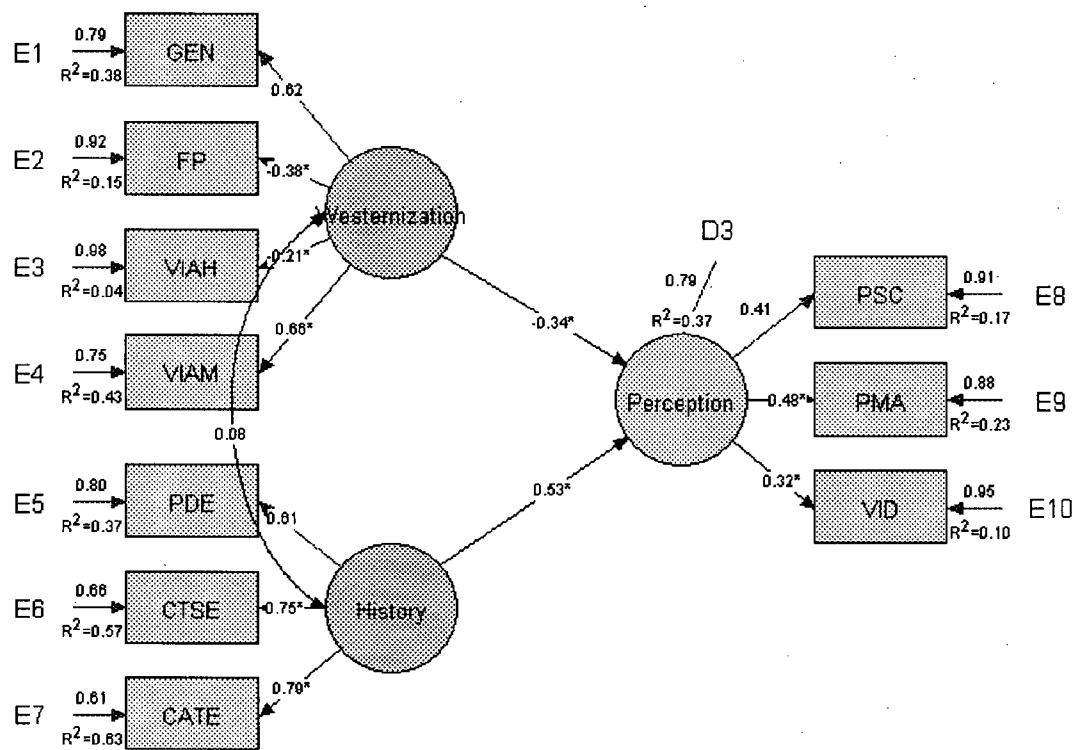
Figure 12. Model 1 – European-descent participants – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE = Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 – Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

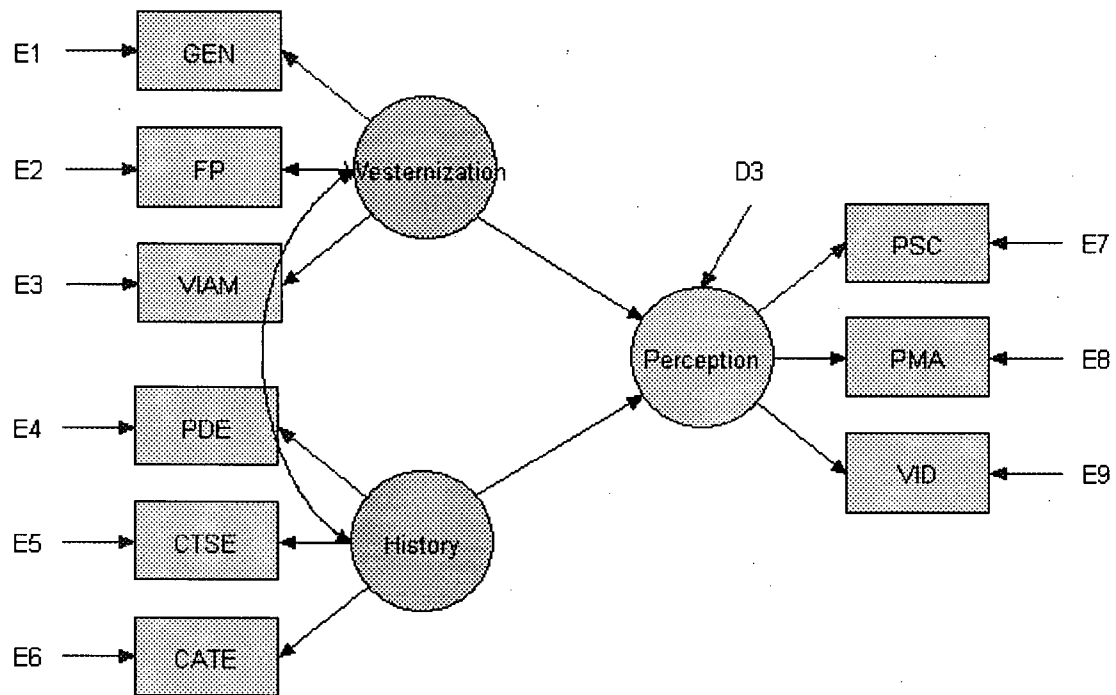
Figure 13. Model 1 – Chinese-descent participants – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAH = Vancouver Index of Acculturation Heritage score, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE – Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 – Disturbance in the exogenous variable

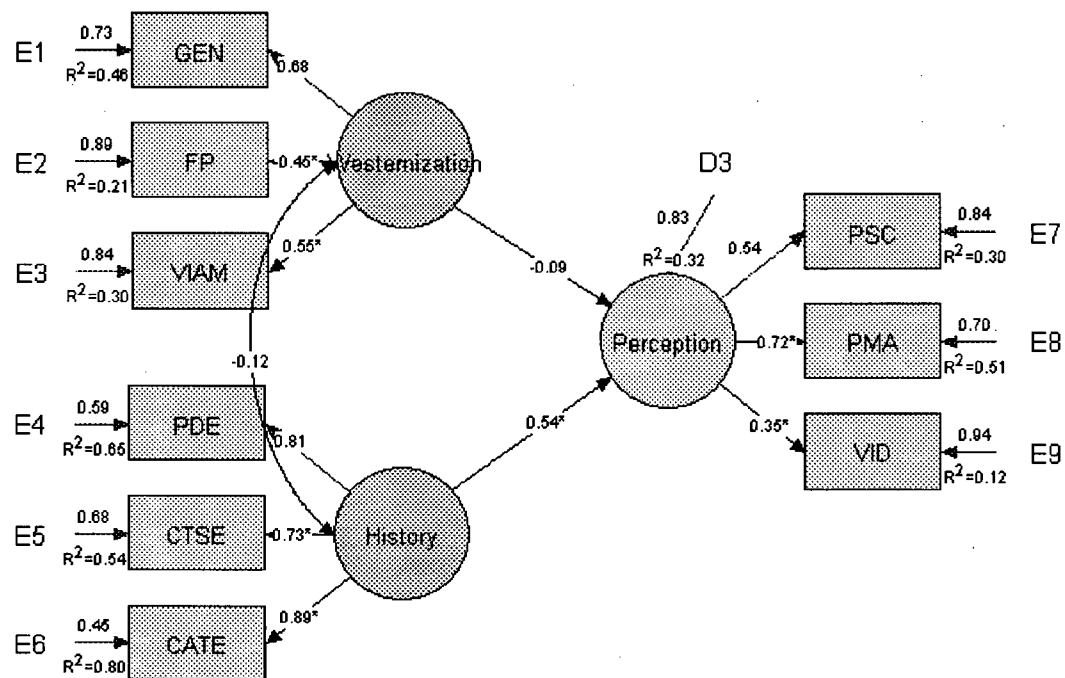
\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

Figure 14. Model 2 – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE – Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 – Disturbance in the exogenous variable

Figure 15. Model 2 – European-descent participants – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE = Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 = Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

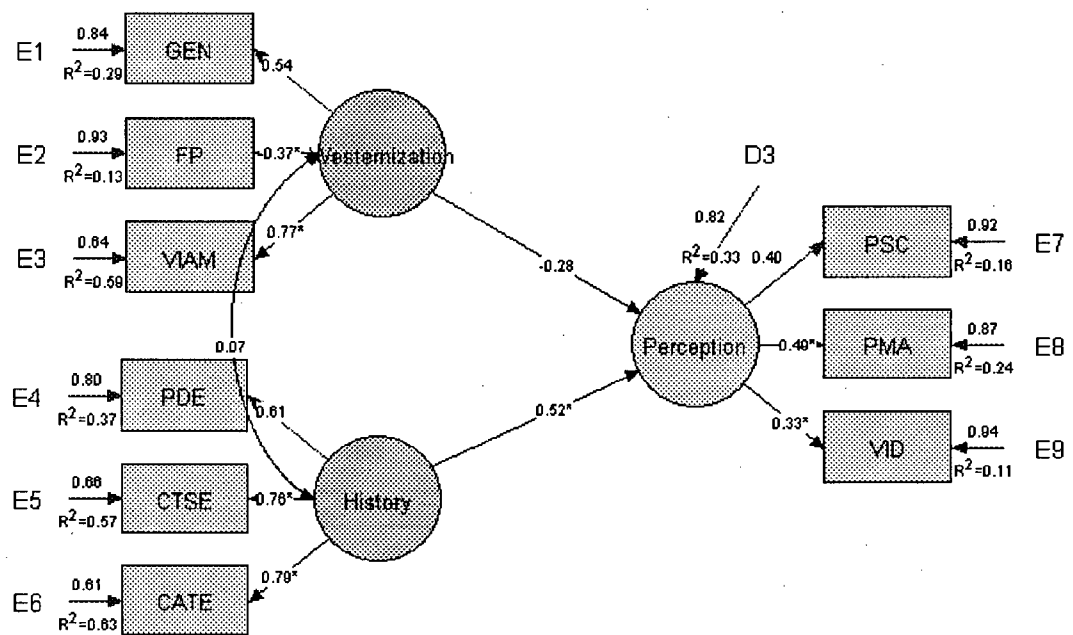
descent group. Dropping the VIAH significantly improved the fit of the model, bringing the CFI up to 0.934. All other indicators were significant (AASR = 0.0346, RMSEA = 0.077, RMR = 0.033). The chi-square was acceptable at 48.392 with 24 degrees of freedom.

Figure 16 presents the results of the Chinese-descent group analysis. This model fit improved from Model 1 with a significant change in the CFI (0.962). The chi-square was good at 33.145 with 24 degrees of freedom. The other indicators were also strong (AASR = 0.0328, RMSEA = 0.044, RMR = 0.025), indicating very little slippage between the model and the data.

The final test for this model was to run it in a multiple-group structure, analyzing the two groups simultaneously and comparing their fits. As in Experiment 1, first the regression coefficient pathways were restrained (or considered equal) between the two models. The fit for this comparison was strong at a CFI of 0.946 with other strong indicators (RMSEA = 0.042, RMR = 0.030). The chi-square test was less than two when divided by the degrees of freedom ( $\chi^2_{(50)} = 83.11$  with 50 degrees of freedom). The Lagrange multiplier test also supported the inclusion of these constraints. Next the 6 free parameters between indicators and their underlying factors were constrained. The fit of this comparison was strong (CFI = 0.940, RMSEA = 0.042, RMR = 0.037,  $\chi^2_{(56)} = 95.57$  with 56 degrees of freedom). The Lagrange multiplier test indicated that one constraint may be problematic (or not truly equal between the two models), the VIAM constraint. Releasing this constraint improved the fit slightly (CFI = 0.946, RMSEA = 0.040, RMR = 0.036,  $\chi^2_{(55)} = 88.05$  with 55 degrees of freedom).

As in Experiment 1, this comparison indicated that there was not an interaction between the model and data. Again, however, it cannot determine whether the two samples came from the same underlying population or whether the model just worked equally well in samples from two distinct populations.

Figure 16. Model 2 – Chinese-descent participants – Emotional abuse



Note: GEN = Generation level, FP = Filial Piety, VIAM = Vancouver Index of Acculturation Mainstream score, PDE = PDAS experience of emotional abuse, CTSE = Conflict Tactics Scale verbal aggression score, CATE = Child Abuse and Trauma Scale emotional abuse score, PSC = Parenting Strategies Checklist, PMA = Perceptions of Emotional Abuse, VID = Video vignettes, D3 = Disturbance in the exogenous variable

\*  $p < .05$ . Significance is fixed for the 1<sup>st</sup> indicator or uppermost box for each factor.

### 3.5 Post hoc analyses of independent measures

To better understand the data collected in this research, some consideration of the relationships between indicator measures was warranted. The characteristics and predictive ability of each of the indicator variables in the Westernization latent variable were considered in post-hoc analyses.

#### *Westernization measures*

The individual predictive abilities of the four Westernization variables were considered in a post-hoc regression analysis predicting perceptions of physical abuse. Since this is exploratory consideration of the data, all four variables were entered into a linear regression in a forward stepwise method. This method calculates the order of entry of the predictors based on their contribution to the regression equation (Field, 2000). This regression analysis determined Filial Piety scores to be the strongest predictor of the variable Total Perceptions of Physical Abuse (TPPA). TPPA is a composite score of the standardized z-scores of the four variables that loaded on the latent variable Perception in the SEM analyses (i.e., video vignettes, Parenting Strategies Checklist, PDAS acceptance of common physical discipline, PDAS acceptance of very common physical discipline). The regression summary can be seen in Table 23. In the first step, Filial Piety scores accounted for 4.3% of the variation. The addition of the VIA Mainstream score and the VIA Heritage score added predictive ability, raising the total variance accounted for to 5.9%. The generation level did not meet significance as a predictor. This analysis presents a similar picture to the SEM analyses in that these variables, individually or in combination, do not predict much of the variance in the perception of physical abuse indicators. Again, this calls into question the leading explanation for physical abuse, namely support for *filial piety* tenets, presented in much of the Asian research. *Filial piety* failed to be a major predictor of support for physical discipline tactics.

Table 23. Summary of Hierarchical Regression Analysis for Variables Predicting Perception of Physical Abuse (TPPA) ( $N = 601$ )

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Model 1			
Filial Piety	.952	.184	.207*
Model 2			
Filial Piety	.640	.208	.139*
VIA Heritage	.144	.069	.087*
VIA Mainstream	-.256	.104	-.107*
Model 3			
Filial Piety	.612	.222	.133*
VIA Heritage	.140	.070	.084*
VIA Mainstream	-.241	.111	-.101*
Generation	-.059	.165	-.018

Note:  $R^2 = .043$  for Model 1;  $\Delta R^2 = .016$  for Model 2 ( $p < .01$ );  $\Delta R^2 < .001$  for Model 3 ( $p = n.s.$ ).

\* $p < .05$ .



The analyses just described were repeated with ethnicity as a potential predictor. Since ethnicity is a primary variable in cross-cultural research, it might be expected that it would contribute to differences in the target variable. In the stepwise linear regression, ethnicity would not load in the exploratory analysis. Its correlation was so weak it failed to meet the minimum probability threshold even to be considered as a predictor and was thus un-analyzable. Regression was repeated with a hierarchical or block-wise entry, forcing ethnicity in as the first predictor. That model, with only ethnicity as a predictor, had an  $R^2$  of .001 and the model failed to meet significance. These findings buttress the SEM conclusions that different ethnic groups are judging perceptions of physical abuse in a similar manner, with other factors accounting for the variance in perceptions (e.g., history of abuse). However, the Vancouver Index of Acculturation has been shown to tap into a psychological construct that provides information above and beyond demographic information (Ryder et al., 2000).

A similar analysis was run for the Westernization measures to assess their predictive ability on the emotional abuse measures. A standardized composite measure was created that included the z-scores of the three perceptions of emotional abuse measures (i.e., video vignettes, Parenting Strategies checklist, and Perceptions of Emotional Abuse). This new variable was called Total Perceptions of Emotional Abuse (TPEA). There were no ethnic differences on this composite variable according to a simple ANOVA,  $F(4, 596) = 0.00, p = 1.00$ . Ethnicity could not be forced into a regression as a predictor in hierarchical analysis, as it did not meet the significance thresholds. In an exploratory stepwise regression none of the predictors managed to produce significant beta-weights. These measures appeared to have no predictive ability with perceptions of emotional abuse.

### *History of physical abuse measures*

The individual predictive abilities of the four variables measuring physical abuse were considered in a stepwise regression analysis. The results of the regression analysis can be seen in Table 24. This regression analysis indicated that the Conflict Tactics Scale physical aggression score (CTSP) was the strongest predictor of the variable Total Perceptions of Physical Abuse (TPPA). CTSP scores accounted for 18.8% of the variation in the perception variable. The next predictor added was the Conflict Tactics Scale severe assault score (CTSS) which raised the  $R^2$  to 0.204. The final addition was the PDAS experience of common physical discipline (PDASC). This model with three predictors accounted for 21.1% of the variance in the TPPA. The other PDAS subscales did not meet significance as a predictor. This analysis demonstrates that history of abuse is a stronger predictor of perceptions of physical abuse than are ethnicity or the Westernization variables already considered. This replicates the results seen in the structural equation models.

### *History of emotional abuse measures*

The three measures of emotional abuse were analyzed in a step-wise regression analysis to examine their individual predictive contributions on the Total Perceptions of Emotional Abuse (TPEA) variable. The results of the analyses can be seen in Table 25. The CTS verbal aggression score (CTSE) proved to be the strongest predictor, accounting for 7.6% of the variance. The CAT emotional abuse raised the  $R^2$  to .091. The PDAS emotional discipline subscale did not meet significance as a predictor. This analysis confirms that history of emotional abuse is a stronger predictor of perceptions of emotional abuse than ethnicity or the Westernization variables already considered.

Table 24. Summary of Stepwise Regression Analysis for Variables Predicting Perceptions of Physical Abuse (TPPA) ( $N = 601$ )

Variable	$B$	$SE\ B$	$\beta$
Model 1			
CTSPA	1.194	.101	.434*
Model 2			
CTSPA	2.071	.272	.752*
CTSSA	-.944	.272	-.343*
Model 3			
CTSPA	1.908	.28-	.693*
CTSSA	-.944	.271	-.348*
PDAS Common	.286	.122	-.104*

Note:  $R^2 = .188$  for Model 1;  $\Delta R^2 = .016$  for Model 2 ( $p < .001$ );  $\Delta R^2 = .007$  for Model 3 ( $p = .02$ ).

\* $p < .05$ .

Table 25. Summary of Stepwise Regression Analysis for Variables Predicting Perception of Emotional Abuse (TPEA) ( $N = 601$ )

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Model 1			
CTSE	.410	.058	.276*
Model 2			
CTSE	.283	.071	.191*
CATE	.467	.149	.149*

Note:  $R^2 = .076$  for Model 1;  $\Delta R^2 = .015$  for Model 2 ( $p < .002$ ).

\* $p < .05$ .

### *Perception of physical abuse measures*

#### *Judging vignettes cross- or intra-culturally*

One of the objectives of this research was to consider the relationship between the ethnicity of the participant assessing the abuse and the ethnicity of the victim being assessed. The video vignettes presented in this research used either a Chinese-descent mother and daughter or a European-descent mother and daughter. To directly compare cross-cultural and intra-cultural judgements, only Chinese-descent and European-descent participants were analyzed. Table 26 presents the average assessments of the video depicting an incident of physical abuse. The scores presented are composite scores across the three vignette questions which were presented in Table 10. The univariate analysis of variance which considered both the ethnicity of the assessor and whether they were viewing a cross-cultural or intra-cultural situation is presented in Table 26. The European-descent and Chinese-descent assessors were both more likely to consider the European-descent victim to have been physically abused. This is represented in the significant interaction effect. Simple main effects analyses revealed that neither group of assessors was varying significantly in their assessments of cross-cultural versus intra-cultural victims. In other words, Chinese-descent participants rated both victims similarly and European-descent participants rated both victims similarly. European-descent participants were more likely to identify the incident as abusive judging cross culturally when compared to Chinese-descent participants judging cross culturally.

#### *Age of child being disciplined*

Another objective of this research was to consider the relationship of age of the victim of physical discipline to the perception of whether it was abusive. The Parenting Strategies Checklist (PSC) assessed the appropriateness of physical discipline for three different age

Table 26. Cross-cultural versus intra-cultural video vignette presentations – Physical abuse\*

Assessor	Cross-cultural	Intra-cultural
European-descent	2.88 (0.82)	3.11 (0.84)
Chinese-descent	3.31 (0.73)	3.23 (0.70)

#### Univariate Analysis of Variance

Ethnicity of assessor	$F(1, 459) = 14.43, p < .001$
Cross vs. intra-cultural	$F(1, 459) = 0.944, p = n.s.$
Interaction	$F(1, 459) = 4.322, p = .038$

#### Simple main effects:

European-descent assessors:	
Cross vs. intra-cultural	$F(1, 164) = 3.036, p = n.s.$
Chinese-descent assessors:	
Cross vs. intra-cultural	$F(1, 295) = 0.958, p = n.s.$
Cross cultural assessment:	
European vs. Chinese	$F(1, 237) = 17.49, p = .0009$
Intra-cultural assessment:	
European vs. Chinese	$F(1, 222) = 1.463, p = n.s.$

\*Since the videos portrayed only European-descent and Chinese-descent families, only these two ethnic groups were analyzed.

Means are followed by standard deviations in parentheses.

Lower means indicate greater agreement that the video portrayed abuse.

groups: Preschool (aged 2-5 years old); Middle Childhood (aged 6-10 years old); and, Early Adolescence (aged 11-14 years old). Participants were asked to mark every parenting strategy that they considered to be an appropriate form of discipline for that age group. Appendix 4 presents the acceptance of physical discipline strategies by age group. To consider whether judgements about the appropriateness of physical discipline strategies varied, a repeated measure ANOVA was conducted with three levels for the age of the child. Due to a sphericity violation, the adjusted Greenhouse-Geisser statistic is reported. There were significant differences among the age groups,  $F(1.96, 1166.34) = 34.70, p < .001$ . Endorsement for physical discipline strategies for children aged 11-14 years old was significantly lower than for the two younger age groups. The highest rates of endorsement for physical discipline appeared for the Preschooler age group.

Potential differences in perceptions of the appropriateness of physical discipline were also assessed with the Perceptions of Physical Abuse scale (PPA). This measure differed from the PSC in that it had a Likert-style response format. This scale was based on items from the Child Abuse and Trauma scale and did not provide a specific example of a situation that might lead a parent to have to discipline like the PSC did. The same three age groups for children being disciplined was used as in the PSC (i.e., Preschool, Middle Childhood, and Early Adolescence). Items considered for each age group can be found in Appendix 5. The repeated measures ANOVA for age require an adjusted  $F$ -value, again due to sphericity concerns. There was a significant effect for age of child being disciplined, Greenhouse-Geisser adjusted  $F(1.4, 831.5) = 58.745, p < .001$ . The lowest rates of acceptance on this measure were for the middle age group, in contrast to the PSC where the lowest endorsement was for the oldest group. Post hoc comparisons were considered by examining the 95% confidence intervals for each age group and the results indicated that acceptance for the middle group was significantly lower than for the younger or older group.

Consideration of the results for the PPA should be tempered by the fact that it did not load on the final Perceptions of Physical Abuse latent variable with the PSC. It failed to load on the two-factor analysis when additional measures for the Westernization construct were considered concurrently. This might have suggested a problem with its convergent validity. It also might just have reflected the conservative decisions made when choosing to only include variables that do covary to be part of the structural equation models. The PPA did, however, load in the measurement model in the one-factor analysis, so there is some evidence that it correlates or shows some convergent validity with the PSC and established measures like the Parent Discipline Attitudes Survey.

#### *Perception of emotional abuse measures*

The interaction of ethnicity of the participant assessing abuse and the ethnicity of the victim was also explored in the emotional abuse video vignettes. The staged incident of emotional abuse was filmed with the same Chinese and European mother-daughter pairs. Table 27 presents the assessments of whether the behaviour portrayed was emotionally abusive, split by the ethnicity of the assessor and the victim. The scores are composite scores of the three questions presented in Table 14. The univariate analysis of variance reported in Table 27 indicates that neither the ethnicity of the assessor main effect nor whether they were viewing a cross-cultural or intra-cultural depiction led to significant *F*-values. The interaction was significant, however. This interaction again represents the fact that both ethnic groups agreed on which mother-daughter dyad represented a more serious incident of abuse. In contrast to the physical assault scenario, where the European-descent victim was considered to be more abused, in the emotional abuse scenario both groups of assessors were more likely to consider the Chinese victim to have been emotionally abused. The ANOVA run separately for each participant group showed that their assessments did differ significantly depending on the



Table 27. Cross-cultural versus intra-cultural video vignettes – Emotional abuse\*

Assessor	Cross-cultural	Intra-cultural
European-descent	2.99 (0.73)	2.74 (0.69)
Chinese-descent	2.82 (0.67)	3.03 (0.68)

#### Univariate Analysis of Variance

Ethnicity of assessor	$F(1, 460) = 0.884, p = n.s.$
Cross vs. intra-cultural	$F(1, 460) = 0.060, p = n.s.$
Interaction	$F(1, 460) = 11.74, p = .001$

#### Simple main effects:

European-descent assessor	
Cross vs. intra-cultural	$F(1, 165) = 4.908, p = .028$
Chinese-descent assessor	
Cross vs. intra-cultural	$F(1, 295) = 7.373, p = .007$
Cross cultural assessment:	
European vs. Chinese	$F(1, 227) = 3.24, p = n.s.$
Intra-cultural assessment:	
European vs. Chinese	$F(1, 233) = 9.117, p = .003$

\*Since the videos portrayed only European-descent and Chinese-descent families only these two ethnic groups were analyzed.

Means are followed by standard deviations in parentheses.

Lower means indicate greater agreement that the video portrayed abuse.

ethnicity of the victim portrayed (see Table 27). Simple main effects ran in the opposite direction for the two groups of assessors since they both chose the same victim as having been abused, European-descent participants judging cross-culturally and Chinese-descent judging intra-culturally. Despite the statistically significant differences in judgments for the emotional abuse video, it is not clear that these differences provide much insight. There appeared to be no consistent pattern in which assessors were more likely to be sympathetic to victims of their own ethnicity. The patterns that appear for the emotional abuse video are different than those for the physical abuse video. This reflects that all participants judged the European-descent victim as more likely to have been physically abused and the Chinese-descent victim as more likely to have been emotionally abused.

Differences in perception of emotional abuse were analyzed for different age groups in the Parenting Strategies Checklist. Appendix 6 presents the acceptance of emotional discipline strategies by age group. To consider whether judgements about the appropriateness of the emotional discipline strategies varied, a repeated measure ANOVA was conducted with three levels for the age of the child. Due to a sphericity concern, the adjusted Greenhouse-Geisser statistic is reported. The age groups differed significantly,  $F(1.96, 1174.86) = 64.43, p < .001$ . Post hoc comparisons of the 95% confidence intervals for each age group indicate that there was no overlap in the three groups' confidence intervals. Similar to the physical discipline strategies, the lowest endorsement rate was for children aged 11-14. The fewest strategies were selected for the oldest group which differed significantly from the two younger age groups. The highest rates of endorsement were for the youngest age group but it did not vary significantly from the middle age group.

Appropriateness of emotional discipline strategies also was assessed in the Perceptions of Emotional Abuse scale (PMA). This Likert-style scale loaded on the Perceptions of Emotion Abuse latent variable with the PSC items, indicating that they are measuring the same

underlying construct. Items included in the PMA can be found in Appendix 7. The repeated measures ANOVA again required a correction for sphericity, and the Greenhouse-Geisser adjusted  $F$ -value was significant,  $F(1.52, 864.23) = 476.021, p < .001$ . Post hoc analyses (e.g., comparison of the 95% confidence intervals for each age group) indicated a different pattern of acceptance than in the previous age-specified measures. In this case, the highest rates of endorsement were for the oldest group. The lowest rates were for the youngest group (aged 2-5) but this group did not vary significantly from the middle group.

Two measures of perception of emotional abuse were not included in the SEM analyses. First, the acceptance of emotional discipline subscale of the Parent Discipline Attitudes Survey did not load. The final measure, open-ended participant generated responses, also did not appear to be measuring the same underlying construct as the other perceptions of abuse measures.

## Chapter IV – Discussion

The results of this study demonstrated that personal experience with abuse is directly related to how you perceive abuse, and that this relationship is similar across different ethnic groups. People who have experienced more physical discipline growing up are likely to be the most tolerant of physical discipline and the least likely to identify it as abusive. A similar relationship exists for emotional abuse, with people who experience the most emotional abuse being the least likely to identify it as abusive. The SEM models indicated that a history of abuse accounted for a very large portion of the variance in perceptions of abuse (e.g., 38-59%), depending on the group surveyed and the type of abuse presented.

This research supported previous findings from this laboratory which revealed that Asian-descent students reported higher levels of physical and emotional abuse than their European-descent counterparts (Kennedy & Gorzalka, 1999). It is also buttressed by research conducted in Asia which has refuted the initial claim that child abuse is merely a “Western” phenomenon (T. P. Ho & Kwok, 1991; Korbin, 1991; McKelvey & Webb, 1995; Tang & Davis, 1996).

This research also addressed to some extent the concern that professionals may be working with ethnocentric definitions of preferred child rearing practices (D’Antonio et al., 1993). This research did not find that perceptions of what constituted abuse showed ethnic differences, beyond the differences related to personal histories of abuse.

Anecdotal reports may have suggested that ethnic differences in perceptions of abuse might exist (e.g., Gray & Cosgrove, 1985) but this empirical analysis found that ethnicity was not related to perceptions above and beyond the differences in personal experiences

of discipline. This research buttressed previous research that warned that a personal history of discipline may lead to differences in perceptions of abusive behaviour (Bower-Russa et al., 2001; Buntain-Ricklefs et al., 1994). An understanding of personal differences in experience of abuse can contribute greatly to a sensitive assessment of current parenting strategies and discipline philosophies. Professionals who are attempting to overcome ethnocentric perspectives can benefit by taking into account the personal experience of the clients they are trying to counsel. Researchers have argued that professionals who bear the responsibility of intervention will be more able to accurately assess risk and identify a family's weaknesses and strengths, if they are aware of cultural variations in child treatment (Rubin, 1992; Terao et al., 2001). Professionals may gain additional insight by considering their own personal history of discipline and how it may be comparable to their current assessments of other people's behaviours.

#### *History of physical abuse as a latent variable*

Data in this dissertation did confirm that physical abuse is indeed a cross-cultural phenomenon and is experienced by many of the students assessed, irrespective of their country of birth. By using a latent variable, which allowed multiple constructs of physical abuse to converge, a comprehensive history of abuse was considered. History of abuse was a strong predictor for perceptions of physical abuse for both ethnic groups considered in the structural equation models. For the European-descent group, personal history accounted for 38% of the variance in perceptions of physical abuse. In the Chinese-descent model, personal history of physical discipline accounted for 59% of the variance in perceptions of physical abuse. The multiple-group structure confirmed that

these two paths were equivalent within the two groups. Both a history of physical discipline and a history of serious physical assault contributed to this predictor variable.

Evidence indicates a significant relationship between a history of experiencing physical discipline and approval of physical discipline (Bower-Russa et al., 2001; Buntain-Ricklefs et al., 1994). Other researchers have found that people who experienced high rates of physical discipline generally view the use of corporal punishment as more appropriate (Bower & Knutson, 1996; Zaidi, Knutson, & Mehm, 1989) and judge transgressions precipitating corporal punishment as more serious than do non-abused respondents (Chilamkurti & Milner, 1993). This dissertation not only replicated these findings, but also showed for the first time in a structural equation model, that higher rates of experienced physical discipline are positively correlated with greater acceptance of abusive physical discipline. The percentage of variance accounted for by the latent variable of history of physical abuse was quite strong at 38 to 59%. One major strength of this research project was the theory-based development of these SEM models, with the added conservative step of employing multiple samples to test the models. This approach reduced the possibility that these models were data driven.

Linking a history of abuse with the risk of becoming an abuser brought this research close to the debate on inter-generational transmission of violence. The original enthusiasm for this theory was replaced by a nearly complete rejection of a plausible but poorly researched theory (Bower & Knutson, 1996). While taking into account the flaws inherent in the research which originally attempted to identify a causal link between childhood experiences of abuse and abusive parenting practices, that line of research still clearly delineated an association between those two variables (Zaidi et al., 1989). A

better understanding of the link between a history of abuse and perceptions of abusive behaviour may help to explain why many former victims do not go on to abuse, whereas others do (Bower & Knutson, 1996). This research did demonstrate that a history of having experienced physical abuse is associated with greater acceptance of physical discipline as a parenting strategy. These findings, combined with the fact that the use of spanking is the most important risk factor for physical abuse (Straus, 2000), indicated that there may be a correlation between history and risk to abuse.

While initial reports suggested that Asian countries experienced lower rates of child maltreatment (Korbin, 1981), researchers are now beginning to suggest that lower incidence rates might reflect a deficiency in reporting procedures, different cultural attitudes towards identifying severe physical discipline as abuse, and a lower likelihood of seeking help outside the family (Hesketh et al., 2000; Lau & Davies, 1993). This dissertation found that students of Asian-descent did not report lower rates of child maltreatment, but the opposite.

Since reporting of child abuse has not been mandatory in many Asian countries (Hahm & Guterman, 2001; Hesketh, Hong, & Lynch, 2000; Samuda, 1988; Tang & Davis, 1996), research conducted with participants of Asian origin at the University of British Columbia may be tapping into untapped information. This research may have provided information on physical and emotional maltreatment which was not reported when it occurred in childhood, either in Canada or in another country.

#### *History of emotional abuse as a latent variable*

As mentioned in the introduction, histories of emotional abuse have only recently

become a focus of maltreatment research (Brassard et al., 1993; Gross & Keller, 1992). Research on emotional abuse was not as plentiful as other areas of abuse and has proceeded in a haphazard fashion (Claussen & Crittenden, 1991; Rosenberg, 1987). The exploration of emotional abuse in this dissertation was unique in combining three different measures of experience of emotional abuse. Little research has compared the available instruments to measure histories of emotional abuse. There have been no studies that have attempted to link emotional disciplinary histories with disciplinary attitudes and risk for abusive parenting.

All three of the indicators used as history of emotional abuse measures, loaded onto one history of emotional abuse latent variable. The emotional abuse subscale (CATE) of the Child Abuse and Trauma scale, the psychological aggression scale of the Conflict Tactics Scale, and the Parent Discipline Attitudes Survey emotional abuse subscale all appeared to be measuring the same underlying construct. Demonstrating that three different scales measure the same underlying construct is important, particularly since they began with different descriptions of what constituted emotional abuse.

Even with different starting means for the Chinese-descent and European-descent samples in the structural equation model, the loading strengths of these three measures were all equivalent, as was demonstrated by the multiple-group structural model. In addition, the path predicting perceptions of emotionally abusive behaviour was equivalent for the two models. In the European-descent group, history accounted for 54% of the variance in perceptions, and in the Chinese-descent group it accounted for 52%. This indicated that as history of emotional abuse experience increased, there was a greater acceptance of emotionally abusive disciplinary tactics. As well, participants in



both groups who experienced lower levels of emotional abuse were more likely to consider the emotional abuse depicted as abusive. As with the physical abuse models, the two groups differed in the same manner with respect to these factors. To simply conclude that Chinese-descent and European-descent participants have different perceptions of emotional abuse would be understating the relationship. Chinese-descent and European-descent participants were almost identical in how their personal histories of abuse related to their perception of abusive emotional discipline. This was an important finding that had previously been unexplored in emotional abuse research. This factor entails further research since it accounted for such a large part (over 50%) of the variance in perceptions of abuse in both samples.

These findings were consistent with research conducted in Asia, where Tang (1996) reported that 62.5% of Hong Kong adolescents experienced verbal abuse. Cross-cultural studies of parenting have shown Chinese parents to be fairly warm towards their children but very restrictive and limiting of their children's activities, speech and friendships (Bond, 1991). Indo-Asian respondents in this UBC sample also reported experiencing high levels of emotional abuse. This is consistent with reports that Indo-Asian parents severely restrict the social interactions of their female children (DasGupta & Warrier, 1996). The findings also support research that claims that strategies used in education and child rearing tend to be more strict and authoritarian in Southeast Asia and West Asia than in the West (Wan & Salili, 1996; Bond, 1991; Tang, 1996; DasGupta & Warrier, 1996). Following the cultural belief that conveying praise to a child will spoil them, parents and teachers rarely praised students publicly (Wan & Salili, 1996; Wu, 1981; Gray & Cosgrove, 1985). In Chinese schools, for example, disruptive behaviour

was not tolerated and discipline enforced through striking, shaming and isolation (Bond, 1991).

#### *Westernization as a latent variable*

This research presented a new conceptualization of Westernization. No previous research has combined acculturation with length of residency in North America and *filial piety* into a multi-faceted construct. To be Westernized, according to this study, was to be high on identification with North America mainstream social practices, higher on duration of residence in North American and lower on the acceptance of subordination of personal interests for the benefit of family members, as measured by the Filial Piety scale. These three measures worked well together in both the factor analysis and the subsequent structural equation modeling and with three different samples. There was a convergence of factors into the latent variable of Westernization. Future research could explore this relationship further. Perhaps there are other constructs like *filial piety* that change with exposure to North American culture. It is likely that *filial piety* is but one of many measures that could fall under the latent variable of Westernization.

The latent variable of Westernization failed to be a predictor for perceptions of abuse in both the physical and emotional abuse models. As a predictor of physical abuse, the path approached significance for the European-descent group but not for the Chinese-descent group. Length of time spent in North America was not as important as was reporting personal experience with abuse for predicting in subsequent perceptions of abuse. This may not be overly surprising, considering that parenting attitudes, perhaps like other close personal values, are slow to change. Previous research in this laboratory

found that length of residency in North America moderated attitudes toward coercive sexual behaviour but not toward non-coercive behaviour (Kennedy & Gorzalka, 2002). It was proposed that coercive sexual behaviour is guided more by social cues as to what constitutes appropriate behaviour whereas non-coercive sexual behaviour is guided more by individual cues acquired from the home and family environment. Social cues may change more quickly and dramatically when someone moves to a new culture. Individual cues, on the other hand, may be slower to change as new immigrants retain the more personal values adopted from their parents' models. This social cue hypothesis is tentative and should be explored in further research.

The current study presented a multifaceted interpretation of Westernization, including measuring comfort in North American culture, length of time in North America and adherence to traditional philosophies as measured by *filial piety*. The data indeed demonstrated that as acculturation and duration of residence in North America increased, support for the tenets of *filial piety* decreased. This relationship was found among European-descent participants as well as among Asian participants. This finding suggested that the tenets of *filial piety* may be relevant for several ethnocultural groups and the structural equation modeling demonstrated that attenuation for the tenets decreased in a similar pattern with increased Westernization among non-Asian groups.

It was entirely possible that *filial piety*, an indigenous Chinese concept, would not have loaded at all for the Westernization latent factor among the European-descent participants. However, among European-descent participants, those scoring low on Westernization also scored higher on Filial Piety. Filial Piety correlated negatively with generation level and acculturation in the preliminary factor-analyses group as well, which

was based on a mix of different ethnic groups. Filial Piety not only correlated in the same direction but also loaded on Westernization in the same way for both SEM groups, as indicated by the multiple-group constraint for that indicator in both the physical and emotional abuse models. Very little research has been conducted with this construct, and it is difficult to say whether the European-descent participants interpreted the questions in the same way as the Chinese-descent participants. However, the fact that this variable loaded equivalently with the European-descent sample and varied in the same manner for the Chinese-descent group, as measured by the multiple-group sampling constraints, indicates that it is a construct that bears further consideration among non-Asian populations.

### *Filial Piety*

While latent variables were the primary points of interest in the SEM analyses, the contributions of individual variables were also of interest. The characteristics and predictive ability of each of the indicator variables in the Westernization latent variable were considered in post-hoc analyses. Filial piety proved to be the most important predictor among the Westernization variables (i.e., Vancouver Index of Acculturation, and generation level) but it was not a very powerful predictor, accounting for less than 5% of the variation in perceptions of physical abuse. These findings failed to support the argument that *filial piety* is a key explanation for the acceptance of physical punishment and emotional neglect (e.g., Goodwin & Tang, 1996; Hahm & Guterman, 2001; Hong & Hong, 1991; J. M. Kim, 1995; Lieh-Mak et al., 1983; Tang, 1996; Tang & Davis, 1996;

Wu, 1981). Those researchers, however, did not quantify *filial piety*, nor did they relate it directly to levels of abuse experienced.

Some practices that are supported by the tenets of *filial piety*, such as never praising children to their faces or shaming children for poor academic performance, might fall under new conceptualizations of emotional abuse. *Filial piety* did not, however, explain any of the variation in perceptions of emotional abuse. Filial Piety scores, like the other Westernization measures, failed to produce significant beta-weights in a regression analysis for predicting perceptions of emotional abuse.

This research provided one of the first cross-cultural explorations of the Chinese construct of *filial piety*. While Chinese-descent participants did report the highest levels of *filial piety*, these levels were not significantly higher than those reported by Indo-Asian descent participants. There has been no previous research consideration of *filial piety* among Indo-Asian groups. In fact, there are no published explorations of *filial piety* among European-descent groups, but one paper warned that it may never be an applicable construct for this group (Cheung & Rensvold, 2000). Psychological constructs developed in North America and Europe have been applied around the world with very little consideration as to their universality. Most Western-developed theories are assumed to be worldwide truths or etics and are assessed without questioning their relevance. Only now are we beginning to recognize that truths only tested in Western communities may actually represent emics or culture-specific constructs. The way that *filial piety* fit into the latent variable of Westernization similarly for different ethnic groups may indicate that it is an etic rather than an Asian emic. Future research exploring the universality of *filial piety* seems warranted.

Previous researchers might have argued that the higher tolerance for physical and emotional discipline, seen for Chinese-descent participants in this research, was partly explainable by the tenet of *filial piety* that parents' authority is supreme and unquestionable (Bond, 1981; Hahm & Guterman, 2001). The results of this dissertation, however, call this explanation into question, since *filial piety* failed to be a strong predictor of perceptions of discipline. Again, this dissertation argues that personal histories of discipline should be considered as the primary explanation for ethnic and individual differences in endorsement of physical and emotional discipline, rather than *filial piety* and its tenets.

Another tenet of *filial piety* that may have been represented in the findings of this research was the notion that parents are considered to own their children and have the right to punish them without outside interference (Hahm & Guterman, 2001; Tang, 1998). Chinese-descent respondents were the least likely to suggest that the physically abusive behaviour depicted should be reported to the authorities. Just to verify that the *filial piety* results were not being diluted by considering cross-cultural samples, a quick check of its effects on only the Chinese-descent participants replicated the previous findings. When *filial piety* was entered as a predictor in a regression for the question, "If you saw this happen would you report it to authorities?", *filial piety* scores accounted for less than 3% of the variance,  $R^2 = 0.27$ , Adjusted  $R^2 = 0.23$  in the physical abuse scenario. This research just did not support the strength of *filial piety* as an explanation for ethnic differences in parenting strategies.

Support for *filial piety* did not vary for immigrant Chinese participants based on their length of residency in Canada. Chinese-descent participants not born in Canada

were split into two groups based on their median and mean age of arrival. Those born in Canada reported a filial piety score of 3.04, those who arrived before age 11 reported a score of 3.30 and those who arrived at or after age 11 reported a score of 3.37. The latter two immigrant groups did not vary but they did vary from the Chinese-descent participants born in Canada. What this research revealed was that levels of *filial* piety vary by generational level in a way consistent with the increase in mainstream acculturation. As duration of residency in Canada increased, it was unclear how different the decrease in filial piety scores was from the decrease in retention of heritage culture. Filial piety scores and heritage scores both appeared to be measuring the same underlying construct when divergent and convergent validity was assessed through the factor analysis. However, in the structure equation modeling, the heritage score failed to load similarly with filial piety scores. Future research could explore the precise rate of change in Filial Piety scores among Chinese and other ethnic groups now that it has been found to correlate with other measures such as mainstream acculturation and generation level for multiple ethnic groups.

#### *Generation level*

Generation level had little predictive ability, despite it loading into the Westernization latent variable in the structural equation models. It might have been suggested that this may be due to the different generational levels seen in the two SEM samples. Within the Chinese-descent SEM group, 65% were born outside Canada, and nearly 50% of those had been in North America less than ten years. The multiple-group SEM in both experiments, however, suggested that the Westernization regression paths

were equivalent for Chinese-descent and European-descent models (with the European-descent group having less than 15% of participants born outside Canada). Also, whereas the European-descent group may have had a greater number of 'Westernized' participants, this pathway failed to make significant predictions among this more varied group. There is always the chance that these two samples did not reflect the Canadian population as a whole, and that the true role of Westernization was somehow masked in this research. Future research might consider directly comparing Westernization, history of abuse and other types of personal characteristics.

The failure of the Vancouver Index of Acculturation heritage score to load on Westernization is somewhat harder to interpret. With the preliminary group, Heritage scores loaded on the Westernization scale, but in the structural equation model, they failed to load. There is some logic to Heritage scores not loading on the same factor as the Vancouver Index of Acculturation Mainstream scores, as already discussed, since they are considered to be orthogonal concepts. However, one might have expected Filial Piety and Heritage scores to change concurrently, with both decreasing at similar rates as Westernization increased. While research has shown that acceptance of mainstream ideals does not necessitate the rejection of heritage ideals, there is little research on the change of *filial piety* as a result of acculturation. The structural equation modeling would imply that *filial piety* changed at a different rate than did the heritage ideals measured by the Vancouver Index of Acculturation. It is possible that the Filial Piety scores varied at a rate consistent with generational level changes and Mainstream acculturation score changes, but differently than Heritage score changes. Future research could look more specifically at the rate of change for these variables.



### *Acculturation*

Acculturation, as measured by the Vancouver Index of Acculturation, varied among the ethnic groups. The low predictive value of acculturation in the regression analyses was in direct contrast to research among Hispanic samples in the United States which found that acculturation accounted for differences in parenting beliefs above and beyond ethnic differences (Acevedo, 2000). This might be due to the use of different acculturation measures. Alternatively, perhaps acculturation failed to account for much of the variance in this case because this dissertation was only interested in a very narrow range of parenting beliefs, namely discipline strategies, whereas other research has surveyed a broader range of behaviours, such as support for breastfeeding. It is possible that parenting strategies about discipline are guided by personal cues and family traditions. Acculturation may have a greater impact on behaviours that are guided more by social cues than personal cues.

The differences in acculturation levels were probably related to the differences in generational level. For example, 75.7% of the European-descent group were second generation (one or both parents born in Canada) whereas only 2.9% of the Chinese-descent group were second generation. The reported acculturation levels of the Chinese-descent group, while different from the European-descent group, were still fairly high (see Table 4). Measuring acculturation among undergraduate students who were attending a competitive English-language university assured English proficiency, but also meant that this sample is not representative of the recent immigrant population. Chinese-descent participants did report higher retention of heritage ideals but they were not significantly higher than the Indo-Asian-descent group. Comfort in mainstream North

American culture increased with successive generational levels. European-descent participants reported significantly higher mainstream acculturation scores than were reported by the three Asian groups. Higher support for mainstream culture varied inversely with support for *filial piety*. These relationships were seen symmetrically among Chinese-descent, European-descent and mixed ethnicity descent groups.

### *Ethnicity of the observer and ethnicity of the victim*

In cross-cultural research on perceptions of abuse, there has been a relative lack of focus on the characteristics of individuals making these assessments (Ashton, 2001; Bower-Russa et al., 2001). While cross-cultural research may have identified that there are ethnic differences in perceptions of abuse, no other researchers have explored whether these differences are in any way related to the interaction of the ethnicity of the observer and the ethnicity of the victim. This study considered this question by comparing how participants assessed abusive behaviour cross-culturally versus intra-culturally. Presenting video vignettes with victims of two different ethnicities to a cross-cultural group of assessors allowed for the exploration of this interaction. The findings provided mixed results. In the physical abuse scenario, both Europeans-descent participants judging intra-culturally and those of Chinese descent judging cross-culturally were more likely to identify abuse. Although both scenarios were enacted, following an identical script, there may have been some difference in the actresses' portrayals that made one victim, the European-descent daughter, seem more sympathetic. Interestingly, in the video vignette presenting emotional abuse with the same actresses, both ethnic groups were more likely to judge the Chinese-descent victim as emotionally abused. In

the emotional abuse case then, the Europeans judging cross-culturally and the Chinese judging intra-culturally had the highest identification of abuse. It is also possible that something was displayed in the Chinese-descent version of the film that participants picked up on despite the use of identical dialogue in the two videos<sup>1</sup>.

For the physical abuse scenario, when the responses were considered separately for the Chinese-descent and European-descent observers, identification of abuse did not differ significantly by the ethnicity of the victim. Combining this information with the symmetry demonstrated in the structural equation models, it appears that different ethnic groups tended to judge abuse in a very similar fashion.

It is possible that the responses to the vignette assessments reflected participants' pre-existing stereotypes, beliefs or preconceptions about the parenting practices of European-descent and/or Chinese-descent parents. Pre-existing cross-cultural expectations for parenting practices were not directly measured prior to presenting the video vignettes. Perhaps participants were measuring abuse differently in the Chinese scenario, for example, according to what they perceived to be normal Chinese parenting strategies. Future research could explore whether participants held stereotypes about Chinese or European parents that might have influenced the way that they judged the presented incidents. The portrayed physical abuse incident was chosen specifically with the intention that it was an unambiguous example of physical abuse. While there may not have been a clear consensus on whether slapping or spanking a child was abusive, striking a child on the side of the head with a broomstick would meet most definitions of a physical assault. It is somewhat disquieting that the Chinese-descent victim was

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<sup>1</sup> During rehearsals, the two actresses who were portraying the mothers were asked to "act meaner" in the emotional abuse videos. For the European-descent actress, she spoke faster and at a higher pitch. For the Chinese-descent actress, she spoke slower and in a lower pitch.

considered to be abused at a significantly lower rate when she suffered the same assault with a broom handle as the European-descent victim.

The use of video vignettes to measure of perceptions of abuse was one of the unique features of this research project. Previously, when participants were asked to judge a written description of an abusive incident (e.g., Hong & Hong, 1991), there was no way to identify how an assessor was picturing the age, maturity, gender, or ethnicity of the child being abused. If two people with similar attitudes imagine two very different children (e.g., a 14-year old versus a 1-year old) when considering questions about whether spanking was an acceptable form of discipline, they may provide very different responses. By presenting a tangible and unequivocal example of abusive parenting, this study was able to directly assess perceptions of child abuse while controlling for a number of other variables (e.g., age, maturity, gender, precipitating interaction).

#### *Age of the child being disciplined*

Another previously unexplored area considered in this research was the relationship between the age of the child being disciplined and the appropriateness of the discipline. Much of the research conducted on perceptions of abusive behaviour (e.g., Parent Discipline Attitudes Survey) does not specify the age of the child being disciplined. It is likely that the appropriateness of disciplinary strategies would differ on this variable. Cross-cultural prevalence studies in the United States have found that there are ethnic differences in the application of physical discipline according to the age of the child being disciplined. For example, Wissow (2001) found that only 41% of Asian parents reported spanking young children (under the age of 3) compared to 57% of

Whites, 47% of Hispanics and 67% of African Americans. Research conducted in Hong Kong also showed a lower approval rating of spanking children under the age of 3 at 36% compared to a 55% approval rating for spanking 5 to 10 year olds; Samuda, 1988.

In contrast to those findings, this research revealed the highest approval ratings for physical discipline for the youngest group (Preschoolers aged 2-5). On the Perception of Physical Abuse (PPA) scale, all five ethnic groups cited the highest approval ratings of physical discipline strategies for the Preschool group, and at a significantly higher rate than for the approval for the Middle Childhood group (aged 6-10). Similarly, on the Parenting Strategies checklist, the Preschool group received a greater number of endorsements for physical discipline strategies than did the older groups, particularly more than for the Early Adolescent group (aged 11-14 years old). Participants' approval ratings for the physical discipline of Early Adolescents were significantly lower than for both of the younger groups. There were a number of problems with the PPA scale. First, it showed lower convergent validity than the other perception measures, as it failed to load in the measurement model when run as part of the three-factor factor analysis. Second, the items included at the three age levels were not completely balanced, as some questions were not included for the oldest age group (e.g., "Young children who hurt other children should be shown by their parents how much it hurts (e.g. if a child bites, a parent can bite their child to show them how much it hurts)."

The age trends in perceptions of emotional abuse were less clear. To the best of my knowledge, there is no published research on how perceptions of emotional abuse might differ by age to which the present findings can be compared. On the Likert-style scale, Perceptions of Emotional Abuse, the emotional discipline of the Preschool group

was considered the least acceptable. Rates of approval for the emotional discipline of the older groups were significantly higher. In contrast, the pattern of approval on the Parenting Strategies Checklist showed the highest number of emotionally abusive discipline strategies chosen for the Preschool group. The Preschool group and Middle Childhood group did not differ significantly. Significantly fewer emotional discipline strategies were chosen as appropriate for the Early Adolescence group.

Perhaps these different patterns can be explained by differences in measurement metrics. In the checklist, participants checked the items that they considered to be appropriate strategies. It could be that some strategies assessed would not be as efficient with older children (e.g., threatening to spank, calling a child lazy). In the Perceptions of Emotional Abuse, the Likert-style scale asked participants to rate the appropriateness of each strategy, so fewer strategies may have been dismissed or not considered.

The suggestion that *filial piety* would support a tendency to indulge younger children among Chinese populations (Bond, 1981) was not borne out by this research. In fact, Chinese-descent participants endorsed physical discipline at higher rates for preschoolers than for older children. This acceptance of greater physical and emotional discipline for Preschoolers appeared among all ethnic groups.

The goal of this research was not to provide a conclusive definition of physical or emotional abuse. The goal was to determine some of the factors that influence people's perceptions of what constitutes abusive behaviour. By designing a broad research plan which included a variety of potentially abusive behaviours and measuring them with multiple strategies (e.g., multiple measures and different types of measures), this research was able to tap into what underlies differences in perception. A personal history of

physical and emotional discipline appeared to be the strongest factor in explaining differences in perceptions of abuse. It explained over a third to nearly 60% of the variation that was seen in the samples assessed. Acculturation, length of time in North America, and *filial piety* explained only a small portion of the variance.

### *Participant-generated examples of abuse*

It has been suggested in previous research that the use of vignettes may not necessarily reflect real-world examples (Garbarino & Ebata, 1983) in that they are limited by what the researcher chooses to include. To ensure that this research did not miss assessing abusive behaviour that was not included in established measures, an open-ended question that allowed for lay conceptualization of child maltreatment was included (Korbin et al., 2000). The results of these open-ended questions proved to be less insightful than anticipated. First, the responses given by participants did not vary among the ethnic groups. Second, the measure did not show convergent validity with the other measures used, so was not included in the structural equation modeling analyses. Third, they did not provide many examples of abuse that were not in the other research measures included<sup>2</sup>. That result could be confirming that professional conceptualizations of abuse, as reflected in the research measures used in the final analyses, do overlap with lay definitions of child maltreatment. This dissertation confirms Korbin and colleagues' (2000) findings that there appears to be consensus about the basic categorization of abusive and neglectful behaviours.

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<sup>2</sup> One respondent claimed that giving a child a 'mullet' should be considered abusive. This can probably be considered a frivolous complaint, but it is also an example of cross-cultural definitional differences. In Canada, a mullet is more commonly known as a 'hockey hair do' (i.e., short in the front and long in the back).

### *Ethnic differences*

The results of this research indicate that emotional and physical abuse are not uniquely Western phenomena, but occur among Asian groups at levels even higher than seen among European-descent participants. Significant ethnic differences existed on almost every measure included in this research: *filial piety*, acculturation measures, generation level, history of physical abuse, history of emotional abuse, perception of video vignettes, Parenting Strategies Checklist, Likert-style attitude measures, and more.

By not merely looking at ethnic differences in perceptions of abuse, this research presented a new explanation for differences seen across ethnic groups. Chinese-descent participants were the most tolerant of physical discipline but they were also more likely to have experienced physical discipline. Despite the difference in the path regressions for the two samples, there was no interaction between ethnicity and the structural models proposed. Again, the multiple-group comparison suggested that the similarity in the relationship between history and perception was identical for Chinese-descent and European-descent participants.

The analyses of emotional abuse provided new insight into ethnic differences. Chinese-descent participants were the most tolerant of emotional discipline but they were also the most likely to have experienced this type of discipline. The symmetry of the emotional abuse models also suggested that if you were to pair Chinese-descent and European-descent participants by their levels of experienced abuse, they would assess emotional abuse at very similar levels. The research demonstrated that 52-54% of the variance in perception of emotional abuse was due to experience, so the ethnic differences seen on the perception variables may simply represent differences in



experience. There was no interaction between ethnicity and the models proposed, and the multiple-group comparison suggested that the similarity in the relationship between history and perception was identical for Chinese and European-descent participants.

### **Limitations of this study**

In addition to revealing some important findings, this research also has some noteworthy limitations. First, some of the measures included (e.g., Video vignettes, check lists, Perception of Emotional Abuse scale) are original measures created for this study. The reliability and validity of these measures should be confirmed by replication with another sample.

In addition to the measurement issue, the models presented in this study should be considered exploratory and further investigation is recommended with different ethnic groups. Replication with a non-student group, a group including a wider range of acculturation levels, and replication with parents would all be useful. Undergraduate students tend to be fairly high-coping individuals and must be reasonably fluent in English, so they represent a more restricted range of acculturation than would be available by assessing the general population.

The frequencies of child abuse may have been under-reported. Disclosing a history of being a victim of abuse may be subject to bias in self-report measures since people are being asked to disclose undesirable experiences. Although the confidential way in which the data were collected was intended to encourage full disclosure, this is a limitation of using self-report measures. Memory for child maltreatment is another factor that may reduce the levels of reported abuse. Research has shown that memories for

childhood abuse or traumatic events are not always consistent across time (Ghetti, Goodman, Eisen, Qin, & Davis, 2002; Porter, Yuille & Lehman, 1998; Williams, 1994). Future research might consider whether there are any reasons to suspect that under-reporting might vary by ethnicity. Previous research has suggested that cultural philosophies such as *familism* may discourage victims from disclosing negative information about their family (Cohen et al., 2001; Hahm & Guterman, 2001; C. K. Ho, 1990; Rao et al., 1992; Tang & Davis, 1996). Perhaps participants were reluctant to reveal any criminal activity, even if they were the victims.

Another limitation might be that the models explained a large part, but not all of the variance in participants' self-reported perceptions of abuse. History of abuse did, however, explain a very large portion of the variance seen. While Westernization did not significantly contribute to the variance, there might have been other individual characteristics that contributed to the unexplained variance. Perhaps different personality measures could be included in future research.

Another limitation might be the use of an indigenous Chinese measure. The Filial Piety Scale has little information published on its validity or reliability. Perhaps more information on this Chinese scale is available but not yet translated into English.

The weak chi-square results in these analyses need to be addressed. While chi-square has been the primary test used to assess model fit, it has fallen substantially out of favour in recent years (Harlowe, 2002). Leaders in the SEM field, such as Barbara Byrne (1994), warn of the over-sensitivity of the chi-squared test for larger samples (1994). All chi-square tests in this research met the rule of thumb that a  $\chi^2$  divided by its number of degrees of freedom must be less than 4 to justify continuing to consider other indices of

fit. That said, non-significant chi-square results would have been more desirable. The fact that some relationships that were expected to be seen, such as Westernization acting upon perceptions, may have also contributed to the high chi-square results. The fit might have been better if the variables included had actually predicted each other. It must be remembered that this study was conducted for the purposes of model development, in contrast to other SEM research projects that seek to fine-tune well-established models. This research was an initial exploration in a field bereft of models and was possibly the first true cross-cultural experiment on perceptions of abuse.

Finally, it is important to note that the structural equation models were essentially correlational models. Accordingly, even with strong fit indices and high levels of explained variance, other models could potentially also explain the data. The nature of correlational models is that changing the direction of paths may be possible without reducing the fit indices. Fortunately, alternative path directions are less plausible in these models since the target variable, attitudes toward abuse, could not influence whether participants experienced abusive behaviours in the past. Attitudes toward abuse could influence reporting of past abuse, but experience was assessed through multiple measures that did not require participants to identify that the behaviour they reported experiencing was abusive.

Despite the limitations inherent in structural equation modeling, the conservative approach to model development taken in this study helped address some of these weaknesses. The fact that the latent variables were confirmed with an independent sample, prior to being tested on two ethnically-different samples, greatly reduced the chances that the models were data driven.

### **Implications for intervention**

This research did make a substantial contribution to theoretical developments in the study of perceptions of abusive parenting practices. This investigation combined multiple factors to explain how people perceive abuse. The results indicated that this process was similar across at least two different ethnic groups. The successful multiple-group results represented initial attempts to confirm the similarity in perceiving abuse in cross-cultural comparisons. The models suggest a greater approval of physical and emotional discipline with an increased history of experiencing these parenting strategies.

These findings provided important information for the development of interventions aimed at preventing abuse. As previously mentioned, the use of physical discipline is the single biggest risk factor in physical abuse, yet it has been routinely ignored by researchers looking for ways to end physical abuse (Straus, 2000, 2001). This risk factor also appeared in Asian research, which revealed that physical abuse was often the result of socially-approved corporal punishment being applied with excessive force (Samuda, 1988). Understanding the relationship between having experienced physical discipline and the minimization of it as abusive should be incorporated into educational programs aimed at preventing physical abuse.

The higher levels of abuse reported by the Chinese-descent participants confirmed the concern mentioned in the introduction that ethnic minorities may be a particularly vulnerable group. Other researchers have warned that Chinese victims may have less social support to deal with victimization (Bond, 1991, Cohen et al., 2001). Cross-cultural research within North America has revealed that Asian family members are less supportive than Black, Hispanic or Caucasian families upon disclosure of abuse (Roa et

al., 1992). These researchers warned that Asian respondents were the least likely to believe the victims, report the abuse to authorities or participate in the treatment process. In the physical abuse scenario in this dissertation, Chinese-descent participants were the least likely to state that they would report this abuse to the authorities. Chinese-descent participants were also significantly less likely to identify the hit with a broom handle as physically abusive. Taken together, Chinese-descent participants reported the highest levels of physical abuse, identified abusive behaviour at the lowest levels, and were the least likely to recommend reporting the behaviour to authorities. These conclusions add to the concern expressed by previous researchers about the potential disclosure obstacles faced by Asians (Cohen et al., 2001; Hahn & Guterman, 2001; C. K. Ho, 1990; Rao et al., 1992; Tang & Davis, 1996).

While Westernization and the tenets of *filial piety* did not prove to be a significant predictor of perceptions of abuse, professionals charged with intervening in or educating about instances of physical abuse would be well served to understand more about indigenous psychological concepts like *filial piety*. For example, outreach workers interacting with Chinese-descent populations could benefit by learning that research in Asia has shown that Hong Kong parents use more discipline to retain their authority and to push their older children to succeed academically (Samuda, 1988; Tang, 1996).

Additionally, it is informative that the two European and Chinese descent groups did not simply differ in their perceptions of what constitutes abuse, but those participants covaried similarly with levels of physical discipline experienced. This finding may be encouraging for researchers seeking a consensual definition of abuse. Armed with the knowledge that personal experience of abuse is a critical part of what will be considered

culturally-specific acceptable forms of discipline, education programs designed to reduce the use of physical discipline can address that relationship directly. Researchers have been warning for twenty years now that it is incumbent upon professionals to reach new immigrants and to explain to them social expectations and Canadian laws pertaining to child discipline (Leung & Carter, 1983). While this dissertation demonstrated that ethnicity on its own was not a significant risk factor, immigrants coming from cultures with high tolerance for abusive parenting strategies should be the targets of education programs. Similarly, these research findings will be relevant to caseworkers themselves. People assessing child maltreatment can be sensitized to the fact that their personal experiences will affect what they consider to be abusive. Personal support for corporal punishment has been found to be a predictor for lower rates of reporting child maltreatment (Ashton, 2001).

### **Conclusion**

The results presented in this dissertation provided encouraging information for researchers who would like to create universal standards for childrearing practices (e.g., Korbin, 1991). They indicate that a personal history of abuse is strongly related to perceptions of abuse and that this relationship is consistent across different cultural groups. The fact that indigenous philosophies such as *filial piety* do not predict differences in perceptions of abuse between Asian and non-Asian groups, suggests that the fundamental difference of personal histories may be a universal cue in understanding perceptions.

## References

Acevedo, M. C. (2000). The role of acculturation in explaining ethnic differences in the prenatal health-risk behaviours, mental health, and parenting beliefs of Mexican American and European American at-risk women. Child Abuse & Neglect, 24, 111-127.

Ashton, V. (2001). The relationship between attitudes toward corporal punishment and the perception and reporting of child maltreatment. Child Abuse & Neglect, 25, 389-399.

Behl, L. E., Crouch, J. L., May, P. F., Valente, A. L., & Conyngham, H. A. (2001). Ethnicity in child maltreatment research: A content analysis. Child Maltreatment, 6, 143-147.

Bentler, P. M., & Wu, E. J. C. (1995). EQS for Windows User's Guide. Encino, CA: Multivariate Software, Inc.

Berger, A. M., Knutson, J. F., Mehm, J. G., & Perkins, K. A. (1988). The self-report of punitive childhood experiences of young adults and adolescents. Child Abuse & Neglect, 12, 251-262.

Berk, L. E. (2003). Child development: Canadian edition. Toronto: Pearson Education Canada.

Bond, M. H. (1991). Beyond the Chinese face: Insights from psychology. Hong Kong: Oxford University Press.

Bower, M. E., & Knutson, J. F. (1996). Attitudes toward physical discipline as a function of disciplinary history and self-labeling as physically abused. Child Abuse & Neglect, 20, 689-699.

Bower-Russa, M. E., & Knutson, J. F. (2001). Disciplinary history, adult disciplinary attitudes, and risk for abusive parenting. Journal of Community Psychology, 29, 219-240.

Brandon, P. R. (1991) Gender differences in young Asian Americans' educational attainments. Sex Roles, 25, 45-61.

Brassard, M. R., Hart, S. N., & Hardy, D. B. (1993). The psychological maltreatment rating scales. Child Abuse & Neglect, 17, 715-729.

Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. Child Abuse & Neglect, 12, 331-341.

Briere, J., & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. Child Abuse & Neglect, 14, 357-364.

Buntain-Ricklefs, J. J., Kemper, K. J., Bell, M., & Babonis, T. (1994). Punishments: What predicts adult approval. Child Abuse & Neglect, 18, 945-955.

Byrne, B. M. (1994). Structural equation modeling with EQS and EQS/Windows: Basic concepts, applications, and programming. Thousand Oaks, CA: Sage.

Catron, T. F., & Masters, J. C. (1993). Mothers' and children's conceptualizations of corporal punishment. Child Development, 64, 1815-1828.

Chan, Y. C. (1994). Parenting stress and social support of mothers who physically abuse their children in Hong Kong. Child Abuse & Neglect, 18, 261-269.

Cheung, G. W., & Rensvold, R. B. (2000). Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. Journal of Cross-Cultural Psychology, 31, 187-212.



Chilamkurti, C., & Milner, J. S. (1993). Perceptions and evaluations of child transgressions and disciplinary techniques in high- and low-risk mothers and their children. Child Development, 64, 1801-1814.

Claussen, A. H., & Crittenden, P. M. (1991). Physical and psychological maltreatment: Relations among types of maltreatment. Child Abuse & Neglect, 15, 5-18.

Cohen, J., Deblinger, E., Mannarino, A., & de Arellano, A. (2001). The importance of culture in treating abused and neglected children: An empirical review. Child Maltreatment, 6, 148-157.

D'Antonio, I. J., Darwish, A. M., & McLean, M. (1993). Child maltreatment: International perspectives. Maternal-Child Nursing Journal, 21, 39-52.

DasGupta, S. D., & Warriar, S. (1996). In the footsteps of 'Arundhati': Asian Indian women's experience of domestic violence in the United States. Violence Against Women, 2, 238-259.

Davis, P. W. (1996). Threats of corporal punishment as verbal aggression: A naturalistic study. Child Abuse & Neglect, 20, 289-304.

Dietz, T. L. (2000). Disciplining children: Characteristics associated with the use of corporal punishment. Child Abuse & Neglect, 24, 1529-1542.

Dubowitz, H., Klockner, A., Starr, R., & Black, M. (1998). Community and professional definitions of child neglect. Child Maltreatment, 3, 235-243.

Edleson, J. L. (1999). The overlap between child maltreatment and woman battering. Violence Against Women, 5, 134-154.

Field, A. (2000). Discovering statistics using SPSS for Windows. London: Sage.

Finkelhor, D., & Korbin, J. (1988). Child abuse as an international issue. Child Abuse & Neglect, 12, 2-23.

Fishbane, M. D. (1999). "Honor thy father and thy mother": Intergenerational spirituality and Jewish tradition. In F. Walsh (Ed.) Spiritual resources in family therapy (pp. 136-156). New York: Guilford Publications.

Garbarino, J., & Ebata, A. (1983). The significance of ethnic and cultural differences in child maltreatment. Journal of Marriage and the Family, 45, 773-783.

Ghetti, S., Goodman, G. S., Eisen, M. L., Qin, J., & Davis, S. L. (2002). Consistency in children's reports of sexual and physical abuse. Child Abuse & Neglect, 26, 977-995.

Giovannoni, J. M., & Becerra, R. M. (1979). Defining child abuse. New York: The Free Press.

Glachan, M. (1991). Child abuse: A social and cultural phenomenon. Early Child Development and Care, 74, 95-102.

Goodwin, R., & Tang, C. S.-K. (1996). Chinese personal relationships. In M. H. Bond (Ed.), The handbook of Chinese psychology. Hong Kong: Oxford University Press.

Gray, E., & Cosgrove, J. (1985). Ethnocentric perception of childrearing practices in protective services. Child Abuse & Neglect, 9, 389-396.

Gross, A. B., & Keller, H. R. (1992). Long-term consequences of childhood physical and psychological maltreatment. Aggressive Behavior, 18, 171-185.

Hahm, H. C., & Guterman, N. B. (2001). The emerging problem of physical child abuse in South Korea. Child Maltreatment, 6, 169-179.

Hampton, R. L., & Newberger, E. H. (1985) Child abuse incidence and reporting by hospitals: Significance of severity, class and race. American Journal of Public Health, 75, 56-60.

Harlowe, L. L. (2002, June). Structural equation modeling. Symposium conducted at the York University Summer Program in Data Analysis, Toronto, Ontario, Canada.

Hart, S. N., & Brassard, M. R. (1987). A major threat to children's mental health: Psychological maltreatment. American Psychologist, 42, 160-165.

Hemenway, D., Solnick, S., & Carter, J. (1994). Child-rearing violence. Child Abuse & Neglect, 18, 1011-1020.

Hesketh, T., Hong, Z. S., & Lynch, M. A. (2000). Child abuse in China: The views and experiences of child health professionals. Child Abuse & Neglect, 24, 867-872.

Ho, C. K. (1990). An analysis of domestic violence in Asian American communities: A multicultural approach to counseling. Women and Therapy, 9, 129-150.

Ho, D. Y. F. (1994). Filial piety, authoritarian moralism, and cognitive conservatism in Chinese societies. Genetic, Social, and General Psychology Monographs, 120, 347-365.

Ho, D. Y. F., & Lee, L. Y. (1974). Authoritarianism and attitudes toward filial piety in Chinese teachers. The Journal of Social Psychology, 92, 305-306.

Ho, T. P., & Kwok, W. M. (1991). Child sexual abuse in Hong Kong. Child Abuse & Neglect, 15, 597-600.

Hoglund, C. L., & Nicholas, K. B. (1995). Shame, guilt, and anger in college students exposed to abusive family environments. Journal of Family Violence, 10, 141-157.

Hong, G. K., & Hong, L. K. (1991). Comparative perspectives on child abuse and neglect: Chinese versus Hispanics and Whites. Child Welfare, 70, 463-475.

Ima, K., & Hohm, C. F. (1991). Child maltreatment among Asian and Pacific Islander refugees and immigrants: The San Diego case. Journal of Interpersonal Violence, 6, 267-285.

Kennedy, M. A., & Gorzalka, B. B. (1999, July). Ethnic differences in self reported rates of childhood abuse and trauma. Poster session presented at the joint meeting of the American Psychology-Law Society and European Association of Psychology and Law, Dublin, Ireland.

Kennedy, M. A., & Gorzalka, B. B. (2002). Asian and non-Asian attitudes toward rape, sexual harassment and sexuality. Sex Roles, 46 (7-8), 227-238.

Kennedy, M. A., Samra, J., & Gorzalka, B. B. (2002, August). Child abuse and trauma scale: Normative data for diverse ethnic groups. Paper presented at Victimization of Children & Youth: An International Conference, Portsmouth, New Hampshire.

Kent, A., & Waller, G. (1998). The impact of childhood emotional abuse: An extension of the child abuse and trauma scale. Child Abuse & Neglect, 22, 393-399.

Kim, E. J., O'Neil, J. M., & Owen, S. V. (1996). Asian-American men's acculturation and gender-role conflict. Psychological Reports, 79, 95-104.

Kim, J. M. (1995). Patriarchal discourse and female oppression. Asian Women, 1, 163-181.

- Kim, D. H., Kim, K. I., Park, Y. C., Zhang, L. D., Lu, M. K., & Li, D. (2000). Children's experience of violence in China and Korea: A transcultural study. Child Abuse & Neglect, 24, 1163-1173.
- Kim, K.-I., & Ko, B. (1990). An incidence survey of battered children in two elementary schools of Seoul. Child Abuse & Neglect, 14, 273-276.
- Klein, R. B. (1998). Principles and practices of Structural Equation Modeling. New York: Guilford Press.
- Kolko, D. J. (2002). Child physical abuse. In J. E. B. Myers, L. Berliner, J. Briere, C. T. Hendrix, C. Jenny, & T. A. Reid (Eds.), The APSAC handbook on child maltreatment (2<sup>nd</sup> ed.) (pp.21-54). Thousand Oaks, CA: Sage.
- Korbin, J. E. (1981). Introduction. In J. E. Korbin (Ed.), Child abuse and neglect (pp. 1-12). Berkeley: University of California Press.
- Korbin, J. E. (1991). Cross-cultural perspectives and research directions for the 21st century. Child Abuse & Neglect, 15, 67-77.
- Korbin, J. E., Coulton, C. J., Lindstrom-Ufuti, H., & Spilsbury, J. (2000). Neighborhood views on the definition and etiology of child maltreatment. Child Abuse & Neglect, 24, 1509-1527.
- Lau, I. K. C., & Davies, D. P. (1993). Non-accidental injury to children in Hong Kong: A 3-year hospital experience. Child Abuse & Neglect, 17, 423-428.
- Leung, J. P. (1998). Emotions and mental health in Chinese people. Journal of Child and Family Studies, 7, 115-128.

Leung, S. M. R., & Carter, J. E. (1983). Cross cultural study of child abuse among Chinese, Native Indians and Anglo-Canadian children. Journal of Psychiatric Treatment and Evaluation, *5*, 37-44.

Lieh-Mak, F., Chung, S. Y., & Liu, Y. W. (1983). Characteristics of child battering in Hong Kong: A controlled study. British Journal of Psychiatry, *142*, 89-94.

Little, T. D. (2000). On the comparability of constructs in cross-cultural research: A critique of Cheung and Rensvold. Journal of Cross-Cultural Psychology, *31*, 213-219.

Liu, J. H., Ng, S. H., Weatherall, A., & Loong, C. (2000). Filial piety, acculturation, and intergenerational communication among New Zealand Chinese. Basic and Applied Social Psychology, *22*, 213-223.

Lu, L., & Lin, Y. Y. (1998). Family roles and happiness in adulthood. Personality and Individual Differences, *25*, 195-207.

McCrae, R. R., Yik, M. S. M., Trapnell, P. D., Bond, M. H., & Paulhus, D. L. (1998). Interpreting personality profiles across cultures: Bilingual, acculturation, and peer rating studies of Chinese undergraduates. Journal of Personality and Social Psychology, *71*, 1041-1055.

McKelvey, R. S., & Webb, J. A. (1995). A pilot study of abuse among Vietnamese Amerasians. Child Abuse & Neglect, *19*, 545-553.

Meston, C. M., Trapnell, P. D., & Gorzalka, B. B. (1996). Ethnic and gender differences in sexuality: Variations in sexual behavior between Asian and non-Asian university students. Archives of Sexual Behavior, *25*, 33-72.

Meston, C. M., Trapnell, P. D., & Gorzalka, B. B. (1998). Ethnic, gender and length of residency influences on sexual knowledge and attitudes. Journal of Sex Research, 35, 176-188.

Mullen, P. E., Martin, J. L., Anderson, S. E., Romans, S. E., & Herbison, G. P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: A community study. Child Abuse & Neglect, 20, 7-21.

Nicholas, K. B., & Bieber, S. L. (1994). Perceptions of mothers' and fathers' abusive and supportive behaviours. Child Abuse & Neglect, 18, 167-178.

O'Hagan, K. P. (1995). Emotional and psychological abuse: Problems of definition. Child Abuse & Neglect, 19, 449-461.

Park, S. E., & Harrison, A. A. (1995). Career-related interests and values, perceived control, and acculturation of Asian-American and Caucasian-American college students. Journal of Applied Social Psychology, 25, 1184-1203.

Perez, C. M., & Widom, C. S. (1994). Childhood victimization and long-term intellectual and academic outcomes. Child Abuse & Neglect, 18, 617-633.

Porter, S., Yuille, J. C., & Lehman, D. R. (1999). The nature of real, implanted, and fabricated memories for emotional childhood events: Implications for the recovered memory debate. Law and Human Behavior, 23 (5), 517-537.

Portwood, S. G. (1998). The impact of individuals' characteristics and experiences on their definitions of maltreatment. Child Abuse & Neglect, 22, 437-452.

Portwood, S. G. (1999). Coming to terms with a consensual definition of child maltreatment. Child Maltreatment, 4, 56-68.

Rao, K., DiClemente, R. J., & Ponton, L. E. (1992). Child sexual abuse of Asians compared with other populations. Journal of the American Academy of Child and Adolescent Psychiatry, 31, 880-886.

Roer-Strier, D. (2001). Reducing risk for children in changing cultural contexts: Recommendations for intervention and training. Child Abuse & Neglect, 25, 231-248.

Rosenberg, M. S. (1987). New directions for research on psychological maltreatment of children. American Psychologist, 42, 166-171.

Rubin, G. B. (1992). Multicultural considerations in the application of child protection laws. Journal of Social Distress and the Homeless, 1, 249-271.

Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. Journal of Personality and Social Psychology, 79, 49-65.

Samuda, G. M. (1988). Child discipline and abuse in Hong Kong. Child Abuse & Neglect, 12, 283-287.

Sanders, B., & Becker-Laussen, E. (1995). The measurement of psychological maltreatment: Early data on the child abuse and trauma scale. Child Abuse & Neglect, 19, 315-323.

Shek, D. T. L. (1989). Perceptions of parental treatment styles and psychological well-being in Chinese adolescents. Journal of Genetic Psychology, 150, 403-415.

Shek, D. T. L. (1993). Perceptions of parental treatment styles and psychological well-being of Chinese college students. Psychologia, 36, 159-166.



Staples, R., & Mirande, A. (1980). Racial and cultural variations among American families: A decennial review of the literature on minority families. Journal of Marriage and the Family, 42, 887-903.

Statistics Canada (1993). Canada year book 1994. Ottawa: Industry, Science and Technology Canada.

Straus, M. A. (2000). Corporal punishment and primary prevention of physical abuse. Child Abuse & Neglect, 24, 1109-1114.

Straus, M. A. (2001). Beating the devil out of them: Corporal punishment in American families and its effect on children (2<sup>nd</sup> ed.). New Brunswick, NJ: Transaction Publishers.

Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (2000). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. Child Abuse & Neglect, 22, 249-270.

Tang, C. S.-K. (1996). Adolescent abuse in Hong Kong Chinese families. Child Abuse & Neglect, 20, 873-878.

Tang, C. S. K. (1998). The rate of physical child abuse in Chinese families: A community survey in Hong Kong. Child Abuse & Neglect, 22, 381-391.

Tang, C. S.-K., & Davis, C. (1996). Child abuse in Hong Kong revisited after 15 years: Characteristics of victims and abusers. Child Abuse & Neglect, 20, 1213-1218.

Terao, S. Y., Borrego, J., Jr., & Urquiza, A. J. (2001). A reporting and response model for culture and child maltreatment. Child Maltreatment, 6, 158-168.

Thakkar, R. R., Gutierrez, P. M., Kuczen, C. L., & McCanne, T. R. (2000). History of physical and/or sexual abuse in current suicidality in college women. Child Abuse & Neglect, 24, 1345-1354.

Trocme, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.

United States Department of Commerce (1996). Statistical abstract of the United States: The national data book (116<sup>th</sup> ed.). Washington: Department of Commerce.

Vissing, Y. M., Straus, M. A., Gelles, R. J., & Harrop, J. W. (1991). Verbal aggression by parents and psychosocial problems of children. Child Abuse & Neglect, 15, 223-238.

Wan, F., & Salili, F. (1996). Perceived effectiveness of reward and punishment strategies by Hong Kong secondary school students. Psychologia, 39, 261-275.

Williams, L. M. (1994). Recall of childhood trauma: A prospective study of women's memories of child sexual abuse. Journal of Consulting and Clinical Psychology, 62, 1167-1176

Wissow, L. S. (2001). Ethnicity, income, and parenting contexts of physical punishment in a national sample of families with young children. Child Maltreatment, 6, 118-129.

Wu, D. Y. H. (1981). Child abuse in Taiwan. In J. E. Korbin (Ed.), Child abuse & Neglect (pp. 139-165). Berkeley: University of California Press.

Zaidi, L. Y., Knutson, J. F., & Mehm, J. G. (1989). Transgenerational patterns of abusive parenting: Analog and clinical tests. Aggressive Behavior, 15, 137-152.

Zhang, J., & Bond, M. H. (1998). Personality and filial piety among college students in two Chinese societies. Journal of Cross-Cultural Psychology, 29, 402-417.

## Appendix 1. Physical abuse video script

### Script 1 – Kitchen Scene (Physical Abuse)

Scene: Mother & daughter are finishing up dinner at the kitchen table. Neither is talking. Mom gets up and clears her plate to the kitchen.

Mother: If you're going to eat, eat. Otherwise get upstairs and do your homework.

Daughter: I'm still eating.

Mother: You're picking

Daughter pushes food around plate, not eating any, mother continues to wipe table, straighten things.

M: Put that in the kitchen and go do your homework.

D: (daughter silently mocks her mother by mouthing her mother's last words. Her mother catches her and gives her a dirty look). I'm still eating.

M: No you're not, you're playing with your food like a little kid.

D: Loud sigh

M: Go upstairs and start your homework.

D: I finished my homework already.

Mother wipes table.

M: Oh really. And when did you do it, while you were watching TV or talking nonsense on the phone?

D: I did it at school.

M: Don't lie to me. Homework is work you take home.

Do you think I'm an idiot. You need to study. I know you have a test coming up.

D: I'm ready for it, and it's no big deal.

M: It's no big deal? That's just great. Maybe if you thought your school work was a bigger deal, you'd be getting decent grades.

D: What are you talking about? I got an A in English.

M: You barely got a C in math.

D: Why do you always bring that up? So I got a C. Big deal. It's a stupid class anyway.

M: Math is essential. You need math for most jobs now. Don't you care about your future?

D: I hate math.

M: That doesn't mean you get to ignore it.

D: Math is stupid and my teacher is stupid.

M: Well, he's smart enough to pass math.

D: He is stupid! Everyone says he's stupid, not just me.

M: Everyone who's failing math you mean.

D: I'm not failing math!

M: It's time to go do your homework.

D: I can't do homework I don't have.

M: Fine! You don't have homework? Then get up there and study.

D: I don't need to.

M: You have a test coming up.

D: So? I don't need to study for it.

M: You stop bringing home Cs and then you can tell me how little you need to study. Now get upstairs.

D: No. I said I don't need to.

M: What is the matter with you? I said go up and study. Now get up off of that chair, put your plate in the kitchen and go up to your room!

D: No, I'm not going to and you can't make me.

M: I am your mother and you WILL do what I tell you.

D: Why do you get to make all the rules. It's not fair.

M: I get to make the rules because I'm your parent. As for it not being fair, get used to it. Life's not fair. You think it's fair that I have such a difficult daughter?

D: I didn't ask to be your daughter! I hate you! I wish I WEREN'T your daughter. I wish you weren't my mother!

M: Don't you dare talk to me like that. I'm your mother whether you like it or it not and you're going to do what I tell you. Get upstairs NOW!

Mother approaches daughter, with broom in hand, she is getting really angry.

D: No. I'm sick of you bossing me around all the time. I'm not going!

M: Get up right now.

Daughter doesn't move. Mother is clenching broom.

M: Right NOW.

D: You're as stupid as my math teacher.

Mother takes a swing at daughter with broom. Daughter holds hand to side of her face.

D: Oww, you hit me! You hit me! I can't believe you did that. You can't do that. I have rights you know...

END OF SCENE

## Appendix 2. Emotional abuse video script

### Script 2 – Living Room Scene (Emotional Abuse)

Mother is sitting on the couch, reading a magazine. Daughter enters room and looks at mother.

Daughter: Hi Mom.

Mother glances at daughter and grunts a little.

Daughter sits down and watches her mother for a minute working up nerve to ask a question.

D: Hey, Mom, you know that new book I asked you about?

M: Mmmhmm

D: Well, did you decide if I can have it yet?

Mom: I don't think so.

D: Why not?

M: Because you've had a bad attitude lately and I don't think you deserve it right now.

D: But mom, I've did all the things you asked this week.

M: I don't know what THINGS you're talking about. Your room is always a mess and you just laze around the house; you never help me.

D: That's not true.

M: It is true. You're turning into a selfish girl and I think it's because you're spoiled. Maybe if you don't get every little thing you ask for, you'll be more considerate of others.

D: You never let me have anything!

M: See? That's what I mean. You're totally ungrateful. You only think about yourself. You have to learn to think about others.

D: I do.

M: No you don't. You come in here and interrupt my reading, and when you don't get what you want you complain.

You're a stupid, selfish brat!

D: I can't believe my own mother is saying stuff like that.

M: I can't believe my own daughter is so disrespectful. You let your family down by talking to me in that tone. You're a disgrace and I'm ashamed to be your mother.  
Daughter is shocked, she says quietly but very angrily...

D: You're unbelievable.

M: What did you just say! Don't you use that tone with me, who do you think you're talking to? You never show me the respect I deserve. Is this what they teach you at school. To treat your parents with such disrespect?

D: They teach us to think for ourselves.

M: Oh, you're SO smart... What could you know at your age? I know what's best for you. That's my job. You don't know anything; you're just a kid. A selfish and stupid kid. Why do you always argue with everything I say?

Daughter sits there glaring at her mother. There is a pause in the tirade.

M: You don't need any more stuff, you don't take care of what you already have. You left your bike outside last week in the rain.

We have rules around here, young lady, and you're need to learn to follow them. The first rule is that you take care of your own stuff! If you can't do that then you're not responsible enough to have new things.

D: It's just a book!

M: Books cost money. You don't appreciate the value of anything.

D: Most parents WANT their kids to read

M: You want to read? Go to the library. That book sounds like trash anyway. You're not getting it so just drop it.

Daughter just stares at mom, looking upset.

M: Now leave me alone. Is two minutes peace and quiet too much to ask for around here?  
Mother goes back reading magazine. Daughter leaves room.

END OF SCENE



## VIDEO

*Please circle the response that indicates how much you agree or disagree with the following statements:*

1	2	3	4	5
strongly agree (YES)	agree	neither agree nor disagree	disagree	strongly disagree (NO)

### THE KITCHEN SCENE (EATING DINNER)

1. Do you think that this mother and daughter love each other?	SA	A	N	D	SD
2. Was this interaction typical of most families?	SA	A	N	D	SD
3. Was the daughter misbehaving?	SA	A	N	D	SD
4. Was the daughter rude or disrespectful to her mother?	SA	A	N	D	SD
5. Do you think the daughter deserved to be disciplined?	SA	A	N	D	SD
6. Was the mother justified in speaking that way to her daughter?	SA	A	N	D	SD
7. Was the mother justified in hitting her daughter?	SA	A	N	D	SD
8. Do you think the daughter suffered physical injury?	SA	A	N	D	SD
9. Do you think the daughter suffered emotional injury?	SA	A	N	D	SD
10. Was this physical abuse?	SA	A	N	D	SD
11. Was this emotional abuse?	SA	A	N	D	SD
12. Did this constitute parental neglect?	SA	A	N	D	SD
13. Should the daughter report her mother's behavior to the authorities?	SA	A	N	D	SD
14. If you saw this happen would you report it to authorities?	SA	A	N	D	SD
15. If this happened to you, would you report it to the authorities?	SA	A	N	D	SD

### THE LIVING ROOM SCENE (READING)

1. Do you think that this mother and daughter love each other?	SA	A	N	D	SD
2. Was this interaction typical of most families?	SA	A	N	D	SD
3. Was the daughter misbehaving?	SA	A	N	D	SD
4. Was the daughter rude or disrespectful to her mother?	SA	A	N	D	SD
5. Was the mother justified in speaking that way to her daughter?	SA	A	N	D	SD
6. Do you think the daughter deserved to be disciplined?	SA	A	N	D	SD
7. Was the mother rude or disrespectful to her daughter?	SA	A	N	D	SD
8. Do you think the daughter suffered emotional injury?	SA	A	N	D	SD
9. Was this physical abuse?	SA	A	N	D	SD
10. Was this emotional abuse?	SA	A	N	D	SD
11. Was this parental neglect?	SA	A	N	D	SD
12. Should the daughter report her mother's behavior to the authorities?	SA	A	N	D	SD
13. If you saw this happen would you report it to authorities?	SA	A	N	D	SD
14. If this happened to you, would you report it to the authorities?	SA	A	N	D	SD

# DEMOGRAPHICS

1. How old are you? \_\_\_\_\_ years
2. What is your sex? \_\_\_\_\_ female \_\_\_\_\_ male
3. Country of Birth:
  - A) You? \_\_\_\_\_
  - B) Your father? \_\_\_\_\_
  - C) Your mother? \_\_\_\_\_
4. A) For how many years have you lived in a Western, English-speaking country (i.e., Canada or U.S.)?
   
\_\_\_\_\_ All my life
   
\_\_\_\_\_ Other (please specify): \_\_\_\_\_ years in a Western, English-speaking country
   
B) If you were not born in Canada, at what age did you move to Canada or the U.S.? \_\_\_\_\_ years
   
C) If you were born in Canada, what generation Canadian do you consider yourself to be? (e.g. 1<sup>st</sup>, 2<sup>nd</sup>) \_\_\_\_\_
5. What was the first language that you learned? \_\_\_\_\_
6. Which language do you speak best?
   
\_\_\_\_\_ English
   
\_\_\_\_\_ Other (please specify): \_\_\_\_\_
7. How often do you speak a language other than English at home? (*circle one*)
   

1	2	3	4	5
Never	Once in a while	Sometimes	More than ½ the time	All of the time
8. How many years of education have you completed? (Note: Completion of grade 1 = "1 year"; Completion of grade 12 = "12 years"). I have completed \_\_\_\_\_ years.
9. For how many years have you been educated in a Western, English-speaking country (i.e., Canada, U.S.)?
   
\_\_\_\_\_ All my years of education have been in a Western, English-speaking country
   
\_\_\_\_\_ Other (please specify): \_\_\_\_\_ years in a Western, English-speaking country.
10. Canadians belong to many ethnic or cultural groups such as Aboriginal/First Nations, French, Chinese, Irish or East Indian. To which ethnic or cultural group(s) do you belong? (If necessary, circle more than one answer).
 

1. Aboriginal/First Nations	8. German	15. Korean
2. British	9. Greek	16. Persian
3. Chinese	10. Hispanic	17. Polish
4. Dutch	11. Irish	18. Portuguese
5. East Indian	12. Italian	19. Scottish
6. Filipino	13. Japanese	20. Ukrainian
7. French	14. Jewish	21. Vietnamese
22. Other ethnic group (please specify): _____		
11. To which ethnic or cultural group(s) does your mother belong? (If necessary, circle more than one answer).
 

1. Aboriginal/First Nations	8. German	15. Korean
2. British	9. Greek	16. Persian
3. Chinese	10. Hispanic	17. Polish
4. Dutch	11. Irish	18. Portuguese
5. East Indian	12. Italian	19. Scottish
6. Filipino	13. Japanese	20. Ukrainian
7. French	14. Jewish	21. Vietnamese
22. Other ethnic group (please specify): _____		

12. To which ethnic or cultural group(s) does your **father** belong? (If necessary, circle more than one answer).

- |  |              |                |
|--|--------------|----------------|
| 1. Aboriginal/First Nations                    | 8. German    | 15. Korean     |
| 2. British                                     | 9. Greek     | 16. Persian    |
| 3. Chinese                                     | 10. Hispanic | 17. Polish     |
| 4. Dutch                                       | 11. Irish    | 18. Portuguese |
| 5. East Indian                                 | 12. Italian  | 19. Scottish   |
| 6. Filipino                                    | 13. Japanese | 20. Ukrainian  |
| 7. French                                      | 14. Jewish   | 21. Vietnamese |
| 22. Other ethnic group (please specify): _____ |              |                |

13. What religion do you belong to?

- |             |              |             |                                   |
|-------------|--------------|-------------|-----------------------------------|
| 1. None     | 4. Catholic  | 7. Islamic  | 10. Protestant                    |
| 2. Anglican | 5. Christian | 8. Jewish   | 11. Sikh                          |
| 3. Buddhist | 6. Hindu     | 9. Lutheran | 12. Other (please specify): _____ |

14. Do you think of yourself as a religious or spiritual person? (*circle one*)

- |                   |                 |             |                    |                     |
|-------------------|-----------------|-------------|--------------------|---------------------|
| <b>1</b>          | <b>2</b>        | <b>3</b>    | <b>4</b>           | <b>5</b>            |
| <i>Not at all</i> | <i>A little</i> | <i>Some</i> | <i>Quite a bit</i> | <i>Very much so</i> |

15. While growing up, your family's household income was approximately which amount, in today's dollars? (*mark one*)

\_\_\_\_ < \$30,000    \_\_\_\_ \$30,000 – \$50,000    \_\_\_\_ \$50,000 – \$70,000    \_\_\_\_ \$70,000 – \$90,000    \_\_\_\_ > \$90,000

#### PDA

*Please name three things that you would consider to be child abuse and neglect.*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

*Please circle the response that indicates how much you think the following things contribute to child abuse and neglect:*

	1	2	3	4	5	6	7	8	9	10			
CONTRIBUTES NOTHING				CONTRIBUTES A LOT									
1.	Unemployment			1	2	3	4	5	6	7	8	9	10
2.	Stress			1	2	3	4	5	6	7	8	9	10
3.	Single Parents			1	2	3	4	5	6	7	8	9	10
4.	Poverty			1	2	3	4	5	6	7	8	9	10
5.	Psychological Problems			1	2	3	4	5	6	7	8	9	10
6.	Divorce			1	2	3	4	5	6	7	8	9	10
7.	Knowledge Deficits			1	2	3	4	5	6	7	8	9	10
8.	Lack of Family Values			1	2	3	4	5	6	7	8	9	10
9.	Drugs			1	2	3	4	5	6	7	8	9	10
10.	Alcohol			1	2	3	4	5	6	7	8	9	10
11.	Lack of Religion			1	2	3	4	5	6	7	8	9	10
12.	Teen Parents			1	2	3	4	5	6	7	8	9	10
13.	Childhood Abuse Experienced by Parents			1	2	3	4	5	6	7	8	9	10

**PMA**

*Please circle the response that indicates how much you agree or disagree with the following statements:*

	SA strongly agree	A agree	N neither agree nor disagree	D disagree	SD strongly disagree
1. Sometimes troublesome children (2-5 years old) can be quieted by ridiculing or making fun of their behaviour in front of other children.	SA	A	N	D	SD
2. Sometimes troublesome children (6-10 years old) can be quieted by ridiculing or making fun of their behaviour in front of other children.	SA	A	N	D	SD
3. Sometimes parents ridicule or make fun of their children (11-14 years old).	SA	A	N	D	SD
4. Children (2-5 years old) can often behave so badly that their parents are justified when insulting or calling them names.	SA	A	N	D	SD
5. Children (6-10 years old) can often behave so badly that their parents are justified when insulting or calling them names.	SA	A	N	D	SD
6. Sometimes parents insult or call their children (11-14 years old) names.	SA	A	N	D	SD
7. Occasionally parents dislike their young children (2-5 years old).	SA	A	N	D	SD
8. Occasionally parents dislike their children (6-10 years old).	SA	A	N	D	SD
9. It is common that parents dislike their children (11-14 years old).	SA	A	N	D	SD
10. Children must learn that parents have a right to verbally lash out at them, even if the children feel they do not deserve it.	SA	A	N	D	SD
11. Children get blamed for things that they didn't actually do.	SA	A	N	D	SD
12. All parents yell at their young children (2-5 years old) in anger.	SA	A	N	D	SD
13. All parents yell at their children (6-10 years old) in anger.	SA	A	N	D	SD
14. All parents yell at their children (11-14 years old) in anger.	SA	A	N	D	SD
15. Childhood is stressful for young children (2-5 years old).	SA	A	N	D	SD
16. Childhood is stressful for most children (6-10 years old).	SA	A	N	D	SD
17. Childhood is stressful for most children (11-14 years old).	SA	A	N	D	SD
18. Children who are yelled at when they are little (2-5 years old) frequently suffer from lower self esteem.	SA	A	N	D	SD
19. Children (6-10 years old) who are yelled at frequently suffer from lower self esteem.	SA	A	N	D	SD
20. Children (11-14 years old) who are yelled at frequently suffer from lower self esteem.	SA	A	N	D	SD
21. Children who are called names or insulted by their parents (e.g., "You're so lazy") when they are little (2-5 years old) suffer lasting scars or damage.	SA	A	N	D	SD
22. Children (6-10 years old) who are called names or insulted by their parents (e.g., "You're so lazy") suffer lasting scars or damage.	SA	A	N	D	SD
23. Children (11-14 years old) who are called names or insulted by their parents (e.g., "You're so lazy") suffer lasting scars or damage.	SA	A	N	D	SD

# PPA

Please circle on your answer sheet the response that indicates how often the following punishment is appropriate:

	0 never	1 rarely	2 occasionally	3 often	4 all the time
1. The best way to raise children is to establish a strict code of behaviour for the home.	0	1	2	3	4
2. Children (2-5 years old) who don't follow the rules of the house should be severely punished.	0	1	2	3	4
3. Children (6-10 years old) who don't follow the rules of the house should be severely punished.	0	1	2	3	4
4. Children (11-14 years old) who don't follow the rules of the house should be severely punished.	0	1	2	3	4
5. Most young children (2-5 years old) feel that "the punishment fits the crime" when they are disciplined.	0	1	2	3	4
6. Most children (6-10 years old) feel that "the punishment fits the crime" when they are disciplined.	0	1	2	3	4
7. Most children (11-14 years old) feel that "the punishment fits the crime" when they are disciplined.	0	1	2	3	4
8. Most young children (2-5 years old) will understand the reason why they are being punished.	0	1	2	3	4
9. Most children (6-10 years old) will understand the reason why they are being punished.	0	1	2	3	4
10. Most children (11-14 years old) will understand the reason why they are being punished.	0	1	2	3	4
11. Most young children (2-5 years old) will feel the punishment was deserved when they have been punished.	0	1	2	3	4
12. Most children (6-10 years old) will feel the punishment was deserved when they have been punished.	0	1	2	3	4
13. Most children (11-14 years old) will feel the punishment was deserved when they have been punished.	0	1	2	3	4
14. Most young children (2-5 years old) get hit or spanked unexpectedly.	0	1	2	3	4
15. Most children (6-10 years old) get hit or spanked unexpectedly.	0	1	2	3	4
16. Most young children (11-14 years old) get hit or spanked unexpectedly.	0	1	2	3	4
17. Children (2-5 years old) who misbehave should be sent to bed without dinner.	0	1	2	3	4
18. Children (6-10 years old) who misbehave should be sent to bed without dinner.	0	1	2	3	4
19. Children (11-14 years old) who misbehave should be sent to bed without dinner.	0	1	2	3	4
20. Young children (2-5 years old) who hurt other children should be shown by their parents how much it hurts (e.g. if a child bites, a parent can bite their child to show them how much it hurts).	0	1	2	3	4
21. Children (6-10 years old) who hurt other children should be shown by their parents how much it hurts (e.g. if a child bites, a parent can bite their child to show them how much it hurts).	0	1	2	3	4

**PPA (continued)**

*Please circle on your answer sheet the response that indicates how often the following punishment is appropriate:*

	0	1	2	3	4
	never	rarely	occasionally	often	all the time
22. Young children (2-5 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0	1	2	3	4
23. Children (6-10 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0	1	2	3	4
24. Children (11-14 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0	1	2	3	4
25. Young children (2-5 years old) who misbehave can be threatened with physical violence (e.g. "If you don't stop that, you are going to get a spanking.")	0	1	2	3	4
26. Children (6-10 years old) who talk back to their parents can be threatened with physical violence (e.g. "If you ever talk to me that way again, I'll smack that smile right off your face.")	0	1	2	3	4
27. Children (11-14 years old) who talk back to their parents can be threatened with physical violence (e.g. "If you ever talk to me that way again, I'll smack that smile right off your face.")	0	1	2	3	4
28. Young children (2-5 years old) who misbehave should be taught how to behave without any physical punishment.	0	1	2	3	4
29. Children (6-10 years old) who misbehave should be taught how to behave without any physical punishment.	0	1	2	3	4
30. Some unruly young children (2-5 years old) will only respond to unusual punishments (e.g. being locked in a closet for a long time or being tied up).	0	1	2	3	4
31. Some wild children (6-10 years old) will only respond to unusual punishments (e.g. being locked in a closet for a long time or being tied up).	0	1	2	3	4

**ASE**

*Please circle the response that indicates how much you agree or disagree with the following statements:*

	SA	A	N	D	SD
	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
1. I am satisfied with my grade point average.	SA	A	N	D	SD
2. I am not happy about my achievement at school.	SA	A	N	D	SD
3. I think that I am capable of improving my marks.	SA	A	N	D	SD
4. I don't think that I am able to raise my grade point average.	SA	A	N	D	SD
5. My marks depend on how much effort I put into school work.	SA	A	N	D	SD
6. My marks depend on how much time I have to devote to school.	SA	A	N	D	SD
7. I could do better in school if I tried harder.	SA	A	N	D	SD
8. If I didn't have other commitments, I could do better in school.	SA	A	N	D	SD
9. Compared to others I know, I'm doing well academically.	SA	A	N	D	SD

**ASE (continued)**

	SA strongly agree	A agree	N neither agree nor disagree	D disagree	SD strongly disagree
10. In comparison to other people, my grades are not very good.				SA	A N D SD
11. Many times exam questions tend to be so unrelated to course work that studying is really useless.				SA	A N D SD
12. Being a success at school is a matter of hard work, and luck has little or nothing to do with it.				SA	A N D SD
<b>In terms of my academic achievement, my family (in general) <u>thinks</u> that:</b>					
13. I am successful				SA	A N D SD
14. I am not doing well				SA	A N D SD
15. My school performance is extremely important				SA	A N D SD
16. How I do in school is of little significance				SA	A N D SD
17. I have lived up to their expectations				SA	A N D SD
<b>In terms of my academic achievement, my family (in general) <u>thinks</u> that:</b>					
18. I have not attained the standing that they had expected				SA	A N D SD
19. Getting a university degree is very important				SA	A N D SD
20. Attending university is a waste of my time				SA	A N D SD
<b>In terms of my academic achievement, my family (in general) <u>feels</u>:</b>					
21. Proud of me				SA	A N D SD
22. Disappointed in me				SA	A N D SD
23. Like they have failed as parents				SA	A N D SD
24. As though they have done everything that they could have done to enable my success				SA	A N D SD

**VIA**

Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than North American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you **most** (e.g., Irish, Chinese, Mexican, Black). If you do not feel that you have been influenced by any other culture, please try to identify a culture that may have had an impact on previous generations of your family.

**\*First, Please write your heritage culture on the space provided.**

Now, please circle the response that indicates how much you disagree or agree with the following statements:

	1 DISAGREE	2	3	4	5	6	7	8	9 AGREE
1. I often participate in my <i>heritage</i> cultural traditions.							1	2	3 4 5 6 7 8 9
2. I often participate in mainstream North American cultural traditions.							1	2	3 4 5 6 7 8 9
3. I would be willing to marry a person from my <i>heritage</i> culture.							1	2	3 4 5 6 7 8 9

### VIA (continued)

Please circle the response that indicates how much you disagree or agree with the following statements:

	1	2	3	4	5	6	7	8	9
DISAGREE									AGREE
4. I would be willing to marry a North American person.	1	2	3	4	5	6	7	8	9
5. I enjoy social activities with people from the same <i>heritage culture</i> as myself.	1	2	3	4	5	6	7	8	9
6. I enjoy social activities with typical North American people.	1	2	3	4	5	6	7	8	9
7. I am comfortable working with people of the same <i>heritage culture</i> as myself.	1	2	3	4	5	6	7	8	9
8. I am comfortable working with typical North American people.	1	2	3	4	5	6	7	8	9
9. I enjoy entertainment (e.g. movies, music) from my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
10. I enjoy North American entertainment (e.g. movies, music).	1	2	3	4	5	6	7	8	9
11. I often behave in ways that are typical of my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
12. I often behave in ways that are ‘typically North American.’	1	2	3	4	5	6	7	8	9
13. It is important for me to maintain or develop the practices of my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
14. It is important for me to maintain or develop North American cultural practices.	1	2	3	4	5	6	7	8	9
15. I believe in the values of my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
16. I believe in mainstream North American values.	1	2	3	4	5	6	7	8	9
17. I enjoy the jokes and humor of my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
18. I enjoy typical North American jokes and humor.	1	2	3	4	5	6	7	8	9
19. I am interested in having friends from my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
20. I am interested in having North American friends.	1	2	3	4	5	6	7	8	9
21. I would be willing to date a person from my <i>heritage culture</i> .	1	2	3	4	5	6	7	8	9
22. I would be willing to date a North American person.	1	2	3	4	5	6	7	8	9

### PSC

All children misbehave or are naughty at times. Please consider the following parenting strategies in the context of these types of naughty behaviour by the age group indicated in each question.

Please select (by marking with a check) which of the following parenting strategies you think should be used:

For example, young children (aged 2-5 years) old may play with the knobs on the stove after repeatedly being told not to. Please select (by marking with a check) which of the following parenting strategies you think should be used:

- |   |  |     |
|---|--|-----|
| 1 | Slapping or hitting with an open hand a child (2-5 years old) who is doing something naughty.  | [ ] |
| 2 | Sending a naughty child (2-5 years old) to bed without dinner.   | [ ] |
| 3 | Making a naughty child (2-5 years old) sit in a chair in a corner by themselves as punishment.   | [ ] |
| 4 | Making a naughty child (2-5 years old) squat (as if sitting on an imaginary chair) as punishment.  | [ ] |
| 5 | Telling a child (2-5 years old) that they will be spanked if they continue to be naughty.  | [ ] |
| 6 | Showing a child (2-5 years old) who bites other people that it is not all right to bite by having the parent bite that child to show how much it hurts or to make a point.     | [ ] |
| 7 | Showing a child (2-5 years old) who pinches other people that it is not all right to pinch by having the parent pinch that child to show how much it hurts or to make a point. | [ ] |
| 8 | Hitting a child with a wooden spoon on the body (2-5 years old) who is doing something naughty.  | [ ] |
| 9 | Giving a naughty child (2-5 years old) a 'time-out' in their bedroom.  | [ ] |



Please select (by marking with a check) which of the following parenting strategies you think should be used:

- 10 Hitting the top of the hand (with a small stick or ruler) of a child (2-5 years old) who's doing something naughty. [ ]
- 11 Hitting with a closed fist a child (2-5 years old) who is doing something naughty.
- 12 Taking away television viewing for a day from a naughty child (2-5 years old). [ ]
- 13 Taking away access to the computer for a day from a naughty child (2-5 years old). [ ]
- 14 Withdrawing a child (2-5 years old) from their favourite sports activity or after school class when they've been really naughty at home. [ ]
- 15 Yelling at a naughty child (2-5 years old). [ ]
- 16 Locking in a closet or tying up a really naughty or wild child (2-5 years old). [ ]

Children **(6-10 years old)** may ignore their parents' requests to not climb on the stairwell railings despite being asked to get down. Please select (by marking with a check) which of the following parenting strategies you think should be used:

- 17 Slapping or hitting with an open hand a child (6-10 years old) who is doing something naughty. [ ]
- 18 Sending a naughty child (6-10 years old) to bed without dinner. [ ]
- 19 Making a naughty child (6-10 years old) sit in a chair in a corner by themselves as punishment. [ ]
- 20 Making a naughty child aged (6-10 years old) squat (as if sitting on an imaginary chair) as punishment. [ ]
- 21 Telling a child (6-10 years old) that they will be spanked if they continue to be naughty. [ ]
- 22 Showing a child (6-10 years old) who bites other people that it is not all right to bite by having the parent bite that child to show how much it hurts or to make a point. [ ]
- 23 Showing a child (6-10 years old) who pinches other people that it is not all right to pinch by having the parent pinch that child to show how much it hurts or make a point. [ ]
- 24 Hitting a child with a wooden spoon on the body a child (6-10 years old) who is doing something naughty. [ ]
- 25 Hitting the top of the hand (with a small stick or ruler) of a child (6-10 years old) who is doing something naughty. [ ]
- 26 Giving a naughty child (6-10 years old) a 'time-out' in their bedroom. [ ]
- 27 Hitting with a closed fist a child (6-10 years old) who is doing something naughty.
- 28 Taking away television viewing for a day from a naughty child (6-10 years old). [ ]
- 29 Taking away access to the computer for a day from a naughty child (6-10 years old). [ ]
- 30 Sending a naughty child (6-10 years old) to bed early, even if they haven't had time to finish their homework. [ ]
- 31 Withdrawing a child (6-10 years old) from their favourite sports activity or after school class when they've been really naughty at home. [ ]
- 32 Yelling at a naughty child (6-10 years old). [ ]
- 33 Locking in a closet or tying up a really naughty or wild child (6-10 years old). [ ]

In the context of a child (6-10 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to:

- 34 Spank the child. [ ]
- 35 Threaten to spank the child. [ ]
- 36 Call the child lazy. [ ]

Children **(11-14 years old)** may defy their parents (i.e., ignore their rules) by taking a forbidden or dangerous short cut home from school. Please select (by marking with a check) which of the following parenting strategies you think should be used:

- 37 Slapping or hitting with an open hand a child (11-14 years old) who is doing something naughty. [ ]
- 38 Sending a naughty child (11-14 years old) to bed without dinner. [ ]
- 39 Telling a child (11-14 years old) that they will be spanked if they continue to be naughty. [ ]
- 40 Hitting a child with a wooden spoon on the body a child (11-14 years old) who is doing something naughty. [ ]
- 41 Giving a naughty child (11-14 years old) a 'time-out' in their bedroom. [ ]

Please select (by marking with a check) which of the following parenting strategies you think should be used:

- 42 Hitting the top of the hand (with a small stick or ruler) of a child (11-14 years old) who is doing something naughty. [ ]
- 43 Hitting with a closed fist a child (11-14 years old) who is doing something naughty. [ ]
- 44 Taking away television viewing for a day from a naughty child (11-14 years old). [ ]
- 45 Taking away access to the computer for a day from a naughty child (11-14 years old). [ ]
- 46 Sending a naughty child (11-14 years old) to bed early, even if they haven't had time to finish their homework. [ ]
- 47 Withdrawing a child (11-14 years old) from their favourite sports activity or after school class when they've been really naughty at home. [ ]
- 48 Yelling at a naughty child (11-14 years old). [ ]
- 49 Locking in a closet or tying up a really naughty or wild child (11-14 years old). [ ]
- In the context of a child (11-14 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to:
- 50 Spank the child. [ ]
- 51 Threaten to spank the child. [ ]
- 52 Call the child lazy. [ ]

Please select (by marking with a check) which of the following parenting practices you think are appropriate:

- 53 Spanking a child under age 1 who is doing something naughty. [ ]
- 54 Leaving a child (2-5 years old) home alone for several hours on one occasion. [ ]
- 55 Leaving a child (2-5 years old) home alone for several hours frequently. [ ]
- 56 Leaving a child (6-10 years old) home alone for several hours on one occasion. [ ]
- 57 Leaving a child (6-10 years old) home alone for several hours frequently. [ ]
- 58 Allowing a baby under 6 months of age to sleep in the same bed as the parents most nights. [ ]
- 59 Allowing a baby (6 – 18 months of age) to sleep in the same bed as the parents most nights. [ ]
- 60 Allowing a child (2-5 years old) to sleep in the same bed as the parents most nights. [ ]
- 61 Allowing a child (6-10 years old) to sleep in the same bed as the parents most nights. [ ]
- 62 Allowing a child (11-13 years old) to sleep in the same bed as the parents most nights. [ ]
- 63 Letting a baby (under age 1) cry itself to sleep (when the crying lasts less than an hour). [ ]
- 64 Letting a baby (under age 1) cry itself to sleep (when the crying lasts less than 20 minutes). [ ]
- 65 Letting a baby sleep in its own room before the age of 4 months old. [ ]
- 66 Letting a baby sleep in its own room (aged 4 month – 1 year old). [ ]
- 67 Putting a baby (under 6 months of age) on a fixed feeding schedule (e.g., only feeding the baby every 3 hours). [ ]

### CAT

Please indicate to what degree these things happened to you before the age of 18. Please answer all questions.

	0 never	1 rarely	2 sometimes	3 very often	4 always
1. Did your parents ridicule you?	0	1	2	3	4
2. Did you ever seek outside help or guidance because of problems in your home?	0	1	2	3	4
3. Did your parents verbally abuse each other?	0	1	2	3	4
4. Were you expected to follow a strict code of behaviour in your home?	0	1	2	3	4
5. When you were punished as a child or teenager, did you understand the reason you were punished?	0	1	2	3	4
6. When you didn't follow the rules of the house, how often were you severely punished?	0	1	2	3	4

*Please indicate to what degree these things happened to you before the age of 18. Please answer all questions.*

	0 never	1 rarely	2 sometimes	3 very often	4 always
7. As a child did you feel unwanted or emotionally neglected?	0	1	2	3	4
8. Did you parents insult you or call you names?	0	1	2	3	4
9. Before you were 14, did you engage in any sexual activity with an adult?	0	1	2	3	4
10. Were your parents unhappy with each other?	0	1	2	3	4
11. Were either of your parents unwilling to attend any of your school-related activities?	0	1	2	3	4
12. As a child were you punished in unusual ways (e.g., being locked in a closet for a long time or being tied up)?	0	1	2	3	4
13. Were there traumatic or upsetting sexual experiences when you were a child or teenager that you couldn't speak to adults about?	0	1	2	3	4
14. Did you ever think you wanted to leave your family and live with another family?	0	1	2	3	4
15. Did you ever witness the sexual mistreatment of another family member?	0	1	2	3	4
16. Did you ever think seriously about running away from home?	0	1	2	3	4
17. Did you witness the physical mistreatment of another family member?	0	1	2	3	4
18. When you were punished as a child or teenager, did you feel the punishment was deserved?	0	1	2	3	4
19. As a child or teenager, did you feel disliked by either of your parents?	0	1	2	3	4
20. How often did your parents get really angry with you?	0	1	2	3	4
21. As a child did you feel that your home was filled with the possibility of unpredictable physical violence?	0	1	2	3	4
22. Did you feel comfortable bringing friends home to visit?	0	1	2	3	4
23. Did you feel safe living at home?	0	1	2	3	4
24. When you were punished as a child or teenager, did you feel "the punishment fit the crime"?	0	1	2	3	4
25. Did your parents ever verbally lash out at you when you did not expect it?	0	1	2	3	4
26. Did you have traumatic sexual experiences as a child or teenager?	0	1	2	3	4
27. Were you lonely as a child?	0	1	2	3	4
28. Did your parents yell at you?	0	1	2	3	4
29. When either of your parents was intoxicated, were you ever afraid of being sexually mistreated?	0	1	2	3	4
30. Did you ever wish for a friend to share your life?	0	1	2	3	4
31. How often were you left at home alone as a child?	0	1	2	3	4
32. Did your parents blame you for things you didn't do?	0	1	2	3	4
33. To what extent did either of your parents drink heavily or abuse drugs?	0	1	2	3	4
34. Did your parents ever hit or beat you when you did not expect it?	0	1	2	3	4
35. Did your relationship with your parents ever involve a sexual experience?	0	1	2	3	4
36. As a child, did you have to take care of yourself before you felt you were old enough?	0	1	2	3	4
37. Were you physically mistreated as a child or teenager?	0	1	2	3	4
38. Was your childhood stressful?	0	1	2	3	4

# CTSPC

Children often do things that are wrong, disobey, or make their parents angry. We would like to know what has happened to you when you did something wrong or made your parents upset or angry.

Below is a list of things that your parents may have done to you. Please circle how many times **your parents** engaged in the following activities while you were under the age of 18 and/or living at home. If you have lived with different set of parents (e.g. step-parents, foster parents, grandparents who were your guardians for a time) please indicate whether this has **ever** happened to you.

How often has the following happened?

1 = once	2 = twice	3 = 3-5 times	4 = 6-10 times	5 = 11-20 times	6 = more than 20	0 = this has never happened	
1. A parent explained why something was wrong.	1	2	3	4	5	6	0
2. A parent put you in a 'time out' or sent you to your room..	1	2	3	4	5	6	0
3. A parent shook you.	1	2	3	4	5	6	0
4. A parent hit you on the bottom with something like a belt, hairbrush, a stick or some other hard object.	1	2	3	4	5	6	0
5. A parent gave you something else to do instead of what you were doing wrong	1	2	3	4	5	6	0
6. A parent shouted, yelled or screamed at you.	1	2	3	4	5	6	0
7. A parent hit you with a fist or kicked you hard.	1	2	3	4	5	6	0
8. A parent spanked you on the bottom with their bare hand.	1	2	3	4	5	6	0
9. A parent grabbed you around the neck and choked you.	1	2	3	4	5	6	0
10. A parent swore or cursed at you.	1	2	3	4	5	6	0
11. A parent beat you up, that is hit you over and over as hard as they could.	1	2	3	4	5	6	0
12. A parent said they would send you away or kick you out of the house.	1	2	3	4	5	6	0
13. A parent burned or scalded you on purpose.	1	2	3	4	5	6	0
14. A parent threatened to spank or hit you but did not actually do it..	1	2	3	4	5	6	0
15. A parent hit you on some other part of the body besides the bottom with something like a belt, hairbrush, a stick or some other hard object.	1	2	3	4	5	6	0
16. A parent slapped your hand, arm or leg.	1	2	3	4	5	6	0
17. A parent took away privileges or grounded you.	1	2	3	4	5	6	0
18. A parent pinched you.	1	2	3	4	5	6	0
19. A parent threatened you with a knife or gun.	1	2	3	4	5	6	0
20. A parent threw or knocked you down.	1	2	3	4	5	6	0
21. A parent called you dumb or lazy or some other name like that.	1	2	3	4	5	6	0
22. A parent slapped you on the face or head or ears.	1	2	3	4	5	6	0

## ASE - Supplemental Question

Your UBC average would be (approximately): ☐ below 50% ☐ 50-59% ☐ 60-69% ☐ 70-79% ☐ 80-89% ☐ 90% or above

Your high school average was (approximately): ☐ below 50% ☐ 50-59% ☐ 60-69% ☐ 70-79% ☐ 80-89% ☐ 90% or above

# PDSA

We are interested in the ways that parents discipline their children. Please read each item and circle how much it happened to you based on your experience with a parent or primary caregiver. Also, answer the right side of the page and rate whether or not you find it to be an acceptable form of discipline. Please do not include accidental injuries like getting your finger caught in the car door. Please circle answers on both sides.

		This happened to me as a child:						I consider this to be an acceptable form of discipline:					
		Never	Very Rarely	Rarely	Some-times	Often	Very often	Never	Very Rarely	Rarely	Some-times	Often	Very often
1	I was grounded (not allowed to go out).	0	1	2	3	4	5	0	1	2	3	4	5
2	I had 'time outs' (asked to sit in a quiet place and calm down)	0	1	2	3	4	5	0	1	2	3	4	5
3	I was spanked.	0	1	2	3	4	5	0	1	2	3	4	5
4	I was ridiculed in front of others.	0	1	2	3	4	5	0	1	2	3	4	5
5	I was purposefully burned with an iron, cigarette, lighter, etc.	0	1	2	3	4	5	0	1	2	3	4	5
6	I was pinched as a punishment.	0	1	2	3	4	5	0	1	2	3	4	5
7	I was bitten as punishment, so hard I had bite marks.	0	1	2	3	4	5	0	1	2	3	4	5
8	I was hit or spanked with a board, stick, cord, hairbrush, or other object.	0	1	2	3	4	5	0	1	2	3	4	5
9	I was tied up as punishment.	0	1	2	3	4	5	0	1	2	3	4	5
10	My hair was pulled or pulled out	0	1	2	3	4	5	0	1	2	3	4	5
11	I had food or water withheld from me for a day or more at a time.	0	1	2	3	4	5	0	1	2	3	4	5
12	I was confined to or locked in an enclosed space for long periods of time.	0	1	2	3	4	5	0	1	2	3	4	5
13	I have had teeth loosened/knocked out.	0	1	2	3	4	5	0	1	2	3	4	5
14	I was injured seriously enough to require medical attention.	0	1	2	3	4	5	0	1	2	3	4	5
15	I was criticized/made to feel worthless.	0	1	2	3	4	5	0	1	2	3	4	5
16	I saw other family members hit/beaten.	0	1	2	3	4	5	0	1	2	3	4	5
17	I was hit or spanked with a belt.	0	1	2	3	4	5	0	1	2	3	4	5
18	I was strangled or choked.	0	1	2	3	4	5	0	1	2	3	4	5
19	I was shaken.	0	1	2	3	4	5	0	1	2	3	4	5
20	I was thrown against objects, walls, or down stairs.	0	1	2	3	4	5	0	1	2	3	4	5
21	I have had broken bones after discipline.	0	1	2	3	4	5	0	1	2	3	4	5

Please answer the following question with a Yes or a No.

I was physically disciplined by my parents as a child.	Yes [   ]	No [   ]
I was physically abused by my parents as a child.	Yes [   ]	No [   ]
I have a sibling who was physically abused by our parents as a child.	Yes [   ]	No [   ]
I was emotionally abused by my parents as a child.	Yes [   ]	No [   ]
I was neglected by my parents as a child.	Yes [   ]	No [   ]
I was sexually abused by my parents as a child.	Yes [   ]	No [   ]
I was sexually abused by someone other than my parents as a child.	Yes [   ]	No [   ]
Do you have any children?	Yes [   ]	No [   ]

FP

The following items are concerned with filial piety. We would like to know what your opinions are on these items. There are no "right" or "wrong" answers. So please respond according to your own personal opinions. For each item, select only one of the following six alternatives:

	1	2	3	4	5	6
	Strongly Disagree					Strongly Agree
<i>Please do not skip any items.</i>						
1. Sons and daughters may protest against being unreasonably scolded by their parents.	1	2	3	4	5	6
2. There is no place under the sun for both oneself and the enemy of one’s father.	1	2	3	4	5	6
3. If there is a reason for doing so, one may rely on an old people’s home to provide for one’s aged parents.	1	2	3	4	5	6
4. Any sacrifice is worthwhile for the sake of filial piety.	1	2	3	4	5	6
5. Sons and daughters should not go to faraway places while their parents are still living.	1	2	3	4	5	6
6. In choosing a spouse, sons and daughters need not follow “the parents’ command.”	1	2	3	4	5	6
7. The main reason for sons and daughters not to do dangerous things is to avoid getting their parents worried.	1	2	3	4	5	6
8. Parents should not interfere with their children’s freedom to choose a vacation.	1	2	3	4	5	6
9. The great debt that you have to repay your parents is as boundless as the sky.	1	2	3	4	5	6
10. “Rearing sons to provide for oneself in one’s old age” should no longer be the main purpose of raising children.	1	2	3	4	5	6
11. No matter how their parents conduct themselves, sons and daughters must respect them.	1	2	3	4	5	6
12. After the father has passed away, sons and daughters must conduct themselves according to the principles and attitudes he followed while he was still living.	1	2	3	4	5	6
13. If there is a quarrel between one’s wife and one’s mother, the husband should advise his wife to listen to his mother.	1	2	3	4	5	6
14. After their parents have passed away, sons and daughters do not necessarily have to finish the business left unfinished by their parents.	1	2	3	4	5	6
15. “Spreading one’s fame to glorify one’s parents” should not be the most important reason for getting ahead.	1	2	3	4	5	6
16. To worship their ancestors regularly on the proper occasions is the primary duty of sons and daughters.	1	2	3	4	5	6
17. To continue the family line is not the primary purpose of marriage.	1	2	3	4	5	6
18. Sons and daughters do not necessarily have to seek parental advice and may make their own decisions.	1	2	3	4	5	6
19. Sons and daughters do not necessarily have to respect the people respected and loved by their parents.	1	2	3	4	5	6
20. After children have grown up, all the money they earn through their own labor belongs to themselves, even though their parents are still living.	1	2	3	4	5	6
21. “There is no crime worse than being unfilial.”	1	2	3	4	5	6
22. As a son or daughter, one must obey one’s parents no matter what.	1	2	3	4	5	6

Appendix 4. Table 1. Physical discipline strategies considered appropriate for the Preschool group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Slapping or hitting with an open hand a child (2-5 years old) who is doing something naughty	16.9%	30.8	12.5	21.9	21.4
Showing a child (2-5 years old) who bites other people that it is not all right to bite by having the parent bite that child to show how much it hurts or to make a point.	7.3%	11.0	12.5	9.4	9.5
Showing a child (2-5 years old) who pinches other people that it is not all right to pinch by having the parent pinch that child to show how much it hurts or to make a point.	16.4%	21.8	20.0	25.0	23.8
Hitting a child with a wooden spoon on the body (2-5 years old) who is doing something naughty.	4.5%	5.2	5.0	3.1	9.5
Hitting the top of the hand (with a small stick or ruler) of a child (2-5 years old) who's doing something naughty.	7.9%	33.8	15.0	25.0	14.3
Hitting with a closed fist a child (2-5 years old) who is doing something naughty.	0.6%	1.0	2.5	6.3	0
Locking in a closet or tying up a really naughty or wild child (2-5 years old).	2.3%	1.9	2.5	3.1	4.8
Average approval rating for physical discipline across the 7 items	0.08	0.15	0.01	0.13	0.12

Appendix 4. Table 2. Physical discipline strategies considered appropriate for the Middle Childhood group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Slapping or hitting with an open hand a child (6-10 years old) who is doing something naughty	14.1%	35.4	10.0	21.9	26.2
Showing a child (6-10 years old) who bites other people that it is not all right to bite by having the parent bite that child to show how much it hurts or to make a point.	2.8%	10.0	12.5	12.5	12.2
Showing a child (6-10 years old) who pinches other people that it is not all right to pinch by having the parent pinch that child to show how much it hurts or to make a point.	10.7%	18.8	10.0	21.9	11.9
Hitting a child with a wooden spoon on the body (6-10 years old) who is doing something naughty.	8.5%	6.5	5.0	3.1	7.1
Hitting the top of the hand (with a small stick or ruler) of a child (6-10 years old) who's doing something naughty.	7.9%	31.5	22.5	18.8	16.7
Hitting with a closed fist a child (6-10 years old) who is doing something naughty.	1.7%	2.9	2.6	3.1	4.8
Locking in a closet or tying up a really naughty or wild child (6-10 years old).	1.1%	2.6	5.0	3.1	2.4
In the context of a child (6-10 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to spank the child	8.5%	10.7	7.5	0	14.3
Average approval rating for physical discipline across the 8 items	0.07	0.16	0.10	0.15	0.12



Appendix 4. Table 3. Physical discipline strategies considered appropriate for the Early Adolescence group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Slapping or hitting with an open hand a child (11-14 years old) who is doing something naughty.	7.3%	16.2	10.0	12.5	4.8
Hitting a child with a wooden spoon on the body (11-14years old) who is doing something naughty.	5.1%	6.8	5.0	3.1	0
Hitting the top of the hand (with a small stick or ruler) of a child (11-14 years old) who's doing something naughty.	5.1%	20.8	20.0	12.5	7.1
Hitting with a closed fist a child (11-14 years old) who is doing something naughty.	2.8%	1.3	2.5	0	4.8
Locking in a closet or tying up a really naughty or wild child (11-14 years old).	1.7%	4.2	2.5	0	0
In the context of a child (11-14 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to spank the child	5.6%	8.4	5.0	0	9.5
Average approval rating for physical discipline across the 6 items	0.05	0.10	0.08	0.05	0.04

# Appendix 5. Perceptions of punishment and physical abuse.

Group	European n= 176	Chinese n=309	SE Asian n=41	Indo-Asian n=32	Other n=42
1. The best way to raise children is to establish a strict code of behaviour for the home.	2.30 (0.8)	2.22 (0.8)	2.20 (0.9)	2.03 (0.9)	2.56 (0.9)
2. Children (2-5 years old) who don't follow the rules of the house should be severely punished.	0.73 (0.8)	1.01 (0.9)	0.83 (0.9)	0.69 (0.8)	1.15 (1.0)
3. Children (6-10 years old) who don't follow the rules of the house should be severely punished.	1.03 (0.9)	1.34 (0.9)	1.17 (0.9)	1.03 (0.9)	1.43 (0.9)
4. Children (11-14 years old) who don't follow the rules of the house should be severely punished.	1.27 (1.0)	1.64 (1.0)	1.61 (1.1)	1.34 (1.2)	1.83 (1.1)
5. [R] Most young children (2-5 years old) feel that "the punishment fits the crime" when they are disciplined.	2.97 (1.0)	2.57 (1.1)	2.56 (1.2)	2.59 (1.2)	3.05 (1.0)
6. [R] Most children (6-10 years old) feel that "the punishment fits the crime" when they are disciplined	2.60 (0.9)	2.38 (0.9)	2.39 (1.0)	2.41 (1.0)	2.76 (0.9)
7. [R] Most children (11-14 years old) feel that "the punishment fits the crime" when they are disciplined.	2.51 (0.9)	2.30 (1.0)	2.43 (1.0)	2.44 (1.1)	2.43 (1.0)
8. [R] Most young children (2-5 years old) will understand the reason why they are being punished.	2.94 (0.9)	2.86 (0.9)	2.90 (0.9)	2.81 (0.9)	2.95 (1.0)
9. [R] Most children (6-10 years old) will understand the reason why they are being punished.	1.83 (0.9)	1.96 (0.8)	1.83 (1.0)	2.06 (0.7)	2.02 (1.0)
10. [R] Most children (11-14 years old) will understand the reason why they are being punished.	1.13 (0.9)	1.34 (0.8)	1.22 (0.9)	1.47 (1.0)	1.29 (0.9)
11. [R] Most young children (2-5 years old) will feel the punishment was deserved when they have been punished.	3.10 (1.0)	2.87 (1.0)	3.00 (0.9)	2.88 (1.3)	3.14 (1.0)

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
12. [R] Most children (6-10 years old) will feel the punishment was deserved when they have been punished.	2.60 (0.9)	2.49 (0.9)	2.56 (0.8)	2.53 (0.9)	2.48 (0.9)
13. [R] Most children (11-14 years old) will feel the punishment was deserved when they have been punished.	2.29 (0.9)	2.28 (0.9)	2.20 (1.0)	2.44 (0.9)	2.21 (1.0)
14. Most young children (2-5 years old) get hit or spanked unexpectedly.	1.33 (0.9)	1.37 (1.0)	1.37 (1.0)	1.22 (1.0)	1.38 (0.9)
15. Most children (6-10 years old) get hit or spanked unexpectedly.	1.11 (0.8)	1.32 (0.9)	1.32 (0.8)	1.16 (0.9)	1.21 (0.7)
16. Most young children (11-14 years old) get hit or spanked unexpectedly.	0.85 (0.7)	1.04 (0.8)	1.00 (0.7)	0.91 (0.9)	0.90 (0.8)
17. Children (2-5 years old) who misbehave should be sent to bed without dinner.	0.28 (0.7)	0.24 (0.6)	0.34 (0.9)	0.22 (0.6)	0.32 (0.6)
18. Children (6-10 years old) who misbehave should be sent to bed without dinner.	0.41 (0.8)	0.35 (0.7)	0.54 (0.9)	0.44 (0.7)	0.50 (0.9)
19. Children (11-14 years old) who misbehave should be sent to bed without dinner.	0.47 (0.9)	0.46 (0.8)	0.63 (0.9)	0.56 (0.9)	0.69 (0.9)
20. Young children (2-5 years old) who hurt other children should be shown by their parents how much it hurts (e.g. if a child bites, a parent can bite their child to show them how much it hurts).	0.30 (0.6)	0.54 (0.9)	0.54 (0.9)	0.28 (0.6)	0.48 (0.7)
21. Children (6-10 years old) who hurt other children should be shown by their parents how much it hurts (e.g. if a child bites, a parent can bite their child to show them how much it hurts).	0.28 (0.6)	0.59 (0.9)	0.61 (1.0)	0.31 (0.6)	0.45 (0.8)
22. Young children (2-5 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0.02 (0.2)	0.09 (0.4)	0.24 (0.6)	0.09 (0.4)	0.10 (0.4)
23. Children (6-10 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0.02 (0.2)	0.12 (0.5)	0.44 (0.9)	0.16 (0.5)	0.14 (0.5)

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
24. Children (11-14 years old) who misbehave should be punished by withholding food for a whole day, if necessary.	0.03 (0.2)	0.15 (0.5)	0.56 (1.0)	0.19 (0.5)	0.17 (0.5)
25. Young children (2-5 years old) who misbehave can be threatened with physical violence (e.g. "If you don't stop that, you are going to get a spanking.")	0.95 (1.0)	0.87 (1.0)	0.78 (0.9)	0.84 (0.9)	1.02 (1.0)
26. Children (6-10 years old) who talk back to their parents can be threatened with physical violence (e.g. "If you ever talk to me that way again, I'll smack that smile right off your face.")	0.58(0.9)	0.75 (0.9)	0.71 (0.8)	0.75 (0.9)	0.86 (1.0)
27. Children (11-14 years old) who talk back to their parents can be threatened with physical violence (e.g. "If you ever talk to me that way again, I'll smack that smile right off your face.")	0.53 (0.9)	0.72 (0.9)	0.63 (0.7)	0.81 (0.8)	0.91 (1.0)
28. [R] Young children (2-5 years old) who misbehave should be taught how to behave without any physical punishment.	0.49 (0.9)	0.77 (1.0)	0.59 (1.0)	0.66 (0.8)	0.43 (0.9)
29. [R] Children (6-10 years old) who misbehave should be taught how to behave without any physical punishment.	0.47 (0.9)	0.77 (1.0)	0.68 (0.9)	0.66 (0.8)	0.55 (0.9)
30. Some unruly young children (2-5 years old) will only respond to unusual punishments (e.g. being locked in a closet for a long time or being tied up).	0.29 (0.8)	0.85 (1.1)	1.15 (1.1)	0.59 (1.2)	0.62 (1.0)
31. Some wild children (6-10 years old) will only respond to unusual punishments (e.g. being locked in a closet for a long time or being tied up).	0.26 (0.7)	0.85 (1.0)	1.22 (1.1)	0.72 (1.3)	0.57 (0.9)
Composite score	1.16 (0.3)	1.26 (0.3)	1.27 (0.3)	1.20 (0.3)	1.33 (0.3)

Reversed items are indicated by [R].

Appendix 6, Table 1. Emotional discipline strategies considered appropriate for the Preschool group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Sending a naughty child (2-5 years old) to bed without dinner.	7.9%	4.5	2.5	6.3	9.5
Making a naughty child (2-5 years old) sit in a chair in a corner by themselves as punishment.	69.5%	68.5	57.5	87.5	61.9
Making a naughty child (2-5 years old) squat (as if sitting on an imaginary chair) as punishment.	4.0%	14.6	17.5	6.3	4.8
Telling a child (2-5 years old) that they will be spanked if they continue to be naughty.	42.4%	50.6	32.5	38.7	47.6
Yelling at a naughty child (2-5 years old)	31.6%	25.6	17.5	18.8	26.2
Average approval rating for emotional discipline across the 5 items	0.31	0.33	0.26	0.32	0.30

Appendix 6, Table 2. Emotional discipline strategies considered appropriate for the Middle Childhood group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Sending a naughty child (6-10 years old) to bed without dinner.	17.5%	8.8	15.0	6.3	11.9
Making a naughty child (6-10 years old) sit in a chair in a corner by themselves as punishment.	61.6%	59.3	42.5	71.9	52.4
Making a naughty child (6-10 years old) squat (as if sitting on an imaginary chair) as punishment.	5.1%	22.1	20.0	12.5	9.5
Telling a child (6-10 years old) that they will be spanked if they continue to be naughty.	34.5%	42.2	22.5	50.0	38.1
Yelling at a naughty child (6-10 years old)	35.6%	33.8	17.5	28.1	40.5
In the context of a child (6-10 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to threaten to spank the child.	23.2%	26.6	25.6	37.5	35.7
In the context of a child (6-10 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to call the child lazy.	10.2%	27.9	20.0	15.6	9.5
Average approval rating for emotional discipline across the 7 items	0.27	0.33	0.23	0.32	0.28

Appendix 6, Table 3. Emotional discipline strategies considered appropriate for the Early Adolescence group.

Group	European n= 177	Chinese n=308	SE Asian n=40	Indo-Asian n=32	Other n=42
% considering this to be appropriate					
Sending a naughty child (11-14 years old) to bed without dinner.	18.1%	12.3	15.0	15.6	21.4
Telling a child (11-14 years old) that they will be spanked if they continue to be naughty.	15.8%	21.8	17.5	12.5	16.7
Yelling at a naughty child (11-14 years old)	37.9%	37.3	20.0	31.3	31.0
In the context of a child (11-14 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to threaten to spank the child.	11.3%	18.2	20.0	25.0	26.2
In the context of a child (11-14 years old) refusing to go to their room and work on their homework, is it appropriate for a parent to call the child lazy.	14.7%	31.2	17.5	34.4	9.5
Average approval rating for emotional discipline across the 5 items	0.20	0.24	0.18	0.24	0.21

## Appendix 7. Perceptions of punishment and emotional abuse.

Group	European n= 177	Chinese n=308	SE Asian n=41	Indo-Asian n=32	Other n=42
1. Sometimes troublesome children (2-5 years old) can be quieted by ridiculing or making fun of their behaviour in front of other children.	1.91 (1.1)	2.31 (1.1)	2.05 (1.1)	1.56 (0.8)	2.12 (1.1)
2. Sometimes troublesome children (6-10 years old) can be quieted by ridiculing or making fun of their behaviour in front of other children.	2.26 (1.3)	2.53 (1.2)	2.37 (1.2)	1.88 (1.1)	2.55 (1.4)
3. Sometimes parents ridicule or make fun of their children (11-14 years old).	3.51 (1.1)	3.38 (1.1)	3.28 (1.0)	3.16 (1.0)	3.41 (1.0)
4. Children (2-5 years old) can often behave so badly that their parents are justified when insulting or calling them names.	1.43 (0.7)	2.08 (1.1)	1.93 (1.1)	1.47 (0.7)	1.66 (0.9)
5. Children (6-10 years old) can often behave so badly that their parents are justified when insulting or calling them names.	1.62 (0.9)	2.21 (1.1)	2.05 (1.1)	1.50 (0.8)	1.88 (1.1)
6. Sometimes parents insult or call their children (11-14 years old) names.	3.57 (1.2)	3.25 (1.1)	3.27 (1.1)	2.78 (1.3)	3.52 (1.0)
7. Occasionally parents dislike their young children (2-5 years old).	2.89 (1.2)	2.57 (1.1)	2.59 (1.2)	2.03 (1.2)	2.69 (1.0)
8. Occasionally parents dislike their children (6-10 years old).	2.90 (1.2)	2.66 (1.1)	2.54 (1.1)	2.09 (1.2)	2.79 (1.0)
9. It is common that parents dislike their children (11-14 years old).	2.10 (1.0)	2.26 (1.1)	2.28 (1.0)	2.06 (1.1)	2.21 (1.1)
10. Children must learn that parents have a right to verbally lash out at them, even if the children feel they do not deserve it.	1.57 (0.9)	1.97 (1.0)	2.07 (1.2)	1.59 (0.8)	1.88 (1.2)
11. Children get blamed for things that they didn't actually do.	3.63 (0.9)	3.46 (0.9)	3.22 (1.0)	3.31 (1.1)	3.69 (1.0)



Group	European n= 177	Chinese n=308	SE Asian n=41	Indo-Asian n=32	Other n=42
12. All parents yell at their young children (2-5 years old) in anger.	2.40 (1.1)	2.64 (1.0)	2.46 (1.1)	2.44 (1.1)	2.69 (1.1)
13. All parents yell at their children (6-10 years old) in anger.	2.50 (1.1)	2.93 (1.1)	2.68 (1.2)	2.94 (1.1)	2.83 (1.1)
14. All parents yell at their children (11-14 years old) in anger.	2.61 (1.2)	3.25 (1.1)	2.90 (1.2)	3.22 (1.2)	3.14 (1.1)
15. Childhood is stressful for young children (2-5 years old).	2.35 (1.0)	1.96 (0.9)	1.98 (0.9)	1.91 (1.1)	2.45 (1.0)
16. Childhood is stressful for most children (6-10 years old).	2.72 (1.0)	2.41 (1.0)	2.29 (0.9)	2.44 (1.0)	2.88 (1.1)
17. Childhood is stressful for most children (11-14 years old).	2.75 (1.0)	3.44 (1.1)	3.39 (1.0)	3.84 (1.1)	3.79 (0.9)
18. [R] Children who are yelled at when they are little (2-5 years old) frequently suffer from lower self esteem.	2.15 (0.8)	2.39 (1.0)	2.44 (1.1)	2.28 (0.9)	2.19 (1.0)
19. [R] Children (6-10 years old) who are yelled at frequently suffer from lower self esteem.	2.03 (0.8)	2.06 (0.8)	2.15 (1.0)	2.19 (0.7)	1.93 (0.8)
20. [R] Children (11-14 years old) who are yelled at frequently suffer from lower self esteem.	1.92 (0.8)	1.93 (0.9)	1.93 (1.0)	1.88 (0.7)	1.95 (0.8)
21. [R] Children who are called names or insulted by their parents (e.g., "You're so lazy") when they are little (2-5 years old) suffer lasting scars or damage.	2.37 (1.0)	2.84 (1.1)	2.69 (1.0)	2.34 (1.0)	2.17 (1.0)
22. [R] Children (6-10 years old) who are called names or insulted by their parents (e.g., "You're so lazy") suffer lasting scars or damage.	2.02 (0.8)	2.44 (1.0)	2.02 (0.8)	2.31 (0.9)	2.10 (1.0)
23. [R] Children (11-14 years old) who are called names or insulted by their parents (e.g., "You're so lazy") suffer lasting scars or damage.	1.97 (0.9)	2.38 (1.1)	1.81 (1.0)	2.34 (1.1)	2.12 (1.1)
Composite score	2.44 (0.5)	2.57 (0.4)	2.44 (0.5)	2.31 (0.4)	2.54 (0.4)

\*Higher scores indicate higher tolerance for emotional abusive behaviour or minimization of the damage of emotional abuse