

THE IMPACT OF CHINESE CANADIAN ADOLESCENTS' PERCEPTIONS OF
PARENTAL WARMTH AND CONTROL ON THEIR PSYCHOLOGICAL ADJUSTMENT

by

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Abstract

There is limited research on parenting and its impact on Chinese Canadian youth. The current study sought to investigate the impact of Chinese Canadian adolescents' perceptions of parental warmth and control on their psychological adjustment, while taking their cultural identity into consideration. The study sample consisted of 192 self-identified Chinese Canadian adolescents enrolled in grades 8 through 12 at four public urban high schools in the Lower Mainland of British Columbia. Adolescents completed the Vancouver Index of Acculturation (VIA), the Mother and Father versions of the Child Parental Acceptance-Rejection/ Control Questionnaire (PARQ/ Control), and the Adult Personality Assessment Questionnaire (PAQ). A bivariate correlation analysis revealed that neither demographic nor cultural variables were significantly associated with psychological adjustment. As hypothesized, perceived maternal/ paternal warmth was significantly and positively associated with psychological adjustment. Perceived maternal/ paternal control was significantly and negatively associated with both perceived maternal/ paternal warmth and psychological adjustment. A series of regression analyses indicated that perceived maternal/ paternal warmth partially mediated the impact of perceived maternal/ paternal control on psychological adjustment. A hierarchical multiple regression analysis further revealed that while perceived maternal/ paternal control contributed to adolescents' psychological adjustment, perceived maternal warmth was the greatest contributor. Perceived paternal warmth was not considered an important contributor to this model. The theoretical and empirical significance of the study findings, and implications for future research and counselling practice, are discussed.

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Chapter One: Introduction

Statement of the Problem

The impact of parenting on children's developmental outcomes has been widely established in Western research literature (Baumrind, 1971; Maccoby, 1980; Rohner, Khaleque, & Cournoyer, 2005). Given the distinct cultural differences in parenting values and practices across Western European and Asian contexts, it is questionable whether research findings obtained using Western samples may be generalized to account for the experiences of those from Asian backgrounds (Wong, De Man, & Leung, 2002; Yau & Smetana, 1996). At a time when the Chinese community constitutes Canada's largest non-European ethnic group, and is increasing at a rate considerably faster than that of Canada's overall population (Statistics Canada, 2001), Chinese Canadians continue to remain underrepresented in the parenting research literature (Lim & Lim, 2004). The term 'Chinese', for the purposes of this study, includes people who are originally from the People's Republic of China, Hong Kong, and Taiwan.

When Chinese families immigrate to Canada, parents and children encounter a new context for parenting that challenges their traditional values and practices. Chinese Canadian parents and children must grapple with issues pertaining to the extent to which they maintain aspects of their heritage culture and the extent to which they adopt aspects of mainstream culture (Berry, 2006). While research on Chinese Canadian families suggests that acculturation may complicate issues of parenting, to the detriment of adolescents' well-being (Costigan & Dokis, 2006; Tardif & Geva, 2006), research on parenting using Chinese Canadian adolescent samples is scarce. So long as scholars and professionals in the social sciences lack the information necessary to form an accurate conceptualization of Chinese Canadian adolescents' experiences,

their ability to identify the needs of this population and to mobilize resources to address those needs will remain impeded.

Purpose of the Study

The purpose of the current study, using a survey method, was to investigate the impact of Chinese Canadian adolescents' perceptions of parental warmth and control on their psychological adjustment. Adolescents' identification with each of Chinese and Canadian culture was further taken into consideration.

Theoretical and Conceptual Framework

Parental Acceptance-Rejection Theory

Parental acceptance-rejection theory (PARTheory; Rohner et al., 2005) served as the theoretical and methodological framework for the current study. This theory is grounded in empirical research investigating natural variations in what are considered to be 'normal' and 'healthy' children and families across a variety of socio-cultural contexts worldwide. This theory seeks to establish cross-culturally valid principles pertaining to the antecedents, consequences, and correlates of parental acceptance and parental rejection (Rohner, 2004). According to PARTheory, and for the purposes of this study, the term 'parent' refers to a significant caregiver in a child's life and not necessarily a biological or adoptive parent; the term 'child' or 'children' refers to one's position in the family and not necessarily one's developmental stage.

PARTheory represents an orthogonal approach to the study of parenting, where parental warmth and parental control are considered to be two separate dimensions of parenting behavior (Rohner & Rohner, 1981). The warmth dimension of parenting is a bipolar continuum that ranges from parental acceptance to parental rejection (Rohner, 1986). Parental acceptance is characterized by the presence of physical and verbal warmth and affection. Parental rejection is

characterized by the absence of warmth and affection and can be further distinguished as hostility and aggression, indifference and neglect, and undifferentiated rejection. Hostility involves feelings of anger and resentment toward a child and aggression can be a behavioral manifestation of this internal state. Indifference involves lack of concern for a child and neglect can be a behavioral manifestation of this internal state, which is generally expressed as physical and psychological unavailability. Undifferentiated rejection refers to a child's subjective experience that his/ her parents do not love him/ her when there are no observable indicators of hostility, aggression, indifference, or neglect. PARTheory recognizes that although the behavioral expression of parental warmth is largely culturally based, it posits that, regardless of culture, children everywhere experience parental acceptance or rejection through expressions of warmth and affection, hostility and aggression, indifference and neglect, and undifferentiated rejection. The underlying assumption is that all children have a need to feel accepted by their parents.

PARTheory's major postulate is that children's perception of parental warmth is universally, directly, and positively associated with their psychological adjustment. According to PARTheory, there are seven personality and behavioral dimensions of psychological adjustment that are associated with the perception of parental warmth: (1) hostility, aggression, and passive aggression, (2) dependence, (3) self-esteem, (4) self-adequacy, (5) emotional responsiveness, (6) emotional stability, and (7) worldview (Rohner, 2004).

Parental control is the second dimension of parenting behavior recognized in PARTheory. According to PARTheory, and for the purposes of the current study, 'parental control' refers specifically to the level of limitations that parents place on their children's behavior. The control dimension of parenting is a bipolar continuum that ranges from

permissiveness to strictness. Permissive parents place minimal limitations on their children's behavior. Moderately controlling parents place few limitations on their children's behavior. Firm parents guide their children's behavior by a firm schedule and parental intervention, but can be flexible. Restrictive parents place many limitations on their children's behavior and demand strict, unyielding obedience. While the relationship between the perception of parental warmth and children's psychological adjustment is clearly established within PARTheory, neither the relationship between the perception of parental control and the perception of parental warmth nor the perception of parental control and psychological adjustment is specifically stated (Rohner et al., 2005).

PARTheory is operationalized by a set of questionnaire measures designed to assess perceptions of parental warmth, perceptions of parental control, and psychological adjustment, as they have been defined within the theory. These measures include (a) the Parental Acceptance-Rejection Questionnaire (PARQ; Rohner, 2005b) that assesses perceptions of maternal and paternal warmth, (b) the Parental Control Scale (PCS; Rohner & Khaleque, 2005a) that assesses perceptions of maternal and paternal control, (c) the Parental Acceptance-Rejection/ Control Questionnaire (PARQ/ Control; Rohner, 2005a) that is essentially a combination of the PARQ and the PCS, and (d) the Personality Assessment Questionnaire (PAQ; Rohner & Khaleque, 2005b) that assesses psychological adjustment.

PARTheory and its quantitative methodology have been applied to dozens of research studies throughout the world (Rohner & Rohner, 2005). Substantial cross-cultural evidence supports the claim that children's perception of parental warmth is universally, directly, and positively associated with their psychological adjustment, regardless of differences in age, culture, ethnicity, language, gender, race, and other such defining conditions (i.e., Cournoyer,

Sethi, & Cordero, 2005; Khaleque & Rohner, 2002a; Kim, Cain, & McCubbin, 2006; Lila, Garcia, & Garcia, 2007; Rohner, 2004; Rohner, Kean, & Cournoyer, 1991).

Acculturation Framework

Parenting is largely constructed by culture, which can be defined as the “learned, shared, and transmitted values, beliefs, norms, and life practices of a particular group that guides thinking, decisions, and actions in patterned ways” (Leininger, 1988, p. 156). To the extent that Western European and Asian cultures differ in their values (Markus & Kitayama, 1991), which emphasize individualism and self-expression versus collectivism and obedience, the parenting practices that are endorsed within these cultures also differ. While Western European cultures encourage reciprocal parent-child communication and overt demonstrations of parental affection, Asian cultures encourage deference to parental authority and restraint from behavioral displays of parental affection (Feldman, Rosenthal, Mont-Reynaud, Leung, & Lau, 1991; Wu & Chao, 2005). When Chinese families immigrate to Canada, they exist between two opposing cultural systems and are faced with issues of acculturation, which may complicate the practice of parenting (Baptiste, 1993; Hwang, 2006; Lim & Lim, 2004).

Berry’s (2006) work on acculturation is extensive. He proposes that there is great variability in the manner in which people seek to adapt to mainstream culture, which he refers to as acculturation strategies. By taking two central features of acculturation, preference for maintaining attitudes and behaviors consistent with one’s heritage culture and preference for adopting attitudes and behaviors consistent with mainstream culture, Berry identifies four possible acculturation strategies. Separation is present when people exclusively follow their heritage culture and have little interest in adapting to mainstream culture. Assimilation is present when people have little interest in maintaining their heritage culture and exclusively follow

mainstream culture. Marginalization is present when people follow neither their heritage culture nor mainstream culture. Integration is present when people balance both cultures. Integration has been identified as the acculturation strategy most conducive to immigrant adolescents' sociocultural and psychological adjustment (Berry, Phinney, Sam, & Vedder, 2006). Berry's work on acculturation has been applied to the study of parenting, with a focus on parent-child acculturation disparity and its impact on children's overall adjustment.

Research on immigrant Asian families suggests that children tend to assimilate to mainstream culture at a faster pace than their parents, who continue to endorse values and parenting practices consistent with their heritage culture (Baptiste, 1993; Costigan & Dokis, 2006; Hwang, 2006). Parent-child acculturation disparity has been linked with intergenerational family conflict and increased levels of anxiety, depression, and somatic problems among immigrant Chinese youth (Juang, Syed, & Takagi, 2007; Tardif & Geva, 2006). In the context of the current study, the implication is that as Chinese Canadian parents continue to exercise strict parental control and refrain from overt demonstrations of parental affection, their children may increasingly adopt a Western perspective of parenting that causes them to perceive their parents as less warm and more controlling than their peers, causing some degree of distress.

Current Research Questions

The overarching question that was addressed in the current study was: What is the impact of Chinese Canadian adolescents' perceptions of parental warmth and control on their psychological adjustment? Specific research questions that were examined include:

- 1) What are the relationships among adolescents' Chinese/ Canadian identification, perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment?

- 2) Do perceptions of maternal/ paternal warmth mediate the relationship between perceptions of maternal/ paternal control and adolescents' psychological adjustment?
- 3) What is the relative contribution of demographic variables (i.e., gender, age, and mothers' level of education), Chinese/ Canadian identification, perceptions of maternal/ paternal control, and perceptions of maternal/ paternal warmth to the prediction of adolescents' psychological adjustment when each set of variables is sequentially added into the prediction?

Significance of Study and Rationale

A considerable amount of research and literature has been devoted to understanding the contribution of parenting style to children's overall adjustment within the Western European context (Baumrind, 1971; Maccoby, 1980). Given the distinct differences in values, norms, and practices across cultural contexts, there is increasing awareness that widely held assumptions grounded in Western research may not necessarily apply to non-Western cultures (Lim & Lim, 2004; Wong et al., 2002; Yau & Smetana, 1996). The current study was important because it was informed by theoretical and empirical literature that has been generated on the topic of cross-cultural parenting and children's developmental outcomes. It was specifically designed to address gaps in the existing knowledge on parenting and Chinese Canadian youth.

This study was warranted because it sought to explore parenting and culture at a time when a number of professionals, including policy makers, program developers, group leaders, educators, and mental health care providers are increasingly acknowledging the importance of identifying cultural factors that promote or hinder adolescents' well-being (Berry et al., 2006). The ultimate aim of this study was to draw attention to the important yet understudied area of Chinese Canadian parenting and to serve as a catalyst for future related research.

Chapter Two: Review of the Literature

Parenting and Culture

Culture refers to the “learned, shared, and transmitted values, beliefs, norms, and life practices of a particular group that guides thinking, decisions, and actions in patterned ways” (Leininger, 1988, p. 156). Parenting is largely constructed by culture because what is deemed normative and necessary depends on the outcomes valued by a particular cultural group (Chao, 1994; Lin & Fu, 1990; Rohner & Pettengill, 1985). To the extent that Western European cultures and Asian cultures differ in their endorsement of individualist versus collectivist values, the parenting practices that manifest across these cultures also differ (Feldman et al., 1991; Xu, Farver, Zhang, Zeng, Yu, & Cai, 2005).

Western European Parenting

Individualistic cultures (i.e., Western European) promote an independent construal of self (Markus & Kitayama, 1991). People are viewed as independent entities, distinct from the groups with which they interact, and are encouraged to maintain their independence from others by actively discovering and expressing their unique inner attributes. The culture’s emphasis on individual autonomy, assertiveness, and self-reliance directly informs the practice of parenting.

The study of parenting style and its impact on children’s developmental outcomes has been extensively researched in Western societies as a result of Baumrind’s (1971) work. She has suggested, and other researchers have confirmed, that authoritative parenting is the most highly endorsed parenting style in Western cultures and is most conducive to adolescents’ psychological health and academic achievement within this cultural context (Baumrind, 1971; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Authoritative parents attempt to guide their children in a rational manner, exercising firm

control, granting appropriate autonomy, offering emotional support, and encouraging reciprocal communication. In Western cultures, parents encourage their children to regulate their own behaviors and to act in socially responsible ways without the use of strict parental control. Parents overtly express their love and affection towards their children through behaviors such as hugging, kissing, and praising (Wu & Chao, 2005). Strict parental control, in the Western European context, is generally perceived as a negative aspect of parenting that infringes on children's need for autonomy (Chao, 1994; Kim, 2005; Rohner & Pettengill, 1985).

Asian Parenting

Collectivistic cultures (i.e., Asian) promote an interdependent construal of self (Markus & Kitayama, 1991). People are viewed as fundamentally related to one another, bound to and defined by the groups to which they belong (Juang et al., 2007). Given that Confucian principles sit at the core of both Chinese and Korean culture, which advocate the rejection of individuality and the maintenance of social and family harmony, the parenting values and practices that manifest within these cultures are similar (Chao, 1994; Kim 2005; Xu et al., 2005). The emphasis of these cultures is on fulfilling social obligations, conforming to norms, demonstrating self-control and restraint, respecting one's elders, and establishing relationships with others.

“Traditional Chinese families are authoritarian and hierarchical, with the dominance of elders and men” (Chen, Liu, & Li, 2000, p. 403). At the core of Chinese parenting is reciprocity. Children are expected to respect, honor, and obey their parents. Parents are expected to assume full responsibility for teaching their children how to behave in socially and relationally sensitive, aware, and responsible ways. Children's failure to abide by moral, cultural, and social rules of behaving is met with prompt and strict discipline. Parents who fully embrace the values of traditional Chinese parenting tend to maintain a generational hierarchy when

interacting with their children and refrain from expressing their love through behaviors such as hugging, kissing, and praising (Wu & Chao, 2005). Rather, parental love is demonstrated through ‘guan’.

The construct of ‘guan’ was introduced into the literature by Chao (1994) to address the defining principal of traditional Chinese parenting. ‘Guan’ refers to the rigorous training and governing that parents engage in, with utmost dedication and personal sacrifice on their part, to ensure the future success of their children. In traditional Chinese culture, academic achievement is particularly emphasized because the opportunities for post-secondary education are extremely limited in China and other Eastern countries (Lin & Fu, 1990; McBride-Chang & Chang, 1998). Research findings reveal that within Chinese families, parental control, guidance, and governance are perceived by parents and children as demonstrations of genuine love, interest, and involvement (Chao, 1994; Lieber, Fung, & Leung, 2006). The construct of ‘guan’ involves a controlling parenting style in the context of a close and caring parent-child relationship, a concept that does not export to the West (Stewart, Bond, Kennard, Ho, & Zaman, 2002). Research on Korean families has similarly identified that parental control is perceived by Korean parents and children as a sign of parental warmth and acceptance (Kim, 2005; Rohner & Pettengill, 1985). Strict parental control, in traditional Chinese and Korean culture, is generally perceived as a positive aspect of parenting.

Parental Warmth, Control, and Psychological Adjustment

Parental acceptance-rejection theory’s (PARTheory; Rohner et al., 2005) theoretical framework and quantitative methodology have been utilized in numerous research studies that have sought to investigate the relationships among children’s perception of parental warmth, perception of parental control, and psychological adjustment. PARTheory’s questionnaire

measures include the Parental Acceptance-Rejection Questionnaire (PARQ; Rohner, 2005b), the Parental Control Scale (PCS; Rohner & Khaleque, 2005a), the Parental Acceptance-Rejection/Control Questionnaire (PARQ/Control; Rohner, 2005a), and the Personality Assessment Questionnaire (PAQ; Rohner & Khaleque, 2005b).

At this time, there is limited research on the contribution of parenting behaviors to the psychological adjustment of Chinese Canadian youth. There has been increasing attention paid to the Korean American population (i.e., Kim, 2005; Kim et al., 2006; Kim & Rohner, 2002). Given that Chinese and Korean parenting practices and family functioning are guided by the same principles of Confucianism (Chao, 1994; Kim, 2005), the current study will take into consideration previous research findings obtained using Korean and Korean American adolescent samples.

Parental Warmth and Psychological Adjustment

There is an abundance of cross-cultural research that has sought to investigate the relationship between children's perception of parental warmth and their psychological adjustment. Khaleque and Rohner (2002a) conducted a meta-analysis of 43 studies that investigated this relationship using the Child and Adult PARQ and the Child and Adult PAQ. In total, there were 7,563 respondents that represented most of the major cultural groups in the United States of America (i.e., African American, Asian American, Hispanic American, and European American). Of the studies analyzed, 28 involved children, ages 6 through 19, who reported their current perception of parental warmth and 15 involved adults, ages 21 through 89, who reported their retrospective perception of parental warmth.

Significant correlations ($p < .05$ or less) were observed between perceived parental warmth and psychological adjustment across all the studies analyzed. The mean weighted effect

sizes of perceived parental warmth on psychological adjustment across all the samples analyzed, adjusted for sample size, were large ($r = .51$ for children; $r = .46$ for adults). These findings indicate that children who perceived their parents as warm reported higher levels of psychological adjustment than those who perceived their parents as less warm, regardless of differences in age, culture, ethnicity, gender, race, and other such defining conditions.

More recently, Kim et al. (2006) investigated the relationships among perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment using a sample of 106 Korean American adolescents, ages 11 through 14. Adolescents completed the Mother and Father versions of the Child PARQ/ Control and the Child PAQ.

A correlation analysis revealed that adolescents' age was significantly associated with their psychological adjustment ($r = .24, p < .05$), indicating that older adolescents had a slight tendency to report higher levels of psychological adjustment than younger adolescents. A hierarchical regression analysis was conducted to determine the relative contribution of demographic variables (i.e., adolescents' age and parents' length of marriage), perceptions of maternal/ paternal warmth, and perceptions of maternal/ paternal control to the prediction of adolescents' psychological adjustment. Demographic variables were not significant in predicting psychological adjustment for the participants in this study. The effects of perceived maternal warmth ($\beta = .26, p < .001$) and paternal warmth ($\beta = .25, p < .001$), when controlling for demographic variables, revealed that adolescents who perceived their mothers/ fathers as warm reported higher levels of psychological adjustment than those who perceived their mothers/ fathers as less warm. Perceptions of maternal/ paternal control were not significant factors in this model. Results of this analysis revealed that approximately 32% and 26% of the variability in

adolescents' psychological adjustment could be accounted for by mothers' and fathers' behaviors, respectively, when controlling for adolescents' age and parents' length of marriage.

In 2007, Lila et al. examined the relationship between perceptions of maternal/ paternal warmth and psychological adjustment using a sample of 234 children in Colombia, ages 7 through 13. Children completed the Mother and Father versions of the Child PARQ and the Child PAQ.

A hierarchical regression analysis was conducted to examine the relative contribution of demographic variables (i.e., gender, age, and social class) and perceptions of maternal/ paternal warmth to the prediction of children's psychological adjustment. Neither gender nor age was significant in predicting psychological adjustment for the participants in this study. The effect of social class ($\beta = -.32, p < .001$) revealed that children from higher socioeconomic backgrounds reported higher levels of psychological adjustment than those from lower socioeconomic backgrounds. The effect of social class did not maintain its significance when perceptions of maternal/ paternal warmth were entered into the regression equation ($\beta = -.08, p = ns$). The effects of perceived maternal warmth ($\beta = .40, p < .001$) and paternal warmth ($\beta = .32, p < .001$), when controlling for demographic variables, revealed that children who perceived their mothers/ fathers as warm reported higher levels of psychological adjustment than those who perceived their mothers/ fathers as less warm. Results of this analysis revealed that approximately 36% of the variability in children's psychological adjustment could be accounted for by both perceived maternal and paternal warmth, when controlling for gender, age, and social class.

There is compelling cross-cultural evidence supporting PARTheory's postulate that children's psychological adjustment varies as a direct result of their perception and experience of

parental warmth. No study has sought to investigate this relationship among the Chinese Canadian population.

Parental Control and Parental Warmth

The relationship between the perception of parental control and the perception of parental warmth is not specifically stated in PARTheory. Research that has sought to investigate this relationship, using PARTheory's questionnaire measures, has generated inconsistent findings. While some studies suggest that there is no relationship between children's perceptions of parental control and parental warmth, other studies suggest that there is a relationship and that it may simply manifest in different ways across different cultural contexts.

In 2005, Cournoyer et al. examined the relationships among perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment using a sample of 108 Ukrainian University students, ages 17 through 28. Young adults completed the Mother and Father versions of the Adult PARQ/ Control and the Adult PAQ.

A correlation analysis revealed a significant positive relationship between perceived maternal/ paternal warmth and psychological adjustment ($r = .41, p < .001$ for mothers; $r = .25, p < .01$ for fathers), as expected, indicating that young adults who perceived their mothers/ fathers as warm reported higher levels of psychological adjustment than those who perceived their mothers/ fathers as less warm. Perceptions of maternal/ paternal control were not significantly correlated with either perceptions of maternal/ paternal warmth or psychological adjustment for the participants in this study. Kim et al. (2006) arrived at these same conclusions using a sample of 106 Korean American adolescents, ages 11 through 14. However, other researchers have suggested that not only is there a relationship between adolescents' perceptions

of maternal/ paternal control and maternal/ paternal warmth, but that cultural factors have a direct impact on the direction of this relationship.

In 1985, Rohner and Pettengill acknowledged previous research findings suggesting that American children tend to associate parental control with parental rejection. They speculated that this may not be the case for Korean children where the culture as a whole values family harmony, obedience, and deference to elders. They subsequently conducted a study to investigate the relationship between perceptions of maternal/ paternal control and perceptions of maternal/ paternal warmth using a sample of 125 Korean adolescents in Korea, ages 15 through 18. Adolescents completed the Mother and Father versions of the Child PARQ and selective subscales from the Children's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965).

A correlation analysis revealed a significant positive relationship between perceived maternal/ paternal control and perceived maternal/ paternal warmth ($r = .34, p < .001$ for mothers; $r = .41, p < .001$ for fathers), indicating that adolescents who perceived their mothers/ fathers as controlling also tended to perceive their mothers/ fathers as warm. No subsequent study, using PARTheory's quantitative methodology, has sought to replicate the finding that traditional Asian adolescents perceive their parents as both controlling and warm. One study has, however, investigated the influence of birthplace on the relationship between Korean American adolescents' perceptions of parental control and parental warmth.

In 2005, Kim acknowledged that while parental control is generally associated with parental rejection in the United States of America, it is generally associated with parental acceptance in Korea. She conducted a study to examine the relationship between perceptions of maternal/ paternal control and perceptions of maternal/ paternal warmth using a sample of 106 Korean American adolescents, ages 11 through 14, while taking birthplace into consideration. Of

the total sample, 26 were Korean-born and 80 were American-born. Adolescents completed the Mother and Father versions of the Child PARQ/ Control.

A correlation analysis, using data from the entire study sample, revealed a significant negative relationship between perceived maternal/ paternal control and perceived maternal/ paternal warmth, indicating that adolescents who perceived their mothers/ fathers as controlling also tended to perceive their mothers/ fathers as less warm. When birthplace was taken into consideration, it was only American-born adolescents who appeared to associate parental control with parental rejection. For these participants, perceived maternal/ paternal control was significantly and positively associated with perceived maternal/ paternal hostility and aggression ($r = .52, p < .001$ for mothers; $r = .45, p < .001$ for fathers) and maternal/ paternal undifferentiated rejection ($r = .49, p < .001$ for mothers; $r = .36, p < .001$ for fathers). On the other hand, Korean-born adolescents' perceptions of maternal/ paternal control were not significantly associated with any of the attributes of maternal/ paternal rejection.

Taken together, these findings suggest that as immigrant Asian adolescents gain exposure to Western culture, they increasingly adopt mainstream values and consequently interpret parental control as a sign of hostility and rejection. However, the correlational nature of these analyses does not allow for the establishment of cause-and-effect relationships. At the present time, there is insufficient empirical evidence to draw any conclusions on the relationship between immigrant Asian adolescents' perceptions of parental control and parental warmth.

Parental Control and Psychological Adjustment

The relationship between the perception of parental control and psychological adjustment is not specifically stated in PARTheory. While some studies suggest that there is no relationship between adolescents' perception of parental control and their psychological adjustment (i.e.,

Cournoyer et al., 2005; Kim et al., 2006), others suggest that there is a weak and inconsistent relationship (i.e., Chiu, Feldman, & Rosenthal, 1992), and yet others suggest that the perception of parental control may indirectly impact adolescents' psychological adjustment through a number of intervening variables (Juang et al., 2007). There is one study that is particularly relevant to the current discussion and involves the examination of a mediated effect. A mediated effect is essentially a causal model in which a variable, called a mediator, serves to explain 'how' or 'why' a predictor causes an outcome (Frazier, Tix, & Barron, 2004).

In 1991, Rohner et al. examined the possible mediating role of perceived caretaker rejection in the relationship between physical punishment and psychological maladjustment. The specific research question proposed was: Is physical punishment associated with impairments in adolescents' psychological adjustment insofar as it is perceived by adolescents to be a form of caretaker rejection? The study sample consisted of 349 adolescents, ages 9 through 16, living in St. Kitts in the West Indies. Within this cultural context, physical punishment is culturally endorsed as a central aspect of responsible parenting. Adolescents completed the Physical Punishment Questionnaire (PPQ; constructed for use in this specific study), the Child PARQ, and the Child PAQ.

Correlations between demographic variables (age, gender, and social class), physical punishment, perception of caretaker rejection, and psychological maladjustment were examined. Perceived caretaker rejection did not vary significantly by age for the participants in this study but varied by gender ($r = -.12, p < .05$), indicating that boys reported slightly more caretaker rejection than girls, and by social class ($r = .29, p < .01$), indicating that adolescents from lower socioeconomic backgrounds reported more caretaker rejection than those from higher socioeconomic backgrounds. Psychological maladjustment did not vary significantly by age or

gender but varied by social class ($r = -.25, p < .05$), indicating that adolescents from lower socioeconomic backgrounds had a slight tendency to report lower levels of psychological adjustment than those from higher socioeconomic backgrounds.

A series of regression analyses were conducted to examine whether the perception of caretaker rejection mediated the relationship between physical punishment and psychological maladjustment. The direct effect of physical punishment on psychological maladjustment was significant, yielding a path coefficient of $.566 (p < .05)$. This established that there was an association to be mediated. The effect of physical punishment on perceived caretaker rejection was significant, yielding a path coefficient of $.478 (p < .05)$. This established that there was an association between the predictor and mediator variable. When psychological maladjustment was regressed on both physical punishment and perceived caretaker rejection, the results revealed that perceived caretaker rejection successfully predicted psychological maladjustment, when controlling for physical punishment. The corresponding path coefficient was $.629 (p < .01)$. Further, the effect of physical punishment on psychological adjustment, when controlling for perceived caretaker rejection, was significant and yielded a path coefficient of $.265 (p < .05)$. These findings revealed that the association between physical punishment and psychological maladjustment was significantly reduced by the inclusion of perceived caretaker rejection. From this, it was determined that physical punishment impaired adolescents' psychological adjustment in large part because it was perceived as a form of caretaker rejection.

Given the relatedness of physical punishment to strict parental control, it is possible that adolescents' perception of parental control impacts their psychological adjustment indirectly through a number of mediating variables. A mediated effect would explain why studies that have sought to understand the relationship between the perception of parental control and

psychological adjustment have generated inconsistent results (Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006; Lim & Lim, 2004). Given the speculation that parental control is interpreted as a form of parental acceptance in Eastern cultures and as a form of parental rejection in Western cultures (Chao, 1994; Lieber et al., 2006), and that the perception of parental warmth is universally associated with children's psychological adjustment (i.e., Kim et al., 2006; Lila et al., 2007), it is possible that the perception of parental warmth mediates the relationship between the perception of parental control and psychological adjustment. In other words, if children perceive their parents as warm, no matter how controlling they perceive their parents to be, perceived parental warmth will take preeminence in influencing their psychological adjustment. Future research is needed to identify and investigate a number of factors that may mediate the effect of perceived parental control on adolescents' psychological adjustment.

Acculturation and Parenting

When Chinese families immigrate to Canada, they exist between two opposing cultural systems, which emphasize interdependence (i.e., Eastern influence) versus independence (i.e., Western influence), and are faced with unique issues of acculturation. Berry (2006) has identified four patterns of cultural adaptation. A person can exclusively follow their heritage culture (separation), exclusively follow mainstream culture (assimilation), follow neither culture (marginalization), or balance both cultures (integration). Research suggests that while children tend to prefer the values and norms associated with mainstream culture, parents tend to retain values and norms consistent with their heritage culture (Baptiste, 1993; Costigan & Dokis, 2006; Rudy & Grusec, 2006).

The parenting literature has documented that Western European parents tend to experience greater equality with their children in comparison to traditional Asian parents (Kim, 2005; Wu & Chao, 2005). The implication is that as Chinese parents continue to retain a more controlled parenting style when they immigrate to Canada, their children, as they more quickly acculturate, will increasingly view this from the Western perspective as a sign of parental domination and rejection, leading to negative consequences for their psychological adjustment.

Research investigating the psychological adjustment of immigrant Asian youth has found that while some adolescents report more distress than their non-immigrant peers, others report similar or even lower levels of distress (Chiu et al., 1992). Intervening factors that have been suggested to contribute to immigrant Chinese adolescents' psychological adjustment include traumatic events, family cohesiveness, social support networks, and adolescents' hardiness (as discussed in Chiu et al., 1992). Adolescent-parent acculturation disparity has also been identified as a contributing factor to anxiety, depression, and somatic problems among immigrant Chinese youth (Costigan & Dokis, 2006; Juang et al., 2007; Tardif & Geva, 2006; Wu & Chao, 2005). In 2006, Berry et al. found that immigrant youth who demonstrated an integrative acculturation style, maintaining aspects of their heritage while simultaneously adopting aspects of mainstream culture, tended to be the most socioculturally and psychologically well-adjusted. Because there is great variability in the ways in which immigrant Asian adolescents acculturate into mainstream culture, their level of psychological adjustment cannot be directly inferred from their length of residence in mainstream culture. In the context of the current study, there is limited research that has investigated the relationships between cultural identity and immigrant Asian adolescents' perceptions of parental warmth, perceptions of parental control, and psychological adjustment. There are three studies that are relevant to the current discussion.

First, Chiu et al. (1992) conducted a study to investigate whether Hong Kong American adolescents' perceptions of parental warmth and control differ from those of Hong Kong and European American adolescents. They further examined the relationships among adolescents' perception of parental warmth, perception of parental control, and level of distress. The sample consisted of 323 participants, ages 15 through 18. Of the total sample, 131 were Hong Kong American adolescents (69 first generation and 62 second generation), 101 were Hong Kong adolescents, and 91 were European American adolescents. On average, Hong Kong American, Hong Kong, and European American adolescents in this study responded differently on measures of perceived parental control but not on measures of perceived parental warmth.

Study findings revealed that Hong Kong American and European American adolescents reported higher levels of perceived parental control than Hong Kong adolescents. No statistically significant relationship was observed between perceived parental control and adolescents' distress. Further, study findings revealed that there were no significant differences among Hong Kong American, Hong Kong, and European American adolescents' reports of perceived parental warmth. Consistent with previous research, a significant and negative association was observed between perceived parental warmth and emotional and physical distress for all participants involved, regardless of cultural background.

Second, Wu and Chao (2005) conducted a study to examine discrepancies between Chinese American adolescents' ideals and perceptions of parental warmth in comparison to a group of European American adolescents. They also sought to investigate the association between such discrepancies and adolescents' internalizing and externalizing adjustment problems. The sample consisted of 264 adolescents, grades 9 through 12. Of the total sample, 184 were Chinese American adolescents (60 first generation and 124 second generation) who

were originally from Taiwan (47%), the People's Republic of China (36%), Hong Kong (6%), and other parts around the world (3%). The remaining 80 adolescents were European American (primarily third generation or later).

Study findings revealed that Chinese American and European American adolescents reported similar ideals of parental warmth. However, contrary to Chiu et al.'s (1992) finding, Chinese American adolescents in this study perceived their parents as less warm than European American adolescents. This study's findings further indicated that discrepancies between ideals and perceptions of parental warmth were associated with externalizing symptoms, specifically aggressive and delinquent behaviors, for Chinese American adolescents but not for European American adolescents. These findings suggest that cultural factors play a role in immigrant Asian adolescents' ideals and perceptions of parental warmth and that those who perceive their parents as less warm than they desire suffer from behavioral adjustment problems.

Third, Kim (2005) conducted a study to examine immigrant Asian adolescents' perceptions of maternal/ paternal warmth and perceptions of maternal/ paternal control, while taking their birthplace into consideration. The study sample consisted of 106 Korean American adolescents, ages 11 through 14. These adolescents lived in the United States of America for an average of 10.69 years, regardless of birthplace. Adolescents completed the Mother and Father versions of the Child PARQ/ Control.

One-way analyses of variance and analyses of covariance were conducted to examine differences between Korean-born and American-born Korean American adolescents' perceptions of maternal/ paternal warmth and control. Findings revealed that while Korean-born adolescents perceived their mothers as warmer than American-born adolescents ($F(1,102) = 4.11, p < .05$), the effect of adolescents' birthplace disappeared ($F(2,98) = .99, p = ns$) when the significant

effect of mothers' level of education was controlled for ($F(1,99) = 4.41, p < .05$). There were no significant differences observed between Korean-born and American-born Korean American adolescents' perceptions of paternal warmth, maternal control, or paternal control. The overall finding was that there were no differences in perceptions of maternal/ paternal warmth and control among the Korean American participants in this study, when taking birthplace into consideration. Given that immigrant Asian youth have been suggested to adopt aspects of mainstream culture relatively quickly (Baptiste, 1993; Hwang, 2006), and that this study sample lived an overwhelming majority of their lives in the United States of America, it is conceivable that Korean-born and American-born Korean American adolescents' perceptions of parenting behaviors may be more similar than different.

A limitation of these three studies is that they did not take cultural factors into consideration. Given that one's manner of cultural adaptation varies on an individual basis, the terms Hong Kong American, Chinese American, and Korean American fail to capture a more precise account of the extent to which these individuals identify with their heritage culture and mainstream culture. Despite this limitation, these studies are important because they are among the few that have sought to investigate the impact of immigration on Asian adolescents' perceptions of parenting behaviors. Taken together, these findings revealed that Hong Kong American adolescents perceived their parents as more controlling than Hong Kong adolescents and that Chinese American adolescents perceived their parents as less warm than European American adolescents, which may be the result of their exposure to and adoption of Western European values and parenting norms.

The current understanding is that children tend to assimilate to mainstream culture more quickly than their parents. It is possible that as Chinese parents continue to retain a more

controlled parenting style when they immigrate to Canada, their children will increasingly view their parents' behaviors from the Western perspective as a sign of parental hostility, domination, and rejection. More research is needed to investigate the impact of cultural factors on immigrant Asian adolescents' perceptions of parenting behaviors, which have been implicated in their psychological adjustment.

Conclusion

The research literature on acculturation, parenting, and children's developmental outcomes suggests that maintaining healthy psychological adjustment may be more complicated for Chinese Canadian adolescents than for European Canadian adolescents. Given that the Chinese Canadian population is underrepresented in the parenting research literature, it remains uncertain the extent to which cultural identity, perceptions of parental warmth, and perceptions of parental control contribute to the psychological adjustment of Chinese Canadian youth.

While substantial cross-cultural evidence supports parental acceptance-rejection theory's (PARTheory; Rohner et al., 2005) major postulate that children's psychological adjustment tends to vary directly and positively with their perception of parental warmth, this relationship has yet to be substantiated using a sample of Chinese Canadian adolescents. Currently, the relationship between the perception of parental control and psychological adjustment remains unstated in PARTheory and inconclusive in empirical research that has utilized PARTheory's quantitative methodology. While it is possible that the perception of parental warmth mediates the relationship between the perception of parental control and psychological adjustment, no study has examined this mediation model.

Chapter Three: Research Design and Method

The current study used a cross sectional, self-report, correlational research design. A total of 195 self-identified Chinese Canadian adolescents, attending four public high schools in a large urban area of Western Canada, were surveyed. The research was conducted to determine whether, and to what extent, Chinese Canadian adolescents' cultural identification and perceptions of parenting behaviors contribute to their psychological adjustment.

In Western language, China is often considered a monolithic country but is in fact made up of distinct provinces and cities with unique historical and cultural contexts. For the purposes of the current study, I collapsed adolescents from the People's Republic of China, Hong Kong, and Taiwan into one group and called them 'Chinese'. This chapter will review the research hypotheses, procedure, and sample population.

Research Questions (Restatement) and Hypotheses

1) What are the relationships among adolescents' Chinese/ Canadian identification, perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment?

Hypothesis 1a: There would be a positive correlation between perceptions of maternal/ paternal warmth and adolescents' psychological adjustment. This relationship has been consistently documented in the research literature (i.e., Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006; Lila et al., 2007; Rohner, 2004; Rohner et al., 1991).

Hypothesis 1b: There would be a negative correlation between perceptions of maternal/ paternal control and perceptions of maternal/ paternal warmth. This hypothesis was based on the previous research finding that while perceptions of parental control and parental warmth were positively associated for a group of Korean adolescents in Korea (Rohner &

Pettengill, 1985), perceptions of parental control and parental warmth were negatively associated for a group of Korean adolescents in America (Kim, 2005). The speculation is that as immigrant Asian adolescents gain exposure to Western culture, they will increasingly adopt mainstream values and consequently interpret parental control as a sign of hostility and rejection (Chao, 1994; Lieber et al., 2006; Stewart et al., 2002).

Hypothesis 1c: There would be a negative correlation between perceptions of maternal/paternal control and adolescents' psychological adjustment. This hypothesis was based on the speculation that as immigrant Asian adolescents gain exposure to Western culture, they will increasingly interpret parental control as a sign of hostility and rejection that has been associated with psychological maladjustment in previous research (Rohner et al., 1991).

Hypothesis 1d: There would be a negative correlation between identification with Canadian culture and perceptions of maternal/paternal warmth. This hypothesis was based on the finding that children tend to acculturate to mainstream culture more quickly than their parents (Hwang, 2006; Tardif & Geva, 2006; Wu & Chao, 2005). The implication is that as Chinese Canadian parents continue to retain their traditional parenting practices, such that they refrain from engaging in overt displays of parental affection, their children may increasingly adopt a Western perspective of parenting that encourages overt displays of parental affection and consequently perceive their parents as less warm than their peers. It was also hypothesized that there would be a positive correlation between identification with Chinese culture and perceptions of maternal/paternal warmth.

Hypothesis 1e: There would be a positive correlation between identification with

Canadian culture and perceptions of maternal/ paternal control. This hypothesis was based on Chiu et al.'s (1992) finding that Hong Kong American and European American adolescents reported higher levels of parental control than Hong Kong adolescents. The implication is that as Chinese Canadian parents continue to implement a more controlled parenting style consistent with traditional Chinese values, their children will increasingly adopt a heightened awareness of the negativity associated with parental control in the Western context and consequently perceive their parents as more controlling than their peers. It was also hypothesized that there would be a negative correlation between identification with Chinese culture and perceptions of maternal/ paternal control.

2) Do perceptions of maternal/ paternal warmth mediate the relationship between perceptions of maternal/ paternal control and adolescents' psychological adjustment?

Hypothesis 2: Perceptions of maternal/ paternal warmth would partially mediate the relationship between perceptions of maternal/ paternal control and Chinese Canadian adolescents' psychological adjustment. This hypothesis was based on Rohner et al.'s (1991) finding that physical punishment impaired Kattitian adolescents' psychological adjustment indirectly through the perception of caretaker rejection. It is also consistent with the parenting literature suggesting that perceptions of maternal/ paternal control likely impact adolescents' psychological adjustment through a number of mediating factors (Juang et al., 2007). While existing research has consistently documented a significant and positive association between perceived maternal/ paternal warmth and psychological adjustment (i.e., Lila et al., 2007; Rohner, 2004; Rohner et al., 1991), all other associations between perceived maternal/ paternal warmth, perceived maternal/ paternal control, and psychological adjustment remain inconsistent and inconclusive (i.e.,

Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006). It is possible that perceived maternal/ paternal warmth plays a mediating role in the relationship between perceived maternal/ paternal control and psychological adjustment.

3) What is the relative contribution of demographic variables (i.e., gender, age, and mothers' level of education), Chinese/ Canadian identification, perceptions of maternal/ paternal control, and perceptions of maternal/ paternal warmth to the prediction of adolescents' psychological adjustment when each set of variables is sequentially added into the prediction?

Hypothesis 3: Any significant effect of demographic variables, Chinese/ Canadian identification, and perceptions of maternal/ paternal control on psychological adjustment would attenuate when perceptions of maternal/ paternal warmth are entered into the equation. Further, perceptions of maternal/ paternal warmth would be the most important predictors of adolescents' psychological adjustment. This hypothesis was based on two previous studies. First, Lila et al. (2007) found that perceptions of maternal/ paternal warmth explained a unique proportion of the variance in Colombian children's psychological adjustment when controlling for gender, age, and social class. Second, Kim et al. (2006) found that perceptions of maternal/ paternal control did not contribute to the prediction of Korean American adolescents' psychological adjustment when controlling for adolescents' age and parents' length of marriage. Perceptions of maternal/ paternal warmth explained a unique proportion of the variance, as expected.

Procedure

Informed Consent and Assent

After receiving ethical approval to conduct this study, from the University of British Columbia's Ethics Review Board and the appropriate School Board Research Committees (See

Appendix A), I contacted school administration and staff at large public high schools in the Lower Mainland of British Columbia with an invitation to take part. Schools that had a high concentration of Chinese Canadian students were specifically targeted. Four schools, located in at least middle-income areas, agreed to participate.

I made brief classroom visits and public student announcements at the schools that agreed to participate in the current study. Both oral and written invitations were extended to all students to convey the purpose and nature of the study, inclusion criteria for participation, reimbursement for participation, and students' role and rights as research participants (See Appendix B for the written invitation). Inclusion criteria for the current study were that adolescents must: (a) self-identify as Chinese Canadian, (b) have adequate English fluency to provide informed assent and complete all the study questionnaires, (c) have both a female and male caregiver in their lives that they can reflect upon when reporting their perceptions of maternal/ paternal warmth and control, (d) receive written parent/ guardian consent for their participation, and (e) give written assent for their own participation. To promote the rate of student participation, all students were informed that they would receive a \$10 gift certificate to the local mall as a token of appreciation for their involvement in the current study.

Parent/ guardian consent forms were made available to students either during classroom visits or through the main office. Parent/ guardian consent forms were available in both English (See Appendix C) and Chinese (See Appendix D). Students were asked to return their completed consent forms to identified school personnel. I collected consent forms from the respective school personnel and compiled a list of names of students who had received parent/ guardian consent to participate in this study. To promote the return rate of parent/ guardian consent forms, all students were informed that if they returned their consent form to identified school personnel

within one week, regardless of whether their parent/ guardian gave them permission to participate in this study or not, they would be entered into a draw to win two movie passes. One student from each participating school was randomly selected as the winner.

Research study session dates and times were announced to students by means of postings in the main office and public student announcements. Only students who fulfilled the study criteria were invited to participate.

Data Collection

I conducted research study sessions at students' home school during their free time (i.e., lunch or after school). I collected independent self-report data from students in group format in either a reserved classroom or cafeteria setting. Upon arrival, each student was asked to cross his/ her name off the list of names of students whose parent/ guardian consented to their participation. Students whose names did not appear on the list were not invited to take part. Prior to filling out the questionnaire measures, students were reminded of the purpose and nature of the study, inclusion criteria for participation, reimbursement for participation, their role and rights as research participants, and the confidential nature of their responses. Students were encouraged to raise questions pertaining to their participation at this time.

I distributed adolescent assent forms to all remaining students (See Appendix E). After students provided written assent for their participation, I distributed a package of study materials to each student that appeared in the following order: (1) the Demographic Questionnaire (See Appendix F), (2) the Vancouver Index of Acculturation (See Appendix G), (3) the Mother version of the Child Parental Acceptance-Rejection/ Control Questionnaire (See Appendix H), (4) the Father version of the Child Parental Acceptance-Rejection/ Control Questionnaire, and (5) the Adult Personality Assessment Questionnaire (See Appendix I). Students were asked to

read the instructions carefully and to respond to every question by selecting one response. I was available to answer any questions that students had as they were filling out the questionnaire measures. On average, it took students 50 minutes to complete all study materials.

Study materials were collected immediately following administration. All students who attempted to complete the questionnaire measures, whether or not they completed all the measures, received a \$10 gift certificate to the local mall immediately following the research study session. At this time, participants were informed of who won the draw for the two movie passes. If the winner was not in attendance at the study session, a public student announcement was made so that the respective student could claim his/ her movie passes from the main office.

Instruments, Measures, and Variables

Demographic Questionnaire

Adolescents were asked to complete a demographic questionnaire to obtain information pertaining to their gender, age, grade, place of birth, length of residence in Canada, Canadian generational status, language(s) used in general (i.e., spoken, understood, and read), language(s) used with their mother, language(s) used with their father, and their mothers' highest level of education (See Appendix F). Adolescents were asked to select their place of birth from the following list: Hong Kong, Taiwan, Taipei, Canada, and Other. If adolescents selected the category of Other, they were further asked to elaborate in the blank space provided. In total, there were 32 adolescents (37.5%) who selected the category of Other and further indicated that they were born in various provinces and cities within the People's Republic of China. All questions pertaining to language were of fill in the blank response format. I collapsed the languages of Mandarin, Cantonese, Taiwanese, Shanghainese, and Hokkien into one category and called it 'Chinese'.

Vancouver Index of Acculturation

The Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus, 2000) was used to assess adolescents' identification with Chinese and Canadian culture. The VIA was developed as a bidimensional measure of acculturation in order to determine one's overall level of ethnic identity. It provides independent measures of the degree to which people identify with their heritage culture and the degree to which they identify with mainstream culture.

The VIA is a 20-item self-report measure that asks people to rate their level of agreement with a series of statements pertaining to their identification with different domains relevant to acculturation (i.e., values, social relationships, and adherence to cultural traditions) (See Appendix G). The measure consists of two subscales (10 items each): heritage dimension and mainstream dimension. Heritage dimension items and mainstream dimension items are identical in content, except for reference to one's heritage or mainstream culture, and are presented in alternate order. Sample items used in the current study include "I enjoy Chinese/ Canadian entertainment (i.e., music, movies)", "I enjoy social activities with Chinese/ Canadian people", and "I often participate in Chinese/ Canadian cultural traditions". Responses are not timed and are given on a nine-point Likert-type scale anchored from 1, "strongly disagree", to 9, "strongly agree".

In the current study, the heritage dimension (i.e., Chinese identification) subscale score was calculated from the mean of all the odd-numbered items. The mainstream dimension (i.e., Canadian identification) subscale score was calculated from the mean of all the even-numbered items. Subscale scores could range from a low of 1, indicating low levels of identification with the respective culture, to a high of 9, indicating high levels of identification with the respective culture. The psychometric properties of the VIA have been documented in the literature.

Ryder et al. (2000) investigated the reliability and validity of scores obtained on the VIA by a culturally diverse sample of undergraduate students (Mean age 20) who identified their heritage culture as either Chinese ($n = 204$; 31% male), non-Chinese East Asian (i.e., Japanese, Korean, and Vietnamese) ($n = 70$; 23% male), or non-East Asian and non-English speaking (i.e., East Indian, Italian, and Arabic) ($n = 140$; 29% male). The scores obtained by Ryder et al.'s sample support the reliability, concurrent validity, discriminant validity, and construct validity of the VIA.

The VIA demonstrated high internal consistency using data obtained by Ryder et al.'s sample. Cronbach's alpha (α) for the heritage dimension were reported as .91, .92, and .91 for each sub sample, respectively. Cronbach's α for the mainstream dimension were reported as .89, .85, and .87 for each sub sample, respectively. Mean interitem correlations (r) were also high. Correlations for the heritage dimension were reported as .52, .53, and .51 for each sub sample, respectively. Correlations for the mainstream dimension were reported as .45, .38, and .44 for each sub sample, respectively. Data obtained by Ryder et al.'s sample further revealed that heritage and mainstream dimension subscale scores were highly correlated with seven concurrent measures, as expected, which included (a) percentage of time lived in a Western country, (b) percentage of time educated in a Western country, (c) generational status, (d) anticipation of remaining in the West, (e) status of English as a first or second language, (f) a single-item measure of Western identification, and (g) the mean score obtained on the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Ahuna, & Khoo, 1992). Heritage and mainstream dimension subscale scores displayed patterns of non-inverse correlations with personality, self-identity, and psychosocial adjustment for the participants in Ryder et al.'s study, as expected.

A principal components factor analysis with promax rotation was conducted using the scores obtained by Ryder et al.'s sample. Two components were extracted. Heritage dimension items accounted for between 29.95% and 34.90% of the variance and mainstream dimension items accounted for between 21.80% and 25.58% of the variance (See Ryder et al., 2000).

The VIA has been implemented in other research. Kennedy, Parhar, Samra, and Gorzalka (2005) used a sample of Chinese ($n = 574$) and South Asian ($n = 102$) undergraduate students. Cronbach's α were reported within the range of .91 to .92 for the heritage dimension and within the range of .85 to .89 for the mainstream dimension.

Parental Acceptance-Rejection/ Control Questionnaire

The Mother and Father versions of the Child Parental Acceptance-Rejection/ Control Questionnaire (PARQ/ Control; Rohner, 2005a) were used to assess adolescents' perceptions of maternal/ paternal warmth and control. These two versions of the measure are identical except for reference to mothers' or fathers' behaviors. The Child PARQ/ Control is a combination of the Child Parental Acceptance-Rejection Questionnaire (PARQ; Rohner, 2005b) and the Child Parental Control Scale (PCS; Rohner & Khaleque, 2005a).

The PARQ/ Control is a 73-item self-report measure that asks children to rate the truth of statements pertaining to their mothers'/ fathers' behaviors towards them (See Appendix H for the Mother version). The total scale consists of five subscales: Warmth/ Affection (20 items) (i.e., My mother/ father makes me feel wanted and needed), Hostility/ Aggression (15 items) (i.e., My mother/ father goes out of her/ his way to hurt my feelings), Indifference/ Neglect (15 items) (i.e., My mother/ father pays no attention to me as long as I do nothing to bother her/ him), Undifferentiated Rejection (10 items) (i.e., My mother/ father does not really love me), and Control (13 items) (i.e., My mother/ father sees to it that I know exactly what I may or may not

do). Subscale items are arranged in cyclical order. Responses are not timed and are given on a four-point Likert-type scale anchored from 1, “almost never true”, to 4, “almost always true”.

A composite score for the PARQ (i.e., Warmth/ Affection, Hostility/ Aggression, Indifference/ Neglect, and Undifferentiated Rejection subscales), after reverse scoring particular items, provides an overall indicator of perceived maternal/ paternal rejection. For the purposes of the current study, the Warmth/ Affection subscale score was used as an indicator of perceived maternal/ paternal warmth and the Control subscale score was used as an indicator of perceived maternal/ paternal control. Subscale scores were calculated from the total sum of their respective items. A portion of the items on the Control subscale were reverse scored in order to reduce response bias.

The Warmth/ Affection score could range from a low of 20, indicating low levels of perceived maternal/ paternal warmth, to a high of 80, indicating high levels of perceived maternal/ paternal warmth. The Control score could range from a low of 13, indicating low levels of perceived maternal/ paternal control, to a high of 52, indicating high levels of perceived maternal/ paternal control. More specifically, scores can be interpreted as follows: 13 - 26 indicates low/ lax control, 27 - 39 indicates moderate control, 40 - 45 indicates firm control, and 46 - 52 indicates strict/ restrictive control. Because the Child PARQ/ Control is essentially the Child Parental Control Scale (PCS) built into the Child Parental Acceptance-Rejection Questionnaire (PARQ), the psychometric properties of these two measures will be discussed separately.

There is reliability and validity evidence documented for the Child PARQ. Numerous studies have used the Child PARQ with culturally diverse youth samples (i.e., African American, Asian American, European American, Hispanic American, and Colombian) and have reported

high internal consistency, using Cronbach's α , within the range of .72 and .96 for the total score (i.e., Khaleque & Rohner, 2002b; Kim, 2005; Kim et al., 2006; Kim & Rohner, 2002; Lila et al., 2007; Rohner & Pettengill, 1985). Khaleque and Rohner (2002b) report that no sample has yet been identified in which reliability for the PARQ is low and non-significant. There are no studies that have used the Warmth/ Affection subscale independently. There is also support for the validity of this measure.

The test manual discusses a validity study conducted on the Child PARQ (Mother version) using a sample of 220 children (ages 9-11; 46% male) from three elementary schools in the metropolitan Washington, D. C. area (Rohner, 2005b). The ethnic background of these study participants was not reported and so it remains unclear whether the data obtained are applicable to youth from a variety of different cultural backgrounds. Although this sample is not entirely appropriate for the intended use of the measure, there is no information available on the validity of this measure when used with samples of immigrant Asian youth. As such, the findings reported in the Washington study will be discussed as a source of convergent, discriminant, and construct-related evidence of validity for the Child PARQ.

To examine the validity of the scores obtained on the Child PARQ, the measure was modified by inserting items from two validated instruments in cyclical order. The pairing of convergent and discriminant measures to each subscale of the Child PARQ was as follows:

- (a) the Acceptance subscale of Schaefer's Children's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965) for the Warmth/ Affection subscale of the PARQ ($r = .83, p < .001$),
- (b) the Physical Punishment subscale of Bronfenbrenner's Parental Behavior Questionnaire (BPB; Siegelman, 1965) for the Hostility/ Aggression subscale of the PARQ ($r = .55, p < .001$),
- (c) the Hostile Detachment subscale of the CRPBI for the Indifference/ Neglect subscale of the

PARQ ($r = .64, p < .001$), and (d) the Rejection subscale of the CRPBI for the Undifferentiated Rejection subscale of the PARQ ($r = .74, p < .001$). Overall, the results of this analysis revealed that items on the four PARQ subscales were related to conceptually similar constructs and unrelated to conceptually dissimilar constructs, as expected, providing convergent and discriminant-related evidence of validity in support of the Child PARQ (See Rohner, 2005b). The Washington study also examined the construct validity of the Child PARQ.

A principal components factor analysis with oblique rotation was conducted using the scores obtained from the respective measures used in the convergent and discriminant validity study discussed above (See Rohner, 2005b). Two factors emerged in this analysis. Perceived parental acceptance accounted for 12.20% of the variance and perceived parental rejection accounted for 45.80% of the variance. This two-factor structure has been replicated with data obtained on the Child PARQ from youth, ages 6 through 19, across 8 sociocultural groups worldwide (i.e., Egyptian, Indian, Korean, Puerto Rican, African American, and European American), providing evidence that the Child PARQ is a valid cross-cultural measure of parental acceptance and warmth (Rohner & Cournoyer, 1994).

There is also reliability and validity evidence documented for the Child PCS. In 2003, Rohner and Khaleque conducted a meta-analysis of 11 studies that used the Child PCS with samples of youth, ages 7 through 19, from different cultural backgrounds (i.e., North America, Pakistan, West Indies, and Turkey). Internal consistency aggregated across all the studies analyzed, using Cronbach's α , was reported as .71. Other studies that have used the Mother and Father versions of the Child PCS with Korean American adolescents, ages 11 through 14, reported Cronbach's α within the range of .72 to .75 (i.e., Kim, 2005; Kim et al., 2006). The test manual provides information on the construct validity of the Child PCS.

Rohner and Khaleque (2005a) report that principal components factor analyses with oblique rotation have been conducted on the Child PCS using data obtained from samples of youth, ages 8 through 19, from different cultural backgrounds (i.e., European American, Korean American, and Pakistani). Results from these analyses confirmed that PCS items tap two ends of the control dimension as expected: perceived parental permissiveness and perceived parental strictness. These two factors accounted for 15.56% and 22.92% of the variance, respectively, for a European American sample ($N = 281$; ages 8-18; 46% male), 13.07% and 31.08% of the variance, respectively, for a Korean American sample ($N = 245$; ages 11-18; 45% male), and 15.46% and 18.36% of the variance, respectively, for a Pakistani sample ($N = 100$; ages 10-16; 60% male).

The Child PARQ/ Control has been used with a sample of Korean American adolescents ($N = 245$; Mean age 14) (Kim & Rohner, 2002). Internal consistency for individual subscales of the full measure, using Cronbach's α , was reported within the range of .81 to .91 for the Mother version and within the range of .81 to .94 for the Father version. Overall Cronbach's α was reported as .85 for the Mother version and .88 for the Father version.

Personality Assessment Questionnaire

The Adult Personality Assessment Questionnaire (PAQ; Rohner & Khaleque, 2005b) was used to assess adolescents' psychological adjustment. The Adult version of the PAQ was used in the current study, rather than the Child version, for two reasons. First, the test manual states that the Child version is intended for use with children from 7 through 12 years of age, whereas the Adult version is intended for use with adolescents and adults. Second, there is more compelling evidence in support of the reliability and validity of scores obtained on the Adult scale (See

Rohner & Khaleque, 2005b). The Child and Adult PAQ are similar with the exception that the Adult version involves slightly more complex language and three additional items per subscale.

The Adult PAQ is a 63-item self-report measure that asks people to rate the truth of statements pertaining to the way they feel about themselves (See Appendix I). The total scale consists of seven subscales (9 items each): Hostility/ Aggression (i.e., I get so angry I throw and break things), Dependency (i.e., I like my friends to feel sorry for me when I am ill), Negative Self-Esteem (i.e., I certainly feel worthless), Negative Self-Adequacy (i.e., I think I am a failure), Emotional Unresponsiveness (i.e., I feel distant and detached from most people), Emotional Instability (i.e., I am cheerful and happy one minute and gloomy or unhappy the next), and Negative Worldview (i.e., I view the universe as a threatening, dangerous place). Subscale items are arranged in cyclical order. Responses are not timed and are given on a four-point Likert-type scale anchored from 1, “almost never true”, to 4, “almost always true”.

In the current study, the Total PAQ score was used as an indicator of overall psychological adjustment and was calculated by adding the total sum of its respective subscale items. A portion of the items were reverse scored in order to reduce response bias. The PAQ is scored in the direction of psychological maladjustment. The Total PAQ score could range from a low of 63, indicating excellent psychological adjustment, to a high of 252, indicating serious psychological maladjustment. Scores that fall at or above the midpoint of 158 indicate more overall maladjustment than adjustment. The psychometric properties of the Adult PAQ have not been extensively researched.

The reliability and validity evidence documented for the Adult PAQ is limited to what is reported in the test manual for a sample of 147 undergraduate students (Mean age 23; 53% male) from a community college in the metropolitan Washington, D. C. area (See Rohner & Khaleque,

2005b). The ethnic background of this study sample was not reported and so it remains unclear whether the data obtained are applicable to Chinese Canadians. Although this sample is not entirely appropriate for the intended use of the measure, there is no information available on this measure when used with samples of adolescent and/ or immigrant Asian participants. As such, the Washington study will be discussed as a source of reliability and validity evidence for the Adult PAQ.

The Washington study reported internal consistency for the subscales of the Adult PAQ, using Cronbach's α , within the range of .73 to .85. Khaleque and Rohner (2002b) report that no sample has yet been identified in which reliability for the PAQ is low and non-significant. The test manual discusses the validity of the Adult PAQ using data obtained from the Washington study sample.

Findings from the Washington study support the convergent, discriminant, and construct-related evidence of validity for the Adult PAQ. To examine the validity of the scores obtained on the Adult PAQ, the measure was modified by inserting items from four validated instruments in cyclical order. No measure was available for assessing the validity of the Emotional Unresponsiveness subscale. The pairing of convergent and discriminant measures to each subscale of the Adult PAQ was as follows: (a) the Hostility Inventory for the Hostility/Aggression subscale of the PAQ ($r = .68, p < .001$), (b) the Help-Seeking subscale of the Interpersonal Style Inventory (ISI) for the Dependency subscale of the PAQ ($r = .78, p < .001$), (c) Rosenberg's Self-Esteem scale for the Negative Self-Esteem subscale of the PAQ ($r = -.75, p < .001$), (d) the Self-Regard subscale from the Personal Orientation Inventory for the Negative Self-Adequacy subscale of the PAQ ($r = -.53, p < .001$), (e) the Relaxed versus Anxious subscale from the ISI for the Emotional Instability subscale of the PAQ ($r = -.83, p < .001$), and (f) the

Trust versus Mistrust subscale from the ISI for the Negative Worldview Subscale of the PAQ ($r = .50, p < .001$). Overall, the results of this analysis revealed that items on the six PAQ subscales were related to conceptually similar constructs and unrelated to conceptually dissimilar constructs, as expected, providing convergent and discriminant-related evidence of validity in support of the Adult PAQ (See Rohner & Khaleque, 2005b). The Washington study also examined the construct validity of the Adult PAQ.

A principal components factor analysis with oblique rotation was conducted on the scores obtained from the respective measures used in the convergent and discriminant validity study discussed above. Findings revealed that five of the seven personality constructs emerged as interpretable factors. Dependency, Emotional Instability, Hostility/ Aggression, Emotional Unresponsiveness, and Negative Worldview accounted for 10.92%, 9.62%, 8.80%, 6.20%, and 6.0% of the variance, respectively. Self-Esteem and Self Adequacy emerged in the analysis as a combined factor (i.e., Self-Evaluation), which accounted for 16.89% of the variance. The results of this factor analysis provide evidence in support of the conceptual basis of the Adult PAQ (See Rohner & Khaleque, 2005b).

Missing Data

In the current study, there were no missing data for the VIA, the Warmth/ Affection subscale of the PARQ/ Control, or the Control subscale of the PARQ/ Control. There were a total of five PAQ questionnaires that were returned with missing data, none of which contained missing data for more than one item on any given subscale or more than six items on the entire measure. According to the test manual, a score was computed for each missing item by (a) computing the sum of the completed items on the respective subscale, after reverse scoring the relevant items, (2) dividing the obtained value by the number of items on the respective

subscale that were answered, and (3) rounding the obtained value up to the nearest whole integer. This newly-created mean score was entered in place of the missing value and was further reverse scored, when summing up the Total PAQ score, if this is what would normally be required for the respective item.

There were a total of four questionnaires returned in which participants endorsed the midpoint between two responses on the Warmth/ Affection subscale of the PARQ/ Control, the Control subscale of the PARQ/ Control, and/ or the PAQ. A random coin toss was performed in these instances to force a decision for either one of the two responses, with ‘heads’ in favor of the lower value and ‘tails’ in favor of the higher value. Any such item that would normally be reverse scored was correspondingly altered when summing up the respective scores.

A total of 3 survey packages were returned with markings on the pages suggesting that participants did not take the task seriously. When questioned, these 3 participants stated that they participated in the study to receive the \$10 gift certificate and confirmed that they did not respond to the items genuinely. These questionnaires were excluded from subsequent analyses.

Sample, Population, and Participants

The demographics of the current study sample are shown in Table 1. The study sample consisted of 192 self-identified Chinese Canadian adolescents enrolled in grades 8 through 12 ($M = 10.25$; $SD = 1.27$) at four public urban high schools in the Lower Mainland of British Columbia. Of the youth, 72.9% were female ($n = 140$) and 27.1% were male ($n = 52$). Adolescents ranged in age from 12 through 18 years ($M = 15.32$, $SD = 1.38$). Of the total sample, 37.5% were born in the People’s Republic of China ($n = 72$), 19.3% were born in Hong Kong ($n = 37$), 12% were born in Taiwan ($n = 23$), 25% were born in Canada ($n = 48$), and 6.2% were born in other parts around the world including the United States of America ($n = 12$).

Adolescents who were not born in Canada had lived in Canada for an average length of 78.82 months or 6.57 years ($SD = 51.50$). In terms of Canadian generational status, 74.5% of adolescents were first generation ($n = 143$), 22.4% were second generation ($n = 43$), and 3.1% were third or later generation ($n = 6$).

In terms of language, 92.7% of adolescents could speak Chinese ($n = 178$), 94.8% could understand Chinese ($n = 182$), and 69.3% could read Chinese ($n = 133$). The main language spoken at home was overwhelmingly Chinese. A total of 60.4% of adolescents spoke only Chinese with their mother ($n = 116$), 25% spoke both English and Chinese with their mother ($n = 48$), and 13.5% spoke only English with their mother ($n = 26$). A total of 60.4% spoke only Chinese with their father ($n = 116$), 21.9% spoke both English and Chinese with their father ($n = 42$), and 16.1% spoke only English with their father ($n = 31$). Adolescents' self-report of their mothers' highest level of education revealed that the majority of mothers were well educated. Specifically, 24% of mothers attended graduate or professional school ($n = 46$); 35.9% graduated from college or university ($n = 69$); 8.3% attended college or university ($n = 16$); 5.2% attended vocational or technical school ($n = 10$); 10.4% graduated from high school ($n = 20$); 6.8% attended high school ($n = 13$); and .5% attended elementary school ($n = 1$). The remaining 8.9% of adolescents reported that they did not know their mothers' highest level of education ($n = 17$).

Table 1

Demographic Table

Gender	Female = 72.9%; Male = 27.1%
Age	Range = 12 – 18; <i>M</i> = 15.32; <i>SD</i> = 1.38
Grade	Range = 8 – 12; <i>M</i> = 10.25; <i>SD</i> = 1.27
Place of birth	China = 37.5% Hong Kong = 19.3% Taiwan = 12% Canada = 25% US/ Other = 6.2%
Length of residence in Canada (if not born in Canada)	Mean = 78.82 months or 6.57 years
Canadian generational status	First Generation = 74.5% Second Generation = 22.4% Third (or later) Generation = 3.1%
Use of Chinese language	Could speak Chinese = 92.7% Could understand Chinese = 94.8% Could read Chinese = 69.3%
Language(s) spoken with mother	Only Chinese = 60.4% Both English and Chinese = 25% Only English = 13.5%
Language(s) spoken with father	Only Chinese = 60.4% Both English and Chinese = 21.9% Only English = 16.1%
Mothers' highest level of education (Adolescents' self report)	Attended graduate or professional school = 24% Graduated from college or university = 35.9% Attended college or university = 8.3% Attended vocational or technical school = 5.2% Graduated from high school = 10.4% Attended high school = 6.8% Attended elementary school = .5% "I don't know" = 8.9%

Note. *N* = 192 self-identified Chinese Canadian adolescents

Chapter Four: Results

The current study ultimately sought to understand the relationships among Chinese/Canadian identification, perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment. This chapter will review the descriptive statistics of responses obtained on each of the questionnaire measures administered. It will further present the results of a bivariate correlation analysis, two mediation regression analyses, and a hierarchical multiple regression analysis that were conducted to address the specific research questions proposed.

Descriptive Statistics of Survey Responses

The descriptive statistics of 192 Chinese Canadian adolescents (Mean age = 15.32 years), enrolled in four public urban high schools in Western Canada, are shown in Table 2. Overall, Chinese Canadian adolescents in this study reported moderate levels of identification with Chinese and Canadian culture, as determined by their responses on the Vancouver Index of Acculturation. This measure has a range of 1, indicating low levels of cultural identification, to 9, indicating high levels of cultural identification. The mean score reported by this sample was 6.98 for Chinese Identification and 6.83 for Canadian Identification.

On average, adolescents perceived their mothers and fathers as moderately warm and moderately controlling, as determined by their responses on the Child Parental Acceptance-Rejection/ Control Questionnaire. The Warmth/ Affection subscale score has a range of 20, indicating low levels of perceived warmth, to 80, indicating high levels of perceived warmth. The mean score reported by this sample was 62.85 for mothers and 59.64 for fathers. The Control subscale score has a range of 13 to 52. Scores can be interpreted as follows: 13 - 26 indicates low/ lax control, 27 - 39 indicates moderate control, 40 - 45 indicates firm control, and

46 - 52 indicates strict/ restrictive control. The mean score reported by this sample was 34.14 for mothers and 33.34 for fathers.

As a whole, adolescents reported that they were psychologically well-adjusted, as determined by their responses on the Adult Personality Assessment Questionnaire. This measure has a range of 63, indicating excellent psychological adjustment, to 252, indicating serious psychological maladjustment. The mean score reported by this sample was 133.85, which falls below the midpoint of 158, indicating more overall adjustment than maladjustment.

Cronbach's measure of internal consistency was computed as a measure of reliability for the scores obtained on each of the measures administered to the current study sample ($N = 192$). For the Vancouver Index of Acculturation, Cronbach's α was computed at .92 for the heritage dimension (i.e., Chinese identification) and .86 for the mainstream dimension (i.e., Canadian identification). For the Warmth/ Affection subscale of the Child Parental Acceptance-Rejection/ Control Questionnaire, Cronbach's α was computed at .93 for the Mother version and .95 for the Father version. For the Control subscale of the Child Parental Acceptance-Rejection/ Control Questionnaire, Cronbach's α was computed at .82 for the Mother version and .85 for the Father version. For the Adult Personality Questionnaire, Cronbach's α for the full measure was computed at .78.

Table 2

Descriptive Statistics for Responses on the VIA, PARQ/ Control, and PAQ

<i>N</i> = 192	Mean	SD	Range	Possible Range	Internal Consistency (α)
Chinese Identification	6.98	1.53	1 - 9	1 - 9	.92
Canadian Identification	6.83	1.22	4 - 9	1 - 9	.86
Maternal Warmth	62.85	10.71	25 - 80	20 - 80	.93
Paternal Warmth	59.64	13.17	23 - 80	20 - 80	.95
Maternal Control	34.14	6.62	19 - 52	13 - 52	.82
Paternal Control	33.34	7.64	16 - 52	13 - 52	.85
Psychological Adjustment	133.85	20.03	89 - 204	63 - 252	.78

Note. Psychological adjustment was scored in the direction of psychological maladjustment.

Bivariate Correlation Analysis Results

A series of Pearson product-moment correlations were computed to examine the relationships among adolescents' Chinese/ Canadian identification, perceptions of maternal/ paternal warmth, perceptions of maternal/ paternal control, and psychological adjustment. A summary of the correlation results are shown in Table 3. Effect sizes reported in this study should be interpreted with reference to Cohen's (1992) criteria, according to which $r = 0.1$ indicates a small effect, $r = 0.3$ indicates a medium effect, and $r = 0.5$ indicates a large effect. There were five hypotheses examined in the current study.

First, the hypothesis that perceptions of maternal/ paternal warmth would be positively associated with adolescents' psychological adjustment was supported. The measure used to assess psychological adjustment, the Personality Assessment Questionnaire, was scored such that lower scores indicate higher levels of psychological adjustment. The significant negative relationship between perceived maternal/ paternal warmth and psychological adjustment ($r = -.32, p < .01$ for mothers; $r = -.25, p < .01$ for fathers) indicates that adolescents who perceived their mothers/ fathers as warm had a tendency to report higher levels of psychological adjustment than those who perceived their mothers/ fathers as less warm. This finding is consistent with cross-cultural findings in the research literature (i.e., Khaleque & Rohner, 2002a; Kim et al., 2006; Lila et al., 2007; Rohner et al., 1991).

Second, the hypothesis that perceptions of maternal/ paternal control would be negatively associated with perceptions of maternal/ paternal warmth was supported. The significant negative relationship between perceived maternal/ paternal control and perceived maternal/ paternal warmth ($r = -.23, p < .01$ for mothers; $r = -.30, p < .01$ for fathers) indicates that adolescents who perceived their mothers/ fathers as controlling also had a slight tendency to

perceive their mothers/ fathers as less warm. This finding is consistent with previous research that used a sample of Korean American adolescents (Kim, 2005). Taken together, these findings lend support to the speculation that as immigrant Asian adolescents gain exposure to Western culture, they increasingly adopt mainstream values and consequently interpret parental control as a sign of hostility and rejection (Chao, 1994; Lieber et al., 2006; Stewart et al., 2002).

Third, the hypothesis that perceptions of maternal/ paternal control would be negatively associated with adolescents' psychological adjustment was supported. The measure used to assess psychological adjustment, the Personality Assessment Questionnaire, was scored in the direction of psychological maladjustment. The significant positive relationship between perceived maternal/ paternal control and psychological adjustment ($r = .23, p < .01$ for mothers; $r = .23, p < .01$ for fathers) indicates that adolescents who perceived their mothers/ fathers as controlling had a slight tendency to report lower levels of psychological adjustment than those who perceived their mothers/ fathers as less controlling. Currently, the relationship between the perception of parental control and psychological adjustment remains inconsistent in the research literature (i.e., Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006). The speculation is that the perception of parental control indirectly impairs adolescents' psychological adjustment through a number of mediating factors (Juang et al., 2007; Rohner et al., 1991).

Fourth, the hypothesis that Canadian identification would be negatively associated with perceptions of maternal/ paternal warmth was not supported. On the contrary, a significant and positive relationship was observed between Canadian identification and perceived maternal warmth ($r = .18, p < .05$), indicating that adolescents who identified more with Canadian culture also had a slight tendency to perceive their mothers as warm. No statistically significant relationship was observed between Canadian identification and perceived paternal warmth.

Further, the hypothesis that Chinese identification would be positively associated with perceptions of maternal/ paternal warmth was partially supported, depending on the gender of the parent in question. A significant and positive relationship was observed between Chinese identification and perceived maternal warmth ($r = .23, p < .01$), indicating that adolescents who identified more with Chinese culture also had a slight tendency to perceive their mothers as warm. No statistically significant relationship was observed between Chinese identification and perceived paternal warmth. Taken together, adolescents in the current study perceived their mothers as warm regardless of whether they identified with Chinese or Canadian culture.

Fifth, the hypothesis that Canadian identification would be positively associated with perceptions of maternal/ paternal control was not supported. No statistically significant relationships were observed between Canadian identification and perceived maternal/ paternal control. Further, the hypothesis that Chinese identification would be negatively associated with perceptions of maternal/ paternal control was not supported. On the contrary, a significant and positive relationship was observed between Chinese identification and perceived maternal control ($r = .18, p < .05$), indicating that adolescents who identified more with Chinese culture also had a slight tendency to perceive their mothers as controlling. No statistically significant relationship was observed between Chinese identification and perceived paternal control. While the current study findings provide insight into the relationships between identification with Chinese/ Canadian culture and adolescents' perceptions of maternal/ paternal warmth and control, the correlational nature of these analyses does not allow for a more detailed explanation of how cultural identity may be contributing to adolescent's perceptions of maternal/ paternal warmth and control. More research is needed to investigate the process and causality of how cultural factors may be impacting adolescents' perceptions of parenting behaviors.

As shown in Table 3, neither demographic variables (i.e., gender, age, and mothers' level of education) nor cultural variables (i.e., Chinese and Canadian identification) were significantly associated with adolescents' psychological adjustment. The current study found that perceptions of maternal/ paternal warmth were significantly and negatively associated with age ($r = -.30$, $p < .01$ for mothers; $r = -.18$, $p < .05$ for fathers), indicating that younger adolescents had a tendency to perceive their mothers/ fathers as warmer than older adolescents. Further, Chinese identification was significantly and positively associated with Canadian identification ($r = .17$, $p < .05$), indicating that adolescents who identified more with Chinese culture also had a slight tendency to identify more with Canadian culture.

Table 3

Bivariate Correlation Analysis: Relationships among Demographic Variables and Psychological Variables

<i>N</i> = 192	Gender	Age	Mothers' Education	Chinese Identification	Canadian Identification	Maternal Warmth	Paternal Warmth	Maternal Control	Paternal Control	Psychological Adjustment
Gender		-.02	.03	-.09	-.18*	-.11	-.12	.09	-.03	.06
Age			-.13	.03	-.22**	-.30**	-.18*	.01	-.04	.09
Mothers' Education				-.07	-.08	.11	.16*	-.09	-.15*	-.02
Chinese Identification					.17*	.23**	-.00	.18*	.10	-.07
Canadian Identification						.18*	.01	-.05	-.02	-.12
Maternal Warmth							.61**	-.23**	-.25**	-.32**
Paternal Warmth								-.14	-.30**	-.25**
Maternal Control									.46**	.23**
Paternal Control										.23**
Psychological Adjustment										

Note. Gender was coded as female = 1; male = 2.

Psychological adjustment was scored in the direction of psychological maladjustment.

* $p < .05$, ** $p < .01$

Preliminary Analyses

A series of regression analyses were subsequently conducted to examine the relative contribution of parenting variables to the prediction of psychological adjustment. Prior to reporting the regression results, assumptions that underlie simple and multiple regression were investigated. After examining for outliers, multicollinearity, normality, linearity, homoscedasticity, and independence of residuals, it was concluded that no tests of assumptions were violated.

Mediation Regression Analyses Results

A mediator is “a variable that explains the relation between a predictor and an outcome” (Frazier et al., 2004, p. 116). More specifically, a mediator explains the process of ‘how’ or ‘why’ a predictor causes an outcome. In the current study, two sets of mediation regression analyses were conducted to examine whether perceptions of maternal/ paternal warmth mediated the relationship between perceptions of maternal/ paternal control and adolescents’ psychological adjustment. One analysis utilized data pertaining to mothers’ behaviors and the other utilized data pertaining to fathers’ behaviors. The measure used to assess psychological adjustment, the Personality Assessment Questionnaire, was scored such that lower scores indicate higher levels of psychological adjustment. According to Baron and Kenny (1986), there are four steps and three regression equations involved in establishing a mediated effect.

In the first step, psychological adjustment (Outcome) was regressed on perceived maternal/ paternal control (Predictor) to establish that there was an association to be mediated. This effect was quantified with the unstandardized regression weight ‘*c*’ and represented as ‘path *c*’ (see Figure 1, Part A). A significant relationship was detected for both mother and father data ($c = .689, p < .01$ for mothers; $c = .599, p < .01$ for fathers).

In the second step, perceived maternal/ paternal warmth (Mediator) was regressed on perceived maternal/ paternal control (Predictor) to establish an association between the predictor and mediator variable. This effect was quantified with the unstandardized regression weight ‘ a ’ and represented as ‘path a ’ (see Figure 1, Part B). A significant relationship was detected for both mother and father data ($a = -.371$, $se = .114$, $p < .01$ for mothers; $a = -.513$, $se = .119$, $p < .001$ for fathers).

In the third step, psychological adjustment (Outcome) was regressed on both perceived maternal/ paternal control (Predictor) and perceived maternal/ paternal warmth (Mediator). The effect of perceived maternal/ paternal warmth on psychological adjustment, when controlling for perceived maternal/ paternal control, was quantified with the unstandardized regression weight ‘ b ’ and represented as ‘path b ’ (see Figure 1, Part B). A significant relationship was detected for both mother and father data ($b = -.519$, $se = .131$, $p < .001$ for mothers; $b = -.297$, $se = .111$, $p < .01$ for fathers).

In the fourth step, the regression equation from the third step was used to examine the effect of perceived maternal/ paternal control on psychological adjustment, when controlling for perceived maternal/ paternal warmth. This effect was quantified with the unstandardized regression weight ‘ c' ’ and represented as ‘path c' ’ (see Figure 1, Part B). A significant relationship was detected for both mother and father data ($c' = .497$, $p < .05$ for mothers; $c' = .447$, $p < .05$ for fathers). For both analyses, the values of ‘ c' ’ were smaller than the values of ‘ c ’ by a nontrivial amount. However, the values of ‘ c' ’ remained statistically significant. According to the criteria discussed by Baron and Kenny (1986), this pattern indicates partial mediation.

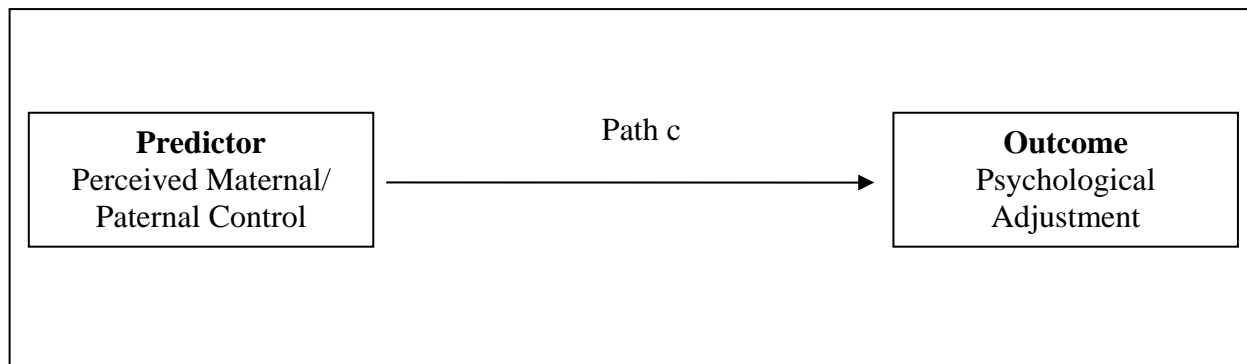
The Sobel test (as discussed in Baron & Kenny, 1986) was further conducted to determine the statistical significance of the mediated effects observed. Operationally, the Sobel test involves computing the unstandardized regression weights and standard errors from ‘path a’ and ‘path b’. The formula for the Sobel test of mediation is $ab / \sqrt{(b^2 s_a^2 + a^2 s_b^2)}$. The z -score obtained from this formula is compared against a standard normal distribution. The mediated effect is considered significant at the .05 level if the z -score is greater than 1.96.

In the current study, both analyses revealed Sobel test statistics that were sufficiently large. From the regression analysis performed using data pertaining to mothers’ behaviors, $ab = (-.371 * -.519) = .19255$ and $SE_{ab} = \sqrt{(-.519)^2 (.114)^2 + (-.371)^2 (.131)^2} = .07657$. Therefore, the critical ratio was $.19255 / .07657 = 2.515$ for mothers, which exceeded the 1.96 criteria for statistical significance. From the regression analysis performed using data pertaining to fathers’ behaviors, $ab = (-.513 * -.297) = .15236$ and $SE_{ab} = \sqrt{(-.297)^2 (.119)^2 + (-.513)^2 (.111)^2} = .06702$. Therefore, the critical ratio was $.15236 / .06702 = 2.273$ for fathers, which exceeded the 1.96 criteria for statistical significance. These findings indicate that the association between perceived maternal/ paternal control and psychological adjustment was significantly reduced by the inclusion of perceived maternal/ paternal warmth ($p < .05$). This confirmed the presence of partial mediation.

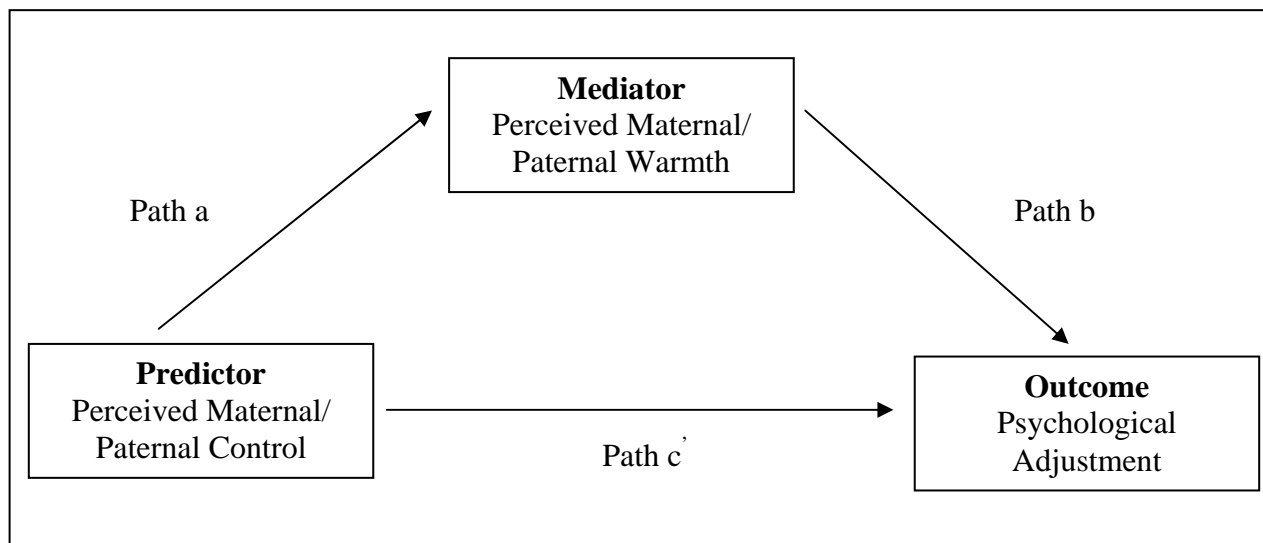
The hypothesis that perceptions of maternal/ paternal warmth would partially mediate the relationship between perceptions of maternal/ paternal control and adolescents’ psychological adjustment was supported. In other words, perceived maternal/ paternal warmth accounted for part of the relationship between perceived maternal/ paternal control and psychological adjustment for the participants in this study.

Figure 1. Illustration of a Direct Effect and a Mediated Effect

Part A: Illustration of a direct effect; Predictor affects Outcome.



Part B: Illustration of a mediated effect; Predictor affects Outcome indirectly through Mediator



Note. Adapted from Preacher and Hayes (2004).

Hierarchical Multiple Regression Analysis Results

A hierarchical multiple regression analysis was conducted to determine predictors of psychological adjustment (as discussed in Cohen, Cohen, West, & Aiken, 2003; Keith, 2006). Because a bivariate correlation analysis revealed that demographic variables (gender, age, and mothers' level of education), Chinese identification, and Canadian identification were not significantly associated with psychological adjustment (See Table 3), these variables were excluded from the regression analysis. The predictor variables were entered in two steps: (1) perceived maternal/ paternal control and (2) perceived maternal/ paternal warmth. In this way, it was possible to determine the predictive importance of perceived maternal/ paternal warmth, when controlling for the effects of perceived maternal/ paternal control. It was also possible to examine the additional predictive importance of maternal/ paternal warmth. This order of entry was based on theoretical and empirical considerations.

At the present time, the influence of perceived maternal/ paternal control on adolescents' psychological adjustment remains inconclusive in parental acceptance-rejection theory (PARTheory; Rohner et al., 2005) and in the previous research literature. The influence of perceived maternal/ paternal warmth on adolescents' psychological adjustment has substantial theoretical and empirical support (i.e., Cournoyer et al., 2005; Khaleque & Rohner, 2002a; Kim et al., 2006; Lila et al., 2007). Given that perceived maternal/ paternal control was exploratory in this model, and was anticipated to have a weak effect, it was entered into the equation before perceived maternal/ paternal warmth. Any effects of perceived maternal/ paternal control were hypothesized to attenuate when perceptions of maternal/ paternal warmth were entered into the regression equation. Perceptions of maternal/ paternal warmth were hypothesized to be the most important predictors of psychological adjustment.

In each step of the analysis, the relative predictive importance of the respective predictor variables was represented by the standardized regression weight Beta (β). The proportion of the variance in psychological adjustment that could be explained by all previously entered variables was represented by R square (R^2). The increase in variance explained by the predictor variables entered at a specific step, beyond what has been explained by the previously entered predictor variables, was represented by change in R^2 (ΔR^2). The significance of ΔR^2 was examined to establish which predictor variables contribute more to the prediction of psychological adjustment.

To further determine the relative contribution of perceived maternal/ paternal control and maternal/ paternal warmth to the prediction of psychological adjustment, variable importance was computed using the Relative Pratt Index (RPI; Thomas, Hughes, & Zumbo, 1998). The formula for the RPI is $(\beta)(r) / R^2$, where β is the standardized beta weight of a predictor variable, r is the corresponding zero-order correlation of the predictor and criterion variable, and R^2 is the total R square for the regression model. The obtained value indicates the proportion of the total R square for the regression model that is attributable to each predictor variable. Predictor variables are considered important to the model if their RPI values are equal to or greater than the minimum Pratt value for variable importance in the model. The formula for the minimum Pratt value is $1 / (2)(p)$, where p equals the number of predictor variables.

A summary of the hierarchical multiple regression analysis results are shown in Table 4. The measure used to assess psychological adjustment, the Personality Assessment Questionnaire, was scored such that lower scores indicate higher levels of psychological adjustment. Predictor variables were entered into the equation in two steps.

First, perceived maternal/ paternal control were entered into the equation (Model 1). The effects of perceived maternal control ($\beta = .156, p < .05$) and paternal control ($\beta = .157, p < .05$) revealed that adolescents who perceived their mothers/ fathers as controlling reported lower levels of psychological adjustment than those who perceived their mothers/ fathers as less controlling. Results of this analysis showed that the ΔR^2 of .071 was significant ($F(2, 189) = 7.28, p < .01$). This finding indicates that approximately 7.1% of the variability in psychological adjustment could be accounted for by both perceived maternal and paternal control.

Second, perceived maternal/ paternal warmth were entered into the equation (Model 2). As shown in Table 4, and as hypothesized, the β -values of perceived maternal/ paternal control did not maintain their significance in this step of the analysis. Given the significant correlation between maternal/ paternal control and maternal warmth (See Table 3), some of the variability due to maternal/ paternal control overlapped with the variability due to maternal warmth. When perceived maternal/ paternal control were controlled for, the effect of perceived maternal warmth was significant ($\beta = -.224, p < .05$), whereas the effect of perceived paternal warmth was not. These findings indicate that adolescents who perceived their mothers as warm reported higher levels of psychological adjustment than those who perceived their mothers as less warm. The perception of paternal warmth was not predictive of adolescents' psychological adjustment. Results of this analysis further showed that the ΔR^2 of .065 was significant ($F(2,187) = 7.07, p < .01$). Approximately 6.5% of the variability in psychological adjustment could be further accounted for by perceived maternal warmth and, to a lesser extent, paternal warmth, beyond the 7.1% accounted for by maternal and paternal control alone. Overall, the full regression equation explained just under 14% of the variance in psychological adjustment.

In the current study, the Relative Pratt Index was computed to determine variable importance for the hierarchical multiple regression model (i.e., perceived maternal/ paternal control and warmth) when psychological adjustment was the criterion variable. The minimum Pratt value for variable importance in the full regression model, including four predictor variables, was .125. As shown in Table 4, perceived maternal control, paternal control, and maternal warmth were important predictors of adolescents' psychological adjustment. These variables accounted for approximately 20.3%, 16.5%, and 51.5% of the variance in psychological adjustment, respectively. Perceived maternal warmth was the greatest contributor to psychological adjustment.

The current study findings are consistent with previous theoretical and research literature claiming that perceived parental warmth is a crucial determinant of children's psychological adjustment (i.e., Chiu et al., 1992; Cournoyer et al., 2005; Rohner, 2004; Rohner et al., 2005). Specifically, this study determined that maternal warmth made the largest contribution to adolescents' psychological adjustment. Contrary to other research findings obtained using parental acceptance-rejection theory's questionnaire measures (i.e., Kim et al., 2006; Lila et al., 2007), the current study did not find adolescents' perception of paternal warmth to be an important predictor of their psychological adjustment.

Table 4

Hierarchical Multiple Regression Analysis: Perceived Maternal/ Paternal Control and Warmth as Predictors of Psychological Adjustment

<i>N</i> = 192	B	Standard Error	β	Sig	Zero-Order Correlation	Relative Pratt Index
<u>Model 1</u>						
$R^2 = .071$						
Maternal Control	.473	.238	.156	.049	.228**	-
Paternal Control	.413	.206	.157	.047	.228**	-
<u>Model 2</u>						
$R^2 = .137$						
$\Delta R^2 = .065$						
Maternal Control	.370	.234	.122	.116	.228**	.203
Paternal Control	.260	.208	.099	.213	.228**	.165
Maternal Warmth	-.419	.162	-.224	.011	-.315**	.515
Paternal Warmth	-.097	.133	-.064	.456	-.246**	.115

Note. The Relative Pratt Index (RPI; Thomas et al., 1998) indicates the proportion of the total R^2 that is attributable to each predictor variable.

The minimum Pratt value for variable importance in the full model, including all four variables, was .125.

Psychological adjustment was scored in the direction of psychological maladjustment.

** $p < .01$

Chapter Five: Discussion

The majority of studies that have examined the impact of parenting on children's developmental outcomes have been conducted in Western, particularly North American, cultures (Baumrind, 1971; Maccoby, 1980). Given that values, beliefs and parenting practices are largely culturally based and differ between Western and non-Western cultures, it is important that research begin to investigate a range of socio-cultural groups in order to gain a comprehensive understanding of how parenting impacts children's overall adjustment (Chen et al., 2000; Rohner & Pettengill, 1985; Wong et al., 2002). Currently, the Chinese population represents Canada's largest non-European ethnic group (Statistics Canada, 2001). Despite this, there are few studies that have examined Chinese Canadian families and adolescent development (Lim & Lim, 2004).

The current study acknowledged that Chinese Canadian families exist between two distinct cultures, which may complicate the practice of parenting, family functioning, and adolescents' developmental outcomes. Given that children tend to adopt aspects of mainstream culture at a faster pace than their parents, it was speculated that Chinese Canadian adolescents may increasingly interpret their parents' controlled parenting style from the Western perspective as a sign of parental rejection, leading to negative consequences for their psychological adjustment. The study findings obtained do not support this speculation.

The study sample consisted of 192 self-identified Chinese Canadian adolescents (Mean age = 15.32 years; 74.5% first generation). Overall, adolescents reported that they identified with both Chinese and Canadian culture, thus adopted an integrative acculturation style. Adolescents' responses indicated that they perceived their mothers and fathers as moderately warm and moderately controlling. Self-report data further revealed that adolescents, on average, experienced more psychological adjustment than maladjustment.

This study sought to examine the specific relationships among Chinese Canadian adolescents' cultural identification, perceptions of parental warmth, perceptions of parental control, and psychological adjustment. Study variables were assessed using the following self-report questionnaire measures: the Vancouver Index of Acculturation (VIA; Ryder et al., 2000), the Warmth/ Affection and Control subscales of the Mother and Father versions of the Child Parental Acceptance-Rejection/ Control Questionnaire (PARQ/ Control; Rohner, 2005a), and the Adult Personality Assessment Questionnaire (PAQ; Rohner & Khaleque, 2005b).

Acculturation, Parenting, and Psychological Adjustment

A series of Pearson product-moment correlations were computed to examine the relationships among the study variables of interest (See Table 3). While the relationships among key variables were significant ($p < .01$), all relationships were low in magnitude ($r \leq .30$) except for the relationship between perceived maternal warmth and psychological adjustment ($r = .32$). There were four key findings in the current study.

First, findings revealed that Chinese Canadian adolescents who perceived their mothers/ fathers as warm tended to report higher levels of psychological adjustment than those who perceived their mothers/ fathers as less warm. This finding supports parental acceptance-rejection theory's (PARTheory; Rohner et al., 2005) major postulate and is consistent with a multitude of cross-cultural findings (i.e., Khaleque & Rohner, 2002a; Kim et al., 2006; Lila et al., 2007; Rohner et al., 1991).

Second, findings indicated that Chinese Canadian adolescents who perceived their mothers/ fathers as controlling had a slight tendency to perceive their mothers/ fathers as less warm. This is consistent with a study conducted using a sample of Korean American adolescents (Kim, 2005). These findings lend support to the speculation that as immigrant Asian adolescents

gain exposure to Western culture, they increasingly associate parental control as a sign of parental mistrust and rejection as generally associated in the Western context, as opposed to parental care and involvement as generally associated in the Eastern context (Chao, 1994; Lieber et al., 2006; Rohner & Pettengill, 1985; Stewart et al., 2002). At the present time, the relationship between the perception of parental control and the perception of parental warmth remains inconsistent in the research literature (i.e., Cournoyer et al., 2005; Kim et al., 2006). More research is needed to investigate the process and causality of how cultural factors may impact immigrant Asian adolescents' interpretation of parenting behaviors.

Third, this study's findings revealed that Chinese Canadian adolescents who perceived their mothers/ fathers as controlling had a slight tendency to report lower levels of psychological adjustment than those who perceived their mothers/ fathers as less controlling. The relationship between the perception of parental control and psychological adjustment remains inconclusive in the theoretical and empirical research literature (i.e., Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006; Lim & Lim, 2004; Rohner et al., 2005). It has been suggested that the perception of parental control indirectly impairs psychological adjustment through a number of mediating factors, most importantly when abuse is taken into consideration (Margolin & Gordis, 2000; Juang et al., 2007; Rohner et al., 1991). The current study did not inquire about abuse. More research is needed to identify factors that may mediate the effect of perceived parental control on adolescents' psychological adjustment.

Fourth, there was an interesting finding in the current study pertaining to cultural identification and perceptions of parenting behaviors. Cross-cultural parenting literature describes that traditional Chinese parenting is characterized by 'guan', which involves a controlling parenting style in the context of a close and caring parent-child relationship (Chao,

1994; Lieber et al., 2006). Research investigating this construct has found that it does not export to the West, where parental control is generally perceived as a negative aspect of parenting (Stewart et al., 2002). Consistent with the literature, this study's findings revealed that Chinese Canadian adolescents who identified more with Chinese culture had a slight tendency to perceive their mothers as both warm and controlling, whereas those who identified more with Canadian culture had a slight tendency to perceive their mothers as warm but not more controlling. There were no significant relationships found among cultural identification and father data. Future research could further examine the relationship between cultural identity and the perception of parenting behaviors. While researchers have found that it is adolescents' perceptions of parenting behaviors that impact their psychological adjustment (Kim et al., 2006; Rohner et al., 2005; Steinberg et al., 1991), it would be valuable to include parents in future research in order to gain a comprehensive understanding of how cultural factors impact Chinese Canadian parents' parenting behaviors as well as Chinese Canadian adolescents' interpretation of parenting behaviors.

The current study found that psychological adjustment did not vary significantly by gender, age, mothers' level of education, or cultural identity. There are likely a multitude of variables that impact psychological adjustment above and beyond demographic and cultural factors. While perceived maternal/ paternal warmth did not vary significantly by gender, they did vary significantly and negatively by age. The finding that younger adolescents had a slight tendency to perceive their mothers/ fathers as warmer than older adolescents is consistent with the literature on parenting and acculturation, which suggests that ordinary adolescent-parent conflict may be further exacerbated by intergenerational acculturation disparity among immigrant Asian families (Feldman et al., 1991; Phinney, Ong, & Madden, 2000; Small,

Eastman, & Cornelius, 1988; Tardif & Geva, 2006; Yau & Smetana, 1996).

Findings further revealed that adolescents who identified more with Chinese culture also had a slight tendency to identify more with Canadian culture. This validates the assertion that unidimensional models and measures of acculturation are limited in their ability to accurately capture one's overall level of ethnic identity. Rather, bidimensional models and measures of acculturation are necessary because they provide independent measures of the degree to which people identify with their heritage culture and with mainstream culture (Ryder et al., 2000).

The Mediating Role of Parental Warmth

In the current study, a series of regression analyses revealed that perceived maternal/paternal warmth partially mediated the relationship between perceived maternal/paternal control and adolescents' psychological adjustment (See Figure 1). In other words, adolescents who perceived their mothers/fathers as controlling reported lower levels of psychological adjustment, in large part because they perceived their mothers/fathers as less warm. This finding is consistent with a similar study conducted by Rohner et al. (1991), which found that physical punishment impaired Kattitian adolescents' psychological adjustment directly, but more so indirectly through the perception of caretaker rejection. It is also consistent with existing literature suggesting that parental control alone cannot fully account for variations in adolescents' psychological adjustment (Chiu et al., 1992; Cournoyer et al., 2005; Kim et al., 2006; Juang et al., 2007). Given that the mediating role of perceived parental warmth in the relationship between perceived parental control and psychological adjustment is not established in the theoretical or empirical literature, future research could seek to replicate this finding.

Predictors of Psychological Adjustment

In the current study, a bivariate correlation analysis revealed that demographic variables

(gender, age, and mothers' level of education), Chinese identification, and Canadian identification were not significantly associated with adolescents' psychological adjustment (See Table 3). A hierarchical multiple regression analysis revealed that while adolescents' perceptions of maternal/ paternal control were predictive of their psychological maladjustment, the predictive ability of these variables was no longer significant when perceptions of maternal/ paternal warmth were entered into the model (See Table 4). Overall, it was adolescents' perception of maternal warmth that made the most significant contribution to their psychological adjustment. Perceived paternal warmth was not a significant predictor of psychological adjustment for the participants in this study. These findings are somewhat consistent with previous studies, which found both perceived maternal and paternal warmth to be important predictors of psychological adjustment (i.e., Kim et al., 2006; Lila et al., 2007).

One possible explanation for the finding that perceived paternal warmth was not predictive of Chinese Canadian adolescents' psychological adjustment in this study is the fact that traditional Chinese families are dominated by elders and men (Chiu et al., 2000). Given that Chinese children are more likely to turn to their mothers for emotional support, it is conceivable that while Chinese Canadian adolescents' perception of maternal warmth may have a significant impact on their psychological adjustment, their perception of paternal warmth may not. The current findings suggest that it is important to consider the behaviors of mothers and fathers independently when examining the impact of parenting on children's developmental outcomes. Future research is needed to further examine the relative contribution of maternal/ paternal warmth and maternal/ paternal control to the psychological adjustment of Chinese Canadian adolescents.

This study found that the variance in psychological adjustment that could be explained by

perceived parental warmth and control was relatively low. This finding is consistent with other studies (i.e., Kim et al., 2006; Lila et al., 2007) suggesting that there is still a large percentage of variance left unaccounted for by these predictor variables. Future research could examine a variety of other variables that may be important in determining Chinese Canadian adolescents' psychological adjustment.

Implications for Counselling Practice

This study's major finding was that the perception of parental warmth, specifically maternal warmth, uniquely and significantly contributed to the healthy psychological adjustment of Chinese Canadian adolescents. Regardless of perceived levels of parental control, adolescents who perceived their parents as warm also tended to report higher levels of psychological adjustment than those who perceived their parents as less warm. This has implications for counsellors practicing in school and community settings. Namely, it is important that the focus be shifted off of parents' behaviors and onto adolescents' subjective experience of parental warmth.

Counsellors could assist Chinese Canadian adolescents to reconceptualize their idea of what constitutes parental warmth. Given that immigrant youth tend to assimilate to mainstream culture relatively quickly, it is likely that Chinese Canadian adolescents interpret parental control as a negative aspect of parenting (i.e., hostility and rejection) much like their Western Canadian peers. With the help of counsellors, adolescents can begin to understand that parental control is generally interpreted as a sign of parental care, involvement, and concern among traditional Chinese families. With this shift in perspective, adolescents whose parents implement a controlled parenting style may be able to experience increased levels of parental warmth, which will contribute to their healthy psychological adjustment.

Counsellors that work with families could inform parents that regardless of the limitations that they place on their child's behavior, it is their child's perception of parental warmth that directly contributes to their psychological well-being. Parents could be encouraged to ask their children what behaviors they interpret as signs of warmth and further increase the demonstration of such behaviors. Counsellors could also assist adolescents to explore and articulate what they need from their parents in terms of warmth.

Strengths of the Study

The current study had several strengths. In response to the underrepresentation of Chinese Canadians in the parenting research literature, the results from this study represent a large cross-section of adolescents attending public urban high schools who self-identify as Chinese Canadian. No other study has documented this population and its perceptions of parenting behaviors. Further, in contrast to previous studies that have combined mothers and fathers into one category of parent, this study examined the independent contribution of perceived maternal and paternal warmth and control to the prediction of psychological adjustment. In doing so, it was determined that the perception of maternal warmth was the single most important predictor of Chinese Canadian adolescents' psychological adjustment, which was theoretically and empirically sound.

The ultimate aim of this study was to draw attention to the important yet understudied area of Chinese Canadian parenting and to serve as a catalyst for future related research focusing on Chinese Canadian families. At this time, scholars and professionals in the social sciences lack the information necessary to form an accurate conceptualization of the experiences of Chinese Canadian families. As a result, their ability to identify the needs of this population and to mobilize resources to address those needs continue to remain impeded.

Limitations of the Study

The current study had a number of limitations that should be taken into consideration. Participants in this study represented a group of self-identified Chinese Canadian adolescents, attending public urban high schools in at least middle-income areas, who voluntarily agreed to participate. The nature of this sample limits the generalizability of the findings obtained. The correlational design of this study allows for the establishment of relationships among study variables but not for the establishment of within-group differences or cause-and-effect relationships. Further, parental acceptance-rejection theory's questionnaire measures have not been validated on cross-cultural populations.

There is a growing need for culturally sensitive and appropriate measures in research, particularly in the area of parenting that has been acknowledged as largely culturally based. The test manual suggests that the Adult Personality Assessment Questionnaire (PAQ) consists of seven subscales and that a Total score can be used as an indicator of overall psychological adjustment. The internal consistency of the PAQ computed in this study suggests that the measure may be multidimensional. Cronbach's alpha for the full measure was computed at .78. Individual subscale alphas for Hostility/ Aggression, Dependency, Negative Self-Esteem, Negative Self-Adequacy, Emotional Unresponsiveness, Emotional Instability, and Negative Worldview were computed at .72, .80, .81, .82, .68, .67 and .86, respectively. The implication for this study is that the PAQ may not have assessed psychological adjustment as it purported to. As a result, the confidence that can be placed in this study's findings and in the replicability of this study's findings is lowered. A detailed validation study was beyond the scope of the current study. Future research could focus on investigating the psychometric properties of parental

acceptance-rejection theory's questionnaire measures using participant samples that represent a range of different cultural and age groups (i.e., Chinese Canadian adolescents).

Despite the study limitations discussed herein, the current study was important because it investigated the impact of perceived maternal and paternal warmth and control on the psychological adjustment of Chinese Canadian adolescents, while taking their cultural identity into consideration. No other study has explored this issue using this population. Because the research questions proposed and examined were generated within the framework of parental acceptance-rejection theory and informed by cross-cultural research, the findings obtained contribute to the parenting literature on both a theoretical and empirical level.

References

- Baptiste, D. A., Jr. (1993). Immigrant families, adolescents and acculturation: Insights for therapists. *Marriage & Family Review, 19*, 341-363.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4*, 1-103.
- Berry, J. W. (2006). Acculturation: A conceptual overview. In M. H. Bornstein & L. R. Cote (Eds.), *Acculturation and parent-child relationships* (pp. 13-30). Mahwah, NJ: Lawrence Erlbaum Associates.
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology, 55*, 303-332.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*, 1111-1119.
- Chen, X., Liu, M., & Li, D. (2000). Parental warmth, control, and indulgence and their relations to psychological adjustment in Chinese children: A longitudinal study. *Journal of Family Psychology, 14*, 401-419.
- Chiu, M. L., Feldman, S. S., & Rosenthal, D. A. (1992). The influence of immigration on parental behavior and adolescent distress in Chinese families residing in two Western nations. *Journal of Research on Adolescence, 2*, 205-239.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Costigan, C. L., & Dokis, D. P. (2006). Relations between parent–child acculturation differences and adjustment within immigrant Chinese families. *Child Development, 77*, 1252-1267.
- Cournoyer, D. E., Sethi, R., & Cordero, A. (2005). Perceptions of parental acceptance-rejection and self-concepts among Ukrainian university students. *Ethos, 33*, 335-346.
- Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Journal of Child Development, 58*, 1244-1257.
- Feldman, S. S., Rosenthal, D. A., Mont-Reynaud, R., Leung, K., & Lau, S. (1991). Ain't misbehavin': Adolescent values and family environments as correlates of misconduct in Australia, Hong Kong, and the United States. *Journal of Research on Adolescence, 1*, 109-134.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134.
- Hwang, W. C. (2006). Acculturative family distancing: Theory, research, and clinical practice. *Psychotherapy: Theory, Research, Practice, Training, 43*, 397-409.
- Juang, L. P., Syed, M., & Takagi, M. (2007). Intergenerational discrepancies of parental control among Chinese American families: Links to family conflict and adolescent depressive symptoms. *Journal of Adolescence, 30*, 965-975.
- Keith, T. Z. (2006). *Multiple regression and beyond*. Boston, MA: Pearson Education.

- Kennedy, M. A., Parhar, K. K., Samra, J., & Gorzalka, B. (2005). Suicide ideation in different generations of immigrants. *Canadian Journal of Psychiatry, 50*, 353-356.
- Khaleque, A., & Rohner, R. P. (2002a). Perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and Family, 64*, 54-64.
- Khaleque, A., & Rohner, R. P. (2002b). Reliability of measures assessing the pancultural association between parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Cross-Cultural Psychology, 33*, 87-99.
- Kim, E. (2005). Korean American parental control: Acceptance or rejection? *Ethos, 33*, 347-366.
- Kim, E., Cain, A. C., & McCubbin, M. (2006). Maternal and paternal parenting, acculturation, and young adolescents' psychological adjustment in Korean American Families. *Journal of Child and Adolescent Psychiatric Nursing, 19*, 112-129.
- Kim, K., & Rohner, R. P. (2002). Parental warmth, control, and involvement in schooling: Predicting academic achievement among Korean American adolescents. *Journal of Cross-Cultural Psychology, 33*, 127-140.
- Leininger, M. M. (1988). Leininger's theory of nursing: Cultural care diversity and universality. *Nursing Science Quarterly, 1*, 152-160.
- Lieber, E., Fung, H., Leung, P. W. L. (2006). Chinese child-rearing beliefs: Key dimensions and contributions to the development of culture-appropriate assessment. *Asian Journal of Social Psychology, 9*, 140-147.
- Lila, M., Garcia, F., & Garcia, E. (2007). Perceived paternal and maternal acceptance and children's outcomes in Colombia. *Social Behavior and Personality, 35*, 115-124.

- Lim, S. L., & Lim, B. K. (2004). Parenting style and child outcomes in Chinese and immigrant Chinese families-Current findings and cross-cultural considerations in conceptualization and research. *Marriage & Family Review, 35*, 21-43.
- Lin, C. C., & Fu, V. R. (1990). A comparison of child-rearing practices among Chinese, immigrant Chinese, and Caucasian-American parents. *Child Development, 61*, 429-433.
- Maccoby, E. E. (1980). *Social development: Psychological growth and the parent-child relationship*. New York: Harcourt Brace Jovanovich.
- Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology, 51*, 445-479.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.
- McBride-Chang, C., & Chang, L. (1998). Adolescent-parent relations in Hong Kong: Parenting styles, emotional autonomy, and school achievement. *Journal of Genetic Psychology, 159*, 421-436.
- Phinney, J. S., Ong, A., & Madden, T. (2000). Cultural values and intergenerational value discrepancies in immigrant and non-immigrant families. *Child Development, 71*, 528-539.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*, 717-731.
- Rohner, R. P. (1986). *The warmth dimension: Foundations of parental acceptance-rejection theory*. Beverly Hills, CA: Sage Publications.

- Rohner, R. P. (2004). The parental 'acceptance-rejection syndrome': Universal correlates of perceived rejection. *American Psychologist*, *59*, 830-840.
- Rohner, R. P. (2005a). Parental acceptance-rejection/ control questionnaire (PARQ/ Control): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 137-186). Storrs, CT: Rohner Research Publications.
- Rohner, R. P. (2005b). Parental acceptance-rejection questionnaire (PARQ): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 43-106). Storrs, CT: Rohner Research Publications.
- Rohner, R. P., & Cournoyer, D. E. (1994). Universals in youths' perceptions of parental acceptance and rejection: Evidence from factor analyses within eight sociocultural groups worldwide. *Cross-Cultural Research*, *28*, 371-383.
- Rohner, R. P., Kean, K. J., & Cournoyer, D. E. (1991). Effects of corporal punishment, perceived caretaker warmth, and cultural beliefs on the psychological adjustment of children in St. Kitts, West Indies. *Journal of Marriage and the Family*, *53*, 681-693.
- Rohner, R. P., & Khaleque, A. (2003). Reliability and validity of the parental control scale: A meta-analysis of cross-cultural and intracultural studies. *Journal of Cross-Cultural Psychology*, *34*, 643-649.
- Rohner, R. P., & Khaleque, A. (2005a). Parental control scale (PCS): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 107-135). Storrs, CT: Rohner Research Publications.
- Rohner, R. P., & Khaleque, A. (2005b). Personality assessment questionnaire (PAQ): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 187-227). Storrs, CT: Rohner Research Publications.

- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2005). Parental acceptance-rejection: Theory, methods, cross-cultural evidence, and implications. *Ethos, 33*, 299-334.
- Rohner, R. P., & Pettengill, S. M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. *Child Development, 56*, 524–528.
- Rohner, R. P., & Rohner, E. C. (1981). Parental acceptance-rejection and parental control: Cross cultural codes. *Ethnology, 20*, 245-260.
- Rohner, R., & Rohner, N. (2005). *Parental acceptance-rejection bibliography*. Retrieved December 1, 2007, from <http://www.ucc.uconn.edu/~rohner/CSPARBL.html>
- Rudy, D., & Grusec, J. E. (2006). Authoritarian parenting in individualist and collectivist groups: Associations with maternal emotion and cognition and children's self-esteem. *Journal of Family Psychology, 20*, 68-78.
- 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.
- Schaefer, E. S. (1965). Children's reports of parental behavior: An inventory. *Child development, 36*, 413-423.
- Siegelman, M. (1965). Evaluation of Bronfenbrenner's questionnaire for children concerning parental behavior. *Child Development, 36*, 163-174.
- Small, S. A., Eastman, G., and Cornelius, S. (1988). Adolescent autonomy and parental stress. *Journal of Youth and Adolescence, 17*, 377-391.
- Statistics Canada. (2001). *The Chinese community in Canada*. Retrieved September 27, 2007, from <http://www.statcan.ca/english/freepub/89-621-XIE/89-621-XIE2006001.htm>

- Steinberg, L., Mounts, N. S., Lamborn, S. D., & Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of Research on Adolescence, 1*, 19-36.
- Stewart, S. M., Bond, M. H., Kennard, B. D., Ho, L. M., & Zaman, R. M. (2002). Does the Chinese construct of guan export to the west? *International Journal of Psychology, 37*, 74-82.
- Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Self-Identity Acculturation Scale: Concurrent and factorial validation. *Educational and Psychological Measurement, 52*, 1041-1046.
- Tardif, C. Y., & Geva, E. (2006). The link between acculturation disparity and conflict among Chinese Canadian immigrant mother-adolescent dyads. *Journal of Cross-Cultural Psychology, 37*, 191-211.
- Thomas, D., Hughes, E., & Zumbo, B. D. (1998). On variable importance in linear regression. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement, 45*, 253-275.
- Wong, I. N., De Man, A. F., & Leung, P. W. L. (2002). Perceived parental child rearing and suicidal ideation in Chinese adolescents. *Social Behavior and Personality, 30*, 19-24.
- Wu, C., & Chao, R. K. (2005). Intergenerational cultural conflicts in norms of parental warmth among Chinese American Immigrants. *International Journal of Behavioral Development, 29*, 516-523.
- Xu, Y., Farver, J. A., Zhang, A., Zeng, Q., Yu, L., & Cai, B. (2005). Mainland Chinese parenting styles and parent-child interaction. *International Journal of Behavioral Development, 29*, 524-531.

Yau, J., & Smetana, J. G. (1996). Adolescent-parent child conflict among Chinese adolescents in Hong Kong. *Journal of Child Development, 67*, 1262-1275.

Appendices

Appendix A: UBC Research Ethics Board Certificate of Approval

PRINCIPAL INVESTIGATOR: Lynn Miller	INSTITUTION / DEPARTMENT: UBC/Education/Educational & Counselling Psychology, and Special Education	UBC BREB NUMBER: H08-00377
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT: Secondary Schools in the Lower Mainland of British Columbia		
CO-INVESTIGATOR(S): Cynthia Ho		
SPONSORING AGENCIES: UBC Hampton Research Endowment Fund		
PROJECT TITLE: The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment		
REB MEETING DATE: March 13, 2008	CERTIFICATE EXPIRY DATE: March 13, 2009	
DOCUMENTS INCLUDED IN THIS APPROVAL:		DATE APPROVED: March 26, 2008
Document Name	Version	Date
Protocol:		
Research Proposal	N/A	April 9, 2008
Consent Forms:		
Parent/ Guardian Consent Form (English)	N/A	April 9, 2008
Parent/ Guardian Consent Form (Chinese)	N/A	April 9, 2008
Assent Forms:		
Adolescent Assent Form	N/A	April 9, 2008
Advertisements:		
Invitation to Participate	N/A	April 9, 2008
Questionnaire, Questionnaire Cover Letter, Tests:		
Parental Acceptance-Rejection/ Control Questionnaire (Mother Version)	N/A	March 18, 2008
Parental Acceptance-Rejection/ Control Questionnaire (Father Version)	N/A	March 18, 2008
Personality Assessment Questionnaire	N/A	March 18, 2008
Demographic Questionnaire	N/A	February 15, 2008
Vancouver Index of Acculturation	N/A	March 18, 2008
Other Documents:		
Vancouver School Board approval	N/A	May 2, 2008
Richmond School District approval	N/A	May 2, 2008
The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.		
Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:		
Dr. M. Judith Lynam, Chair Dr. Ken Craig, Chair Dr. Jim Rupert, Associate Chair Dr. Laurie Ford, Associate Chair Dr. Daniel Salhani, Associate Chair Dr. Anita Ho, Associate Chair		



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Appendix B:
 Invitation
 to Participate

The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education. Phone: (604) 822-8539.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Dear Student,

You are being invited to participate in a research study that we are conducting at your school entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". Cynthia Ho, a graduate student, is completing this research study for her Master's Thesis. This form will give you the information you need in order to decide whether or not you would like to participate in this research study.

Purpose:

Since there is very little information on parenting and its impact on Chinese Canadian youth, your participation in this study can help us and others better understand how parenting impacts teenagers just like you.

Who Participates?

Only Chinese Canadian students who are fluent in English and can think about both a female and male caregiver in their lives will be invited to participate. Students must also receive parent/guardian permission and voluntarily agree to take part in this study before they can participate.

Study Procedures:

If you decide to participate in this study, you will be asked to fill out a series of questionnaires during free time. These questionnaires will take approximately one hour to complete. One questionnaire will ask you questions about your background, such as your gender, age, and place of birth. The other questionnaires will ask you questions about how much you identify with Canadian and Chinese culture, your parents' behaviors, and the way you feel about yourself. There is no right or wrong answer to any of the questions that will be asked. The only answers that we are looking for are your honest ones.

Potential Risks:

There are no known risks for participating in this study.

Potential Benefits:

There are no direct benefits to those who participate in this study. Society as a whole may benefit because you will be providing information that may help us and others better understand how parenting impacts teenagers just like you.

Confidentiality:

The identity of every student in this study will be kept strictly confidential. Your responses will not be available to other students, your teachers, school personnel, or your parents. All documents will be kept in a locked filing cabinet at UBC and all information entered into the computer will be password protected. Study findings will be reported at the group level and individual students will not be identified by name.

Compensation:

All students who return their completed parent/ guardian consent form to _____ (school personnel) by _____ (date), whether their parent/ guardian agrees to let them participate in this study or not, will be entered into a draw to win two movie passes. One student from each participating school will be randomly selected as the winner.

All students who participate in this study will receive a \$10 gift certificate to the local mall.

Contact for information about the study:

If you have any questions or would like more information about this study, feel free to call Dr. Lynn Miller at (604) 822-8539.

If you have questions about your treatment or rights as a research participant, feel free to call the Research Subject Information Line in the UBC Office of Research Services at (604) 822-8598 or email RSIL@ors.ubc.ca.

Assent:

Your participation in this study is entirely voluntary. You may refuse to participate or withdraw from this study at any time without any consequences or impact on your class standing or schoolwork.

In order for you to participate in this study, you need to take a parent/ guardian consent form home to your parent/ guardian so that he/ she can give you permission to participate. Please do your best to return your parent/ guardian consent form to _____ (school personnel) by _____ (date), whether or not your parent/ guardian gives you permission to participate.

Please keep this letter for your own records.

Thank you very much for your time. We hope that you agree to participate!

Sincerely,

Cynthia Ho, M.A. Student

Lynn Miller, UBC Assistant Professor



THE UNIVERSITY OF BRITISH COLUMBIA
**Department of Educational and Counselling Psychology,
 and Special Education**
 Faculty of Education,
 2125 Main Mall,
 Vancouver, B. C., V6T 1Z4
 Phone: (604) 822-0242, Fax: (604) 822-3302

Appendix C:
 Parent/ Guardian
 Consent Form

The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education. Phone: (604) 822-8539.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Dear Parent(s) or Guardian(s),

We would like to ask your permission for your child to participate in a research study that we are conducting at _____ (name of school) entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". Cynthia Ho, a graduate student, is conducting this research study for her Master's Thesis.

Purpose:

The purpose of this study is to investigate the impact of Chinese Canadian adolescents' perceptions of parental warmth and control on their psychological adjustment. Since research on this topic is limited, your child's participation in this study can help us and others better understand how parenting affects the well-being of Chinese Canadian youth.

Who Participates?

Only Chinese Canadian students who are fluent in English and can think about both a female and male caregiver in their lives will be invited to participate. Students must also receive parent/guardian permission and voluntarily agree to take part in this study before they can participate.

Study Procedures:

Students who participate in this study will be asked to fill out a series of questionnaires during free time. These questionnaires will take approximately one hour to complete. One questionnaire will ask students about their background, such as their gender, age, and place of birth. Other questionnaires will ask students about how much they identify with Canadian and Chinese culture, their parents' behaviors, and the way they feel about themselves. There is no right or wrong answer to any of the questions that will be asked. The only answers that we are looking for are honest ones.

Potential Risks:

There are no known risks for participating in this study.

Potential Benefits:

There are no direct benefits to those who participate in this study. Society as a whole may benefit because students will be providing information that may help us and others better understand how parenting impacts the well-being of Chinese Canadian youth.

Confidentiality:

The identity of every student in this study will be kept strictly confidential. Students' responses will not be available to other students, teachers, school personnel, or parents. All documents will be kept in a locked filing cabinet at UBC and all information entered into the computer will be password protected. Study findings will be reported at the group level and individual students will not be identified by name.

Compensation:

All students who return their completed parent/ guardian consent form to _____ (school personnel) by _____ (date), whether their parent/ guardian agrees to let them participate in this study or not, will be entered into a draw to win two movie passes. One student from each participating school will be randomly selected as the winner.

All students who participate in this study will receive a \$10 gift certificate to the local mall.

Contact for information about this study:

If you have any questions or would like more information about this study, feel free to call Dr. Lynn Miller at (604) 822-8539.

If you have questions about your child's treatment or rights as a research participant, feel free to call the Research Subject Information Line in the UBC Office of Research Services at (604) 822-8598 or email RSIL@ors.ubc.ca.

Consent:

Your child's participation in this study is entirely voluntary and he/ she may refuse to participate or withdraw from this study at any time without any consequences or impact on his/ her class standing or schoolwork.

We would be very pleased if your child takes part in our study and we hope that you will give him/ her permission to do so. Please keep this letter for your own records.

Please indicate on page 4 whether you give permission for your child to participate in this study and have your child return page 4 to _____ (school personnel) by _____ (date). *Please return the form even if you do not want your child to participate so that we know you received our request.*

Thank you very much for your time and consideration of this request!

Sincerely,

Cynthia Ho, M.A. Student

Lynn Miller, UBC Assistant Professor

*** PLEASE KEEP THIS CONSENT FORM FOR YOUR RECORDS ***

PARENT/ GUARDIAN CONSENT FORM

Study Title: The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Consent: I have read and understood the information presented about the study entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". I understand that my child's participation in this study is entirely voluntary and that he/ she may refuse to participate or withdraw from this study at any time without any consequences or impact on his/ her class standing or schoolwork.

I have received a copy of this consent form for my own records.

I give my permission for my son/ daughter to participate in this research study (please check one):

YES, I consent to my son/ daughter's participation in this study.

NO, I do not consent to my son/ daughter's participation in this study.

Printed Name of son/ daughter

Son/ daughter's grade level

Parent or Guardian Signature

Date

Printed Name of the Parent or Guardian signing above

THANK YOU!

***** PLEASE HAVE YOUR CHILD RETURN THIS FORM TO THE SCHOOL *****

PARENT/ GUARDIAN CONSENT FORM

Study Title: The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Consent: I have read and understood the information presented about the study entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". I understand that my child's participation in this study is entirely voluntary and that he/ she may refuse to participate or withdraw from this study at any time without any consequences or impact on his/ her class standing or schoolwork.

I have received a copy of this consent form for my own records.

I give my permission for my son/daughter to participate in this research study (please check one):

YES, I consent to my son/ daughter's participation in this study.

NO, I do not consent to my son/ daughter's participation in this study.

Printed Name of son/ daughter

Son/ daughter's grade level

Parent or Guardian Signature

Date

Printed Name of the Parent or Guardian signing above

THANK YOU!



英属哥伦比亚大学
心理咨询特别教育系
教育学院
2125 Main Mall,
Vancouver, B. C., V6T 1Z4
电话: (604) 822-0242, 传真: (604) 822-3302

Appendix D:
家长/监护人
同意书

加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响

主要研究者: Lynn Miller 博士, 教授助理, 英属哥伦比亚大学, 心理咨询特别教育系。

电话: (604) 822-8539.

联合研究者: Cynthia Ho, 硕士研究生, 英属哥伦比亚大学, 心理咨询特别教育系。

尊敬的家长/监护人：

我, Cynthia Ho, 英属哥伦比亚心理咨询特别教育系硕士研究生, 争取您的同意, 希望您的小孩在_____ (学校名称) 参与我的硕士毕业论文调查。这个调查是关于加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响。

调查目的：

这个调查试验的目的是为了研究加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响。由于目前关于这方面的研究有限, 您的同意和您的小孩的参与会极大地帮助我们理解和帮助华裔青春期少年的健康发展。

调查对象：

实验调查对象仅限于具有流利英文能力的中国裔学生, 同时学生必须具有男性与女性的监护人会参与这项调查。参加的学生必须得到家长或监护人的同意, 并且出于自愿。

调查过程：

参加调查的学生会在闲暇时间填写一系列问卷调查。所有的问卷会占用大约 1 个小时。第一个问卷会询问学生的背景, 例如性别, 年龄, 和出生地点。第二个问卷会询问他们对中国和加拿大文化的认识, 家庭管教的行为, 以及他们对于自己的看法。所有的问题都没有对和错之分, 只需要诚实作答。

潜在风险:

这个调查不存在潜在的风险。

潜在受惠:

对于参与学生来说，调查不产生直接优惠。但是调查会帮助我们认识家庭管教对于华裔少年健康成长的影响。

调查资料保密:

每一位参与学生的身份会被严格保密。学生的答案不会被泄漏给任何其他学生，老师，学校职工，或是家长。所有的问卷会被所在英属哥伦比亚大学文件收藏处，并且所有电脑信息会被电脑加密保存。调查的结果不会提及任何参与者的名字，并会与全组学生讨论。

奖励:

所有取得家长同意书，并上交给_____ (老师名字)，在_____ (学校名称)，在_____ (日期)的学生，无论最后他们的家长 / 监护人是否同意他们参加这个调查，都有机会参与 2 张电影票的抽奖。最后会有一名学生被抽中并获得 2 张电影票。

所有参加调查的学生将会得到\$10本地商场礼券。

调查信息联系人:

如果您对于这项调查有任何问题，或者想获取更多的信息，您可以联系Lynn Miller博士。
电话：(604) 822-8539. 如果您对于少年参与问卷调查权益有任何问题，请联系英属哥伦比亚大学研究调查热线 (604) 822-8598 或者电邮 RSIL@ors.ubc.ca.

自愿同意:

您的孩子的参与是完全出于自愿。他 / 她可以在任何时间里停止参加这项调查，并且不会受到任何处罚，包括学校和功课。

我们非常感谢和希望您能过同意您的孩子参加这项调查。

请保留这封信作为您的资料依据。

请在第 4 页纸上标明您是否同意您的孩子参与这项调查。同时，请您让您的小孩将第 4 页纸交还给_____ (老师名字)，在_____ (日期)之前。*即使您表示不同意，也请您的孩子交还第 4 页纸，这样表示您收到我们发出的邀请。*

非常感谢您的时间以及对考虑我们的邀请！

Cynthia Ho, 硕士研究生

Lynn Miller, 英属哥伦比亚教授助理

*** 请保留这份表格作为您的依据***

家长 / 监护人同意书

调查名称: 加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响。

主要研究者: Lynn Miller 博士，教授助理, 英属哥伦比亚大学，心理咨询特别教育系

联合研究者: Cynthia Ho, 硕士研究生, 英属哥伦比亚大学，心理咨询特别教育系。

同意:

我已经阅读并明白关于“加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响”这项调查的相关信息。我明白我的孩子的参与完全是自愿，他 / 她可以在任何时间拒绝参与或者退出这项调查，并且不会受到任何处罚，包括学校及功课。

我已经收到并保留了一份同意书的影印件作为我的依据。

关于我的孩子参加这项调查，我的意见是：（请选择下列其中之一）

_____ 我同意我的孩子参与这项调查。

_____ 我不同意我的孩子参与这项调查。

_____ 孩子的名字（请拼写）

_____ 孩子学级

_____ 家长 / 监护人签名

_____ 日期

_____ 签名的家长 / 监护人名字（请拼写）

非常感谢！

*** 请让您的孩子将这份表格交还给学校***

家长 / 监护人同意书

调查名称: 加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响。

主要研究者: Lynn Miller 博士，教授助理, 英属哥伦比亚大学，心理咨询特别教育系

联合研究者: Cynthia Ho, 硕士研究生, 英属哥伦比亚大学，心理咨询特别教育系。

同意:

我已经阅读并明白关于“加国华裔青春期少年对于家庭温暖及管教的认知对他们的心理调整的影响”这项调查的相关信息。我明白我的孩子的参与完全是自愿，他 / 她可以在任何时间拒绝参与或者退出这项调查，并且不会受到任何处罚，包括学校及功课。

我已经收到并保留了一份同意书的影印件作为我的依据。

关于我的孩子参加这项调查，我的意见是：（请选择下列其中之一）

_____ 我同意我的孩子参与这项调查。

_____ 我不同意我的孩子参与这项调查。

_____ 孩子的名字（请拼写）

_____ 孩子学级

_____ 家长 / 监护人签名

_____ 日期

_____ 签名的家长 / 监护人名字（请拼写）

非常感谢！



THE UNIVERSITY OF BRITISH COLUMBIA
**Department of Educational and Counselling Psychology,
 and Special Education**
 Faculty of Education,
 2125 Main Mall,
 Vancouver, B. C., V6T 1Z4
 Phone: (604) 822-0242, Fax: (604) 822-3302

Appendix E:
 Adolescent
 Assent Form

The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education. Phone: (604) 822-8539.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Dear Student,

You are being invited to participate in a research study that we are conducting at your school entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". Cynthia Ho, a graduate student, is completing this research study for her Master's Thesis. This form will give you the information you need in order to decide whether or not you would like to participate in this research study.

Purpose:

Since there is very little information on parenting and its impact on Chinese Canadian youth, your participation in this study can help us and others better understand how parenting impacts teenagers just like you.

Who Participates?

Only Chinese Canadian students who are fluent in English and can think about both a female and male caregiver in their lives will be invited to participate. Students must also receive parent/guardian permission and voluntarily agree to take part in this study before they can participate.

Study Procedures:

If you decide to participate in this study, you will be asked to fill out a series of questionnaires during free time. These questionnaires will take approximately one hour to complete. One questionnaire will ask you questions about your background, such as your gender, age, and place of birth. The other questionnaires will ask you questions about how much you identify with Canadian and Chinese culture, your parents' behaviors, and the way you feel about yourself. There is no right or wrong answer to any of the questions that will be asked. The only answers that we are looking for are your honest ones.

Potential Risks:

There are no known risks for participating in this study.

Potential Benefits:

There are no direct benefits to those who participate in this study. Society as a whole may benefit because you will be providing information that may help us and others better understand how parenting impacts teenagers just like you.

Confidentiality:

The identity of every student in this study will be kept strictly confidential. Your responses will not be available to other students, your teachers, school personnel, or your parents. All study materials will be kept in a locked filing cabinet at UBC and all information entered into the computer will be password protected. Study findings will be reported at the group level and individual students will not be identified by name.

Compensation:

All students who return their completed parent/ guardian consent form to _____ (school personnel) by _____ (date), whether their parent/ guardian agrees to let them participate in this study or not, will be entered into a draw to win two movie passes. One student from each participating school will be randomly selected as the winner.

All students who participate in this study will receive a \$10 gift certificate to the local mall.

Contact for information about this study:

If you have any questions or would like more information about this study, feel free to call Dr. Lynn Miller at (604) 822-8539.

If you have questions about your treatment or rights as a research participant, feel free to call the Research Subject Information Line in the UBC Office of Research Services at (604) 822-8598 or email RSIL@ors.ubc.ca.

Assent:

Your participation in this study is entirely voluntary. You may refuse to participate or withdraw from this study at any time without any consequences or impact on your class standing or schoolwork.

Please keep this letter for your own records.

Thank you very much for your time. We hope that you agree to participate!

Sincerely,

Cynthia Ho, M.A. Student

Lynn Miller, UBC Assistant Professor

***** PLEASE KEEP THIS ASSENT FORM FOR YOUR OWN RECORDS *****

ADOLESCENT ASSENT FORM

Study Title: The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Assent: I have read and understood the information presented about the research study entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". I understand that my participation in this study is entirely voluntary and that I may refuse to participate or withdraw from this study at any time without any consequences or impact on my class standing or schoolwork.

I am willing to participate in this research study (please check one):

_____ YES

_____ NO

Participant's signature

Date

Printed name of the participant signing above

Grade

THANK YOU!

*** PLEASE RETURN THIS FORM TO THE RESEARCHER ***

ADOLESCENT ASSENT FORM

Study Title: The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment

Principal Investigator: Dr. Lynn Miller, Assistant Professor, UBC Department of Educational and Counselling Psychology, and Special Education.

Co-Investigator: Cynthia Ho, Master of Arts Student, UBC Department of Educational and Counselling Psychology, and Special Education.

Assent: I have read and understood the information presented about the research study entitled "The Impact of Chinese Canadian Adolescents' Perceptions of Parental Warmth and Control on Their Psychological Adjustment". I understand that my participation in this study is entirely voluntary and that I may refuse to participate or withdraw from this study at any time without any consequences or impact on my class standing or schoolwork.

I have received a copy of this assent form for my own records.

I am willing to participate in this research study (please check one):

_____ YES

_____ NO

Participant's signature

Date

Printed name of the participant signing above

Grade

THANK YOU!

Appendix F: Demographic Questionnaire

We are interested in learning about your background. Please answer ALL the questions below:

1. What is your gender?

- Female
- Male

2. How old are you?

_____ Years Old

3. What grade are you in?

- 8
- 9
- 10
- 11
- 12

4. Where were you born?

- Hong Kong
- Taiwan
- Taipei
- Canada
- Other _____

5. If you were born outside of Canada, how long have you lived in Canada?

_____/_____
 (years) (months)

6. What is your Canadian generational status?

- First generation** (i.e., born outside of Canada and immigrated to Canada)
- Second generation** (i.e., born in Canada but your parents were not)
- Third or later generation** (i.e., born in Canada and your parents and/ or grandparents were born in Canada)

7. What language(s) can you speak (i.e., English, Cantonese, Mandarin)?

8. What language(s) can you understand (i.e., English, Cantonese, Mandarin)?

9. What language(s) can you read (i.e., English, Chinese)?

10. What language(s) do you speak with your mother (or primary female caregiver)?

11. What language(s) do you speak with your father (or primary male caregiver)?

12. How much education does your mother (or female guardian) have?

- Some high school
- Graduated from high school
- Vocational or technical school
- Some college or university
- Graduated from college or university
- Attended graduate or professional school (for example, to be a doctor, lawyer or teacher)
- I don't know

THANK YOU!

Appendix G: Vancouver Index of Acculturation

From Ryder et al. (2000)

Please answer each question as carefully as possible by circling *one* of the numbers to the right of each question to indicate your degree of agreement or disagreement.

Use the following key to help guide your answers:

Strongly Disagree		Disagree		Neutral/ Depends		Agree		Strongly Agree
1	2	3	4	5	6	7	8	9

(1) Strongly Disagree ←————→ (9) Strongly Agree

1. I often participate in <u>Chinese</u> cultural traditions	1	2	3	4	5	6	7	8	9
2. I often participate in <i>Canadian</i> cultural traditions	1	2	3	4	5	6	7	8	9
3. I would be willing to marry a <u>Chinese</u> person	1	2	3	4	5	6	7	8	9
4. I would be willing to marry a <i>Canadian</i> person	1	2	3	4	5	6	7	8	9
5. I enjoy social activities with <u>Chinese</u> people	1	2	3	4	5	6	7	8	9
6. I enjoy social activities with <i>Canadian</i> people	1	2	3	4	5	6	7	8	9
7. I am comfortable working with <u>Chinese</u> people	1	2	3	4	5	6	7	8	9
8. I am comfortable working with <i>Canadian</i> people	1	2	3	4	5	6	7	8	9
9. I enjoy <u>Chinese</u> entertainment (e.g., music, movies)	1	2	3	4	5	6	7	8	9
10. I enjoy <i>Canadian</i> entertainment (e.g. music, movies)	1	2	3	4	5	6	7	8	9
11. I often behave in ways that are ‘typically <u>Chinese</u> ’	1	2	3	4	5	6	7	8	9
12. I often behave in ways that are ‘typically <i>Canadian</i> ’	1	2	3	4	5	6	7	8	9
13. It is important for me to maintain or develop <u>Chinese</u> cultural practices	1	2	3	4	5	6	7	8	9
14. It is important for me to maintain or develop <i>Canadian</i> cultural practices	1	2	3	4	5	6	7	8	9
15. I believe in <u>Chinese</u> values	1	2	3	4	5	6	7	8	9
16. I believe in <i>Canadian</i> values	1	2	3	4	5	6	7	8	9
17. I enjoy <u>Chinese</u> jokes and humor	1	2	3	4	5	6	7	8	9
18. I enjoy <i>Canadian</i> jokes and humor	1	2	3	4	5	6	7	8	9
19. I am interested in having <u>Chinese</u> friends	1	2	3	4	5	6	7	8	9
20. I am interested in having <i>Canadian</i> friends	1	2	3	4	5	6	7	8	9

Appendix H: Parental Acceptance-Rejection/ Control Questionnaire (Mother)

From Rohner, 2005a

CHILD PARQ/ Control: Mother

Here are some statements about the way mothers and other caregivers act toward their children. I want you to think about how each one of these fits the way your mother or main caregiver treats you. If the statement is basically true about the way she treats you then ask yourself, "Is it almost always true?" or "Is it only sometimes true?" If you think your mother or caregiver almost always treats you that way, put an X in the box ALMOST ALWAYS TRUE; if the statement is sometimes true about the way she treats you then mark SOMETIMES TRUE. If you feel the statement is basically untrue about the way your mother or caregiver treats you then ask yourself, "Is it rarely true?" or "Is it almost never true?" If it is rarely true about the way she treats you put an X in the box RARELY TRUE; if you feel the statement is almost never true then mark ALMOST NEVER TRUE.

Remember, there is no right or wrong answer to any statement, so be as honest as you can. Answer each statement the way you feel your mother or main caregiver really is rather than the way you might like her to be. For example, if she almost always hugs and kisses you when you are good, you should mark the item as follows:

	TRUE OF MY MOTHER		NOT TRUE OF MY MOTHER	
	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
MY MOTHER				
Hugs and kisses me when I am good	X			

Respondent's significant female caretaker (if not Mother)

	TRUE OF MY MOTHER		NOT TRUE OF MY MOTHER	
	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
MY MOTHER				
1. Says nice things about me				
2. Nags or scolds me when I am bad				
3. Pays no attention to me				
4. Does not really love me				
5. Sees to it that I know exactly what I may or may not do				
6. Talks to me about our plans and listens to what I have to say				
7. Complains about me to others when I do not listen to her				
8. Takes an active interest in me				
9. Tells me exactly what time to be home when I go out				
10. Wants me to bring my friends home, and tries to make things pleasant for them				
11. Ridicules and makes fun of me				
12. Pays no attention to me as long as I do nothing to bother her				
13. Yells at me when she is angry				
14. Is always telling me how I should behave				
15. Makes it easy for me to tell her things that are important to me				
16. Treats me harshly				

MY MOTHER	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
17. Enjoys having me around her				
18. Believes in having a lot of rules and sticking to them				
19. Makes me feel proud when I do well				
20. Hits me, even when I do not deserve it				
21. Forgets things she is supposed to do for me				
22. Sees me as a big nuisance				
23. Gives me as much freedom as I want				
24. Praises me to others				
25. Punishes me severely when she is angry				
26. Makes sure I have the right kind of food to eat				
27. Tells me exactly how I am to do my work				
28. Talks to me in a warm and loving way				
29. Gets angry at me easily				
30. Is too busy to answer my questions				
31. Seems to dislike me				
32. Lets me go any place I want without asking				
33. Says nice things to me when I deserve them				
34. Gets mad quickly and picks on me				

MY MOTHER	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
35. Cares about who my friends are				
36. Insists that I must do exactly as I am told				
37. Is really interested in what I do				
38. Says many unkind things to me				
39. Pays no attention when I ask for help				
40. Thinks it is my own fault when I am having trouble				
41. Lets me go out any time I want				
42. Makes me feel wanted and needed				
43. Tells me I get on her nerves				
44. Pays a lot of attention to me				
45. Would like to be able to tell me what to do all the time				
46. Tells me how proud she is of me when I am good				
47. Goes out of her way to hurt my feelings				
48. Forgets important things I think she should remember				
49. Makes me feel unloved if I misbehave				
50. Gives me certain jobs to do and does not let me do anything else until they are done				
51. Makes me feel what I do is important				
52. Frightens or threatens me when I do something wrong				

MY MOTHER	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
53. Likes to spend time with me				
54. Lets me do anything I want to do				
55. Tries to help me when I am scared or upset				
56. Shames me in front of my friends when I misbehave				
57. Tries to stay away from me				
58. Complains about me				
59. Wants to control whatever I do				
60. Cares about what I think, and likes me to talk about it				
61. Feels other children are better than I am no matter what I do				
62. Cares about what I would like when she makes plans				
63. Lets me do things I think are important, even if it is hard for her				
64. Thinks other children behave better than I do				
65. Wants other people to take care of me (for example, a neighbor or relative)				
66. Lets me know I am not wanted				
67. Is interested in the things I do				
68. Tries to make me feel better when I am hurt or sick				

MY MOTHER	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
69. Tells me how ashamed she is when I misbehave				
70. Lets me know she loves me				
71. Treats me gently and with kindness				
72. Makes me feel ashamed or guilty when I misbehave				
73. Tries to make me happy				

Appendix I: Personality Assessment Questionnaire

From Rohner and Khaleque, 2005b

ADULT PAQ

The following pages contain a number of statements describing the way people feel about themselves. Read each statement carefully and think how well it describes you. Work quickly; give your first impression and move on to the next item. Do not dwell on any item.

Four boxes are drawn after each sentence. If the statement is basically true about you then ask yourself, “Is it almost always true?” or “Is it only sometimes true?” If you think the statement is almost always true put an X in the box ALMOST ALWAYS TRUE; if you feel the statement is only sometimes true mark SOMETIMES TRUE. If you feel the statement is basically untrue about you then ask yourself, “Is it rarely true?” or “Is it almost never true?” If it is rarely true then put an X in the box RARELY TRUE; if you feel the statement is almost never true mark ALMOST NEVER TRUE.

Remember, there is no right or wrong answer to any statement so be as honest as you can. Respond to each statement the way you think you really are rather than the way you would like to be. For example, if you almost always feel good about yourself, then mark the item as follows:

	TRUE OF ME		NOT TRUE OF ME	
	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
.				
I feel good about myself	X			

	TRUE OF ME		NOT TRUE OF ME	
	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
1. I feel resentment against people				
2. I like to be given encouragement when I have trouble with something				
3. I get disgusted with myself				
4. I think I am a failure				
5. I feel I have trouble making and keeping close, intimate friends				
6. I get upset easily when I meet difficult problems				
7. I view the universe as a threatening, dangerous place				
8. I have trouble controlling my temper				
9. I like my friends to feel sorry for me when I am ill				
10. I feel I am a good person and worthy of the respect of others				
11. I can compete successfully for the things I want				
12. It is hard for me to be emotionally spontaneous around people				
13. I get upset when things go wrong				
14. Overall, life-the very nature of the universe-is for me good, friendly, and secure				
15. I find myself pouting or sulking when I get angry				

	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
16. I would rather keep my problems to myself than seek sympathy or comfort				
17. I certainly feel worthless				
18. I am overcome by feelings of inadequacy				
19. My relationship with others is spontaneous and warm				
20. My mood is fairly constant throughout the day				
21. I see life, by its very nature, as being insecure and threatening				
22. I make fun of people who do stupid things				
23. I like friends to make a fuss over me when I am hurt or sick				
24. I feel pretty good about myself				
25. I feel I am successful in the things I do				
26. I feel distant and detached from most people				
27. I am cross and grumpy without any good reason				
28. Life for me is a good thing				
29. I like being sarcastic				
30. I like my friends to sympathize with me and to cheer me up when I am depressed				
31. When I meet a stranger I think that s(he) is better than I am				
32. I feel depressed by my inability to handle situations				

	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
33. It is easy for me to be affectionate with people I care about				
34. Some things get on my nerves unbearably even though I know they are unimportant				
35. I view the world as an anxious and insecure place				
36. I get so angry I throw and break things				
37. I like to be given encouragement when I have failed				
38. I like myself				
39. I am pretty satisfied with my ability to meet daily demands as they arise				
40. I have trouble expressing my true feelings				
41. I can take a lot of frustration without getting angry or upset				
42. In my view the world is basically a good, happy place				
43. I get revenge when someone insults me or hurts my feelings				
44. I prefer to work out problems on my own rather than ask for reassurance or encouragement				
45. I feel that I am no good and never will be any good				
46. I am dissatisfied with myself, feeling that I am not as capable as most people I know				

	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
47. I feel uncomfortable and awkward when I try to show the way I really feel to someone I like				
48. Small setbacks upset me a lot				
49. I see life as full of dangers				
50. I want to hit something or someone				
51. I like my friends to be sympathetic when I have problems				
52. I feel I am inferior to others in most respects				
53. I feel I am as capable as most people around me				
54. I am warm and affectionate toward the people I really like				
55. I am cheerful and happy one minute and gloomy or unhappy the next				
56. I feel that life is pleasant				
57. I think about fighting or being unkind				
58. I like my friends to show a lot of affection toward me				
59. I wish I could have more respect for myself				
60. I feel inept in many of the things I try to do				
61. I avoid close interpersonal relationships				
62. I can keep my composure when I am under minor emotional stress				

	<i>Almost Always true</i>	<i>Sometimes true</i>	<i>Rarely true</i>	<i>Almost never true</i>
63. I see the world as basically a secure and pleasant place in which to live				