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Date June 7, 2001

DE-6 (2/88)
Abstract

This study attempted to link parental beliefs to parenting behaviors and adolescent outcomes within specific domains. The study also explored whether parental warmth moderated the relationship between parenting behavior and adolescent outcomes. A sample of 60 Chinese immigrant families from Mainland China, Hong Kong, and Taiwan participated in the study. One primary parent and one adolescent aged between 13 and 18 from each family answered surveys related to parental goals, parenting behaviors and adolescent competence in the moral, prudential and learning/academic domains. Findings offer confirmatory evidence for associations between parental goals and parenting behaviors and between parental goals and adolescent competence in all domains. Parenting behaviors were related to adolescent competence in the learning/academic domain only. No mediating effects of parenting behaviors nor moderating effects of parental warmth were found. Results are discussed in terms of Smetana's (1997) notion of domain-specificity, parental goal-parenting behavior congruency (Hastings & Grusec, 1998), and age and cultural relevance in regards to the chain associations found between parental goal, parenting behavior and adolescent outcomes.
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Learning is a means and not an end. It is a life-long process. The process of accomplishing this intermediate goal is no exception. More than the knowledge she imparted, I have learnt to appreciate the efforts of an exceedingly committed and devoted supervisor. Sheila, thanks for all your investment in time, energy, and encouragement, in each and all of us students. I have also had the great fortune of working with an exceptional team of exceptional people. Karen and Pansy, thank you for your brilliant ideas, your unfailing cooperation and your great team spirit, without which we could not have brought our project to satisfactory completion. As well, I thank my father Kar-Yu Chen for translating some of the measures. Our conversations on Chinese culture and families provided me with insight and useful ideas. The happy faces and cheers of fellow students like Kelli, Jamie, Kathy, Jennifer and Heather will always be fond memories. I will not forget the good laughs we shared. Faculty members have always been present and supportive. In particular, I’d like to thank Karen Kobayashi and Dr. Perlman. Last but not least, I’d like to thank the three wise men in my life without whose understanding, patience and support, I would never have made it. Thank you Alessandro and Thomas for your positive thinking and for being patient with mom. I especially thank you, Piero, for all your humour, help and encouragement throughout these years.
Two areas of parenting research have provided a substantial amount of information on parent-child relations. The first is on the association between parental beliefs and parenting behaviors (Goodnow, Cashmore, Cotton, & Knight, 1984; Kuczynski, 1984; Bugental, Blue, & Cruzcossa, 1989; McGillicuddy-De Lisi, 1992; Okagaki & Divecha, 1993; Youniss, 1994) and the other is on the association between parenting behaviors and child outcomes (Baumrind, 1978; Maccoby & Martin, 1983; Brody & Stoneman, 1992, Shek, 1999). The considerable support for the two associations suggests a possible chain effect among the three components, of parental belief, parenting behavior and child outcome. Yet, research examining the chain association is scarce (Smetana, 1994; Darling & Steinberg, 1993). The present study will attempt to build a model linking parental beliefs to parenting behaviors and adolescent outcomes. The parental belief-parenting behavior-adolescent outcome model will be used to explore parenting dynamics within a Chinese immigrant group in the Lower Mainland of British Columbia. As well, the model will investigate how parental beliefs and practices may be related to the adjustment of adolescent children in a new country.

Beliefs serve as a guide and organize time- and energy-efficient parenting strategies to meet the myriads of demands in parenting (McGillicuddy-De Lisi, 1995). Beliefs also act as standards against which parents can assess and adjust their strategies, evaluate and preserve their self-worth (McGillicuddy-De Lisi, 1995). Parental beliefs and expectations vary across cultural contexts (Ninio, 1979; Hess, Hashiwagi, Azuma, Price, & Dickson, 1980; Goodnow et al., 1984; Super & Harkness, 1986) as each culture chooses to transmit the most adaptive information, goals, and strategies for the kind of society in which their members live (LeVine, 1988; Super & Harkness, 1986). For example, agricultural societies which tend to rear children with a primary goal of survival and a secondary goal of economic sufficiency (LeVine, 1988) would adopt parenting strategies of keeping the baby close to the mother at all
times during infancy and training them for simple chores as early as toddlerhood (Super & Harkness, 1986).

Parenting behaviors can be described as motivated actions for which a goal exists (Austin & Vancouver, 1996). Goals are the internal representations of desired states, events or outcomes which motivate behavior toward achieving the goals (Austin & Vancouver, 1996). These goals are often related to cultural beliefs (LeVine, 1988; Super & Harkness, 1986) and provide a drive which directs parenting behaviors towards the desired outcome or goal achievement. In turn, the outcome can provide feedback for adjustment of goals and strategies (McGillicuddy-De Lisi, 1995).

Given the importance of cultural relevance when undertaking research with an immigrant group, the present study will investigate the parental goals of the parents’ belief system. Parental goals are chosen as they reflect the parents’ desires and encompass part of their value system (McGillicuddy-De Lisi, 1995). In addition, the association between parenting behaviors and adolescent outcomes in the moral, prudential (Smetana, 1983) and learning/academic development (Chao, 1994) will be investigated in accordance with Smetana’s (1983) social domain perspective. Matters of correctness, of safety, and of school performance are considered valid issues of adolescent adjustment in both the North American and Chinese context (Smetana, 1983; Dornbusch, Ritter, Leiderman, Bond & Hwang, 1986; Roberts, & Fraleigh, 1987).

The Chinese immigrant group from Taiwan, Hong Kong and mainland China is selected as it comprises a large proportion of immigrants to British Columbia, with 46% of the total immigrant population coming from the three places alone in 1995 (British Columbia Council for Families, 1997). Adolescence is a period of significant renegotiation and realignment of parent-child interactions (Feldman & Elliott, 1990; Collins & Luebker, 1994). Yet, little is
known about the realignment of parent-adolescent interactions among immigrants. The identification of parenting practices and the ways these practices can facilitate a smoother transition of the adolescent to future adult roles over and above the transition into a new country may enhance the integration of immigrants into the new society.

Literature Review

The Belief-Behavior-Outcome Model

This study will draw on findings of research in support of the two associations between parental belief and parenting behavior and between parenting behavior and child outcome. Further, the study will endeavour to connect those findings which share common grounds that could provide the basis of the parental belief-parenting behavior-adolescent outcome model. The study aims at integrating the two associations in order to provide a broader view of parenting dynamics in the study of a Chinese immigrant group.

Beliefs are knowledge-based cognitions constructed through interaction with objects, events, or persons (McGillicuddy-De Lisi, 1995). Like other cognitions, beliefs direct the process by which incoming information and experience are organized, prioritized and interpreted to facilitate the prediction of other people’s behaviors as well as guide one’s own (McGillicuddy-De Lisi, 1995). For example, parents who believe children are blank slates upon which parents must inscribe every piece of information will be more likely to use directions and instructions in teaching rather than allow children to explore and learn on their own (Kuczynski, Marshall & Schell, 1997). Beliefs continuously evolve as parents interact with the environment. Interaction with the environment makes culture an important source of the belief system (Okagaki & Divecha, 1993). One of the forms under which beliefs have been studied is the value system. Within each value system are embedded the cultural values and goals of the group. Parenting values are defined in terms of what parents would like to see in
their children (Kohn, 1969), or the parents’ longstanding goals (McGillicuddy-De Lisi, 1995). Goals provide a drive and impetus to purposeful parental action (Hoffman, 1988; McGillicuddy-De Lisi, 1995). Parents’ actions can be described as goal-driven behaviors. An example of parenting behavior as goal-driven behavior is observed in a study where parents’ behavior towards their child differed when different kinds of situational goals were set for the parent-child dyad to achieve (Kuczynski, 1984). Parents’ attempts to accomplish long-term goals with their child were associated with a higher level of nurturance and reasoning whereas parents’ short-term goals were associated with less nurturance and more power-assertive techniques. The present study will explore parental goals within the parents’ belief or value system and how these goals may motivate parents to adopt different kinds of parenting behaviors aimed at goal achievement.

Goal accomplishment or outcome reflects the effects exerted by the motivated behaviors to achieve set goals (Austin & Vancouver, 1996). The outcome in parenting dynamics can either be for the parent, for the parent-child relationship, or for the child (McGillicuddy-De Lisi, 1995). The present study is interested in the adjustment of the immigrant adolescent in view of the particular challenge they may face in the double transition towards adulthood and into a new country.

Amidst the large body of research in support of the association between parenting behaviors and child outcomes, certain parenting behaviors such as positive communication and warm, sensitive and involved parenting and role-modelling are consistently associated with positive developmental outcomes in children (Kochanska & Thompson, 1997). For example, Zhengyuan et al. (1990) showed that socialization practices such as parental control, use of reasoning, encouragement of independence and setting good examples correlated with kindergarten children’s increased self-control, positive attitudes toward work and character
development. Similar studies with adolescents found that positive family communication, parental acceptance, supervision, autonomy-granting and involvement were conducive to the adolescents' academic competence (Dornbusch et al., 1987, Steinberg, Lamborn, & Dornbusch, 1992), and to their self-esteem and well-being (Shek, 1999). As well, high parental monitoring and involvement reduced the risk of adolescents' drug-use (Pilgrim, Luo, & Urberg, 1999). On the other hand, aggressive parenting behaviors or poor communication were found to be associated with negative child behaviors and outcomes (Patterson, 1986; Bugental et al., 1989; Bugental, 1992). To summarize, socialization practices which endorse, promote and model desirable skills, attitudes and behaviors tend to foster the desired competencies in children (Brody & Stoneman, 1992).

Studies that investigate the connections between parental beliefs, parenting behaviors and child behaviors have been considered as scarce (Darling & Steinberg, 1993; Smetana, 1994). Rare attempts include Bugental, Lyon, Lin, McGrath, and Bimbela's (1999) study in which adult authority figures who believed themselves as having low authority over children were shown to be more ambiguous in their communication with children. The ambiguity in turn led to a lower level of attention paid to the adults by the children or to the total disengagement of the children's attention from them (Bugental et al., 1999). Further, Steinberg et al. (1992) illustrated how parents' belief in the positive effects of a warm and supervised home environment were related to parental involvement and encouragement in the adolescent's school life, thereby increasing the chances of the adolescent's academic success. Lastly, Chen (1997) found support for chain associations between parental goals, parenting behaviors and child competencies with respect to established goals. Parental goals consisting of social interaction, social cooperation, independence, and non-aggression, parenting behaviors
consisting of discipline, management and warmth, and child competencies with respect to established goals were found to be significantly correlated with one another.

A word of caution, however, is needed regarding the support found for the parental belief-parenting behavior, the parenting behavior-child outcome, and the parental belief-parenting behavior-child outcome associations. The support for the various associations is more consistent in studies with a white or European-descent sample than when different cultural groups are involved (Chao, 1994). For example, Dornbusch et al. (1987) found that the academic performance of American adolescents of Spanish and Asian descent correlated positively with parents' level of restrictive control and autocratic communication patterns. In a similar vein, the level of warm parental involvement in the school life of Asian adolescents did not predict the latters' success in school (Steinberg et al., 1992). These findings are contrary to those established by most parenting behavior-child outcome research whereby warm, autonomy-granting and sensitive parenting, and not restrictive parental control, plays an important role in positive child development (Kochanska & Thompson, 1997). The roles of parental control and warmth seem to become ambiguous when studies had used cultural groups. This ambiguity is of particular relevance to the present study of Chinese families who have immigrated to Canada.

The two variables of parental control and warmth have frequently been employed in the past 40 and more years of parenting research (Schaefer, 1958; Baumrind, 1968, 1978; Kriger & Kroes, 1972; Maccoby & Martin, 1983; Chiu, 1987; Shek, 1999). Findings usually indicate a negative association between parental control and warmth (Baumrind, 1968, 1978; Maccoby & Martin, 1983; Shek, 1999). It was thus surprising that Rohner and Pettengill (1985) found the level of restrictive and controlling parenting correlated positively with the level of parental acceptance and warmth as perceived by a group of Korean adolescents.
Differences in research findings when cultural groups are involved may emerge from various sources. It could be due to differences in samples in that some studies may use an immigrant population while other studies may use a cultural group in the home country. The age group of the samples could differ as well, or there are differences in the use of direct assessment of parents versus indirect assessment of parents from the perspective of the child (e.g. Dornbusch et al., 1987). Some researchers (Lau & Cheung, 1987; Lin & Fu, 1990; Chao, 1994) scrutinized the lack of cultural relevance or conceptual equivalence in the models and instruments when applied to an ethnic group. Chao (1994) took the approach of designing and introducing an indigenous instrument called chiao-shun or training. The essence of this instrument lies in its notions of Chinese socialization ideologies whereby the inherent nature of children is held to be good (Ho, 1986; Bond & Hwang, 1986) and that control and discipline is as vital an aspect of the parenting role as that of nurturance (Ho & Kang, 1984), care, involvement and concern (Chao, 1994). Chinese strict discipline does not preclude a warm and caring family environment and hence may not be associated with negative parental affect and effects on the child (Lin & Fu, 1990; Chao, 1994; Gorman, 1995). Compared to European-American mothers, Taiwanese immigrant mothers of preschoolers who scored significantly higher on restrictive and controlling parenting also scored higher on parental warmth and on the Chinese childrearing ideologies scale of chiao-shun (Chao, 1994). Gorman (1995) was able to replicate Chao’s (1994) findings on a group of Taiwanese immigrant parents of adolescent children.

Chao’s (1994) findings from an indigenous instrument shed some light on the controversial relationship between parental control and warmth by showing that the two variables may not be mutually exclusive when applied to cultural groups. Chao’s (1994) study was able to demonstrate that North American parenting paradigms may not adequately explain
the parenting behaviors of individuals and groups who do not share the same sociocultural context or background.

Further, there seems to be theoretical ambiguity concerning the role and definition of parental warmth in parenting research. Some researchers describe parental warmth loosely and refer to it interchangeably with responsiveness (e.g., Stewart et al., 1998). But responsiveness is a parent's contingent response to a child to develop the latter's instrumental competence (Ainsworth, Bell, & Stayton, 1971; Baumrind, 1978). While there may be an element of acceptance or sensitivity in responsiveness, warmth includes affection and praise which can be given contingently, but also unconditionally and spontaneously, regardless of the child's behavior (Maccoby & Martin, 1983). Distinctions between responsiveness/demandingness and warmth/control have become blurred to the point that some researchers (e.g., Stewart et al., 1998) assume a higher level of parental control to mean a lower level of parental warmth. Some researchers (e.g., Darling & Steinberg, 1993) suggest that parental warmth is the emotional climate of the parent-child relationship and that it should be distinguished from parenting behaviors. This definition of parental warmth is adopted in the present study because it agrees with the Chinese notion of a warm and caring environment in which parents raise their children (Chao, 1994).

To conclude, support for the associations between parental belief, parenting behavior, and child outcome seems to be strong. The parental belief-parenting behavior-adolescent outcome model promises to be a good approach for the examination of specific domains of adolescent development relevant to a Chinese immigrant group in a North American context. Further, this model permits the exploration of the effects of parental warmth on domain-specific relationships within the parental belief-parenting behavior-adolescent outcome model.
Research based on a model sensitive to culture may offer understanding as to how parenting practices may affect adolescent development and adjustment in cultural groups.

**Theoretical Framework**

The present study will attempt to introduce cultural sensitivity into the belief-behavior-outcome model in two steps. In accordance with Smetana's (1983) social domain theory, the first step is to separate the belief-behavior-outcome model into the specific domains chosen for this study (see Figure 1). This is followed by fitting into selected domains the appropriate parental goals which reflect the values of the cultural group.

Key to this study is social domain theory’s concept of domain-specificity. Domain-specificity is defined as the large repertoires of discipline strategies from which parents can generate a response appropriate to the kind of situation and nature of the act or transgression (Smetana, 1983).

**Figure 1. Applying domain-specificity to the belief-behavior-outcome model**

This perspective is supported by three main areas of research. Studies on parental discipline suggest that parents tend to react to children’s misdeeds differentially depending on the nature of the transgression or the context of the act (Grusec & Goodnow, 1994). Another area of
research on the types and nature of parental responses showed that the responses tend to fall into the domains of moral issues (e.g. welfare and rights), prudential issues (e.g. harm avoidance), social-conventional issues (e.g. manners), personal issues (e.g. pasttime), and multi-faceted issues which border between the social-convention and personal domain (e.g. a neat room) (Smetana, 1994). A third area of research on beliefs about parental authority showed that there was high concordance between parents and children as to the domains whereupon parents have and should exercise their authority (Smetana, 1994).

Smetana’s (1994) research on beliefs about parental authority further showed that parents’ beliefs about their authority over children in various domains differed as a function of the parents’ global and stable parenting characteristics or parenting styles. Authoritarian parents believed they should exert the same kind and amount of parental authority over their adolescents in all the domains. Unlike authoritative parents, there was an inability to treat various issues differentially by authoritarian parents who oversocialize their children and fail to grant them personal autonomy typically conceded by North American culture (Smetana, 1994). The present study will attempt to extend the notion of social domain analysis to incorporate the sphere of the adolescent’s adjustment in particular areas of development. Specifically, parents’ beliefs in the kinds of goals which are important for their adolescents to achieve and the parenting behaviors used by parents toward goal achievement will be examined in relations to adolescent moral, prudential and academic adjustment.

Area- or domain-specificity permits the examination of important issues such as moral issues which are rather “universalizable” (Smetana, 1983, 1995; Turiel, 1983), hence adaptable for another cultural group. Two of Smetana’s domains are especially significant according to Confucian tradition. Morality is the highest virtue to be attained while prudentiality or health and safety are necessary conditions for the fulfilment of filial obligations towards parents (de
Bary et al., 1960; Yu, 1982). A third domain which this study will examine is the learning/academic domain. While most parents desire their children to succeed in school (Dornbusch et al., 1987; Steinberg et al., 1992; Chao, 1994), Confucian teaching goes further in that it dictates learning to be the only path to morality (de Bary et al., 1960; Yu 1982). The foregoing would suggest that morality, prudentiality and learning/academic domains are valid issues in both the North American and the Chinese context.

The present study will examine the associations between parental goals, parenting behaviors and adolescent outcome in three domains. In addition, the role of parental warmth will be explored in order to help clarify the theoretical ambiguity surrounding warmth and assist in understanding the discrepant findings between European-descent and Asian cultural groups (Rohner & Pettengill, 1985; Chao, 1994, Gorman, 1995). Although frequently studied as a behavior in parenting research (Maccoby & Martin, 1983; Lin & Fu, 1990; Stewart et al., 1998; Shek; 1999), parental warmth has been defined as a characteristic or property of the relationship, and should not be confused with the behavior of a parent (Hinde, 1979). Other literature supporting the notion that parental warmth is not a parenting behavior includes the social domain theory (Smetana,1997) which acknowledges the importance of emotional bonds between parents and children. These bonds entail a kind of emotional security and trust (Hoffman, 1991) which makes parents a valued source of information for children’s social experiences (Smetana, 1997). Likewise, a positive atmosphere renders a child more open to receive parental messages as it alters the manner in which messages are perceived, received and eventually internalized within the child (Grusec & Goodnow, 1994). Children may also wish to reciprocate their parents’ warmth by wanting to please them in return, leading to more mutual compliance and better cooperation (Grusec, 1997). Parental warmth represents, therefore, the characteristic of the relationship. Moreover, the discrepant findings on parental
warmth between European-descent and Asian groups (Rohner & Pettengill, 1985; Chao, 1994, Gorman, 1995) recall Baron and Kenny’s (1986) suggestion that “the unexpectedly weak or inconsistent relation between a predictor and a criterion variable, such as when a relation holds in one subpopulation but not for another, makes the introduction of a moderator variable opportune” (p. 1178). Unlike many previous studies, parental warmth will thus be explored here as a moderator of the relationships between parenting behaviors and adolescent outcomes (Darling & Steinberg, 1994).

This study aims at introducing domain-specificity to the parental belief-parenting behavior-adolescent outcome connection and at separating self-reports of parenting behaviors from the relationship property of parental warmth. It further tries to apply cultural specificity by including parental goals relevant to the ethnic group and by organizing them within the social domain framework in a culturally-meaningful way. A domain- and contents-specific, as well as culturally-sensitive, model is hoped to better reveal the socialization dynamics as well as the adaptive and adaptational processes of the group under study (Chao, 1994). Specifically, the present study will test the following hypotheses (see Figure 2):

**Hypothesis 1(a).** Parental goals will be positively associated with parenting behaviors such that:

(i) Moral and prudential goals will be positively related to parental rule-setting and rule-enforcement.

(ii) Learning/academic goals are positively associated with parental rule-setting, rule-enforcement and training.

**Hypothesis 1(b).** Parental goals will be positively associated with adolescent competence by domain such that:
(i) Parental moral goals will be positively associated with adolescent moral competence.

(ii) Parental prudential goals will be positively associated with adolescent prudential competence.

(iii) Parental learning/academic goals will be positively associated with adolescent academic competence.

**Hypothesis 1(c).** Parenting behaviors will be positively associated with adolescent competence such that:

(i) Parental rule-setting and rule-enforcement are positively associated with adolescent moral, prudential and academic competence.

(ii) Training is positively related to adolescent academic competence.

**Hypothesis 2.** Within each domain, the relationships between parental goals and adolescent competence will be mediated by parenting behaviors:

(a) parental rule-setting and rule-enforcement mediate the relationships in the moral and prudential domains

(b) parental rule-setting, rule-enforcement and training mediate the relationships in the learning/academic domain.

**Hypothesis 3.** Parental warmth will moderate the relationships between parenting behaviors and adolescent competence, by strengthening:

(a) the relationships between parental rule-setting and adolescent moral, prudential and academic competence.

(b) the relationships between parental rule-enforcement and adolescent moral, prudential and academic competence.
Method

Sample

The sample consisted of 61 immigrant Chinese families who have come to Canada after 1986 from either Taiwan, Hong Kong, or mainland China and are at present residing in Greater Vancouver. Surveys from one family had to be discarded owing to incomplete information in the adolescent's survey, making a total of 60 families in the final sample. The mean number of years since arrival in Canada was approximately 6 years with a standard deviation of 3 years and 3 months. One primary parent and one child between 13 to 18 years of age from each family participated in the study. There were 5 families (8%) from China, 32 families (53%) from Taiwan and 23 families (38%) from Hong Kong. Twenty-seven families (45%) were astronaut families where one parent worked and resided in the country of origin while the other family members resided in Canada. The primary parent were mostly mothers (N=59; 98%) and 1 father (2%) with an average age of 44 years. The children were 34 daughters (57%) and 26 sons (43%) with an average age of 16 years. The families came
from an overall high level of socio-economic status. Before immigration, around 60% of the respondent parents and over 72% of their partners had college or university level education. A similar percentage of respondent parents and their partners held semi-professional occupations such as middle management or business managers to higher executive and major professional occupations such as doctors or lawyers.

In spite of the enormous effort and time made to recruit families to participate in this survey, the response was not high. Many families expressed their interest to participate but did not have children in the adolescent age group. Other families regretted either their lack of time due to work or other commitments such as adolescents' schoolwork.

Procedures

Subjects were mainly recruited with the assistance of the member schools of the Chinese Language Association of BC. Advertisements were placed in Chinese language newspapers, television and radio broadcasts. Participants were invited to refer potential respondents fulfilling the necessary requirements to the researchers.

Participants communicated their interest by calling the project’s telephone numbers to make arrangements with co-investigators to either deliver the survey to their homes at a time convenient for both the parent as well as the adolescent, or to have the surveys mailed to them. The latter procedure was necessary to accommodate families who were interested to participate but had difficulty organizing their schedules for a home interview. All written communications and questionnaires were available in English, traditional Chinese and simplified Chinese characters. All verbal communications and visits were conducted in the choice of language of the participants in either English, Mandarin or Cantonese.

Consent for each participating family member was obtained before administration of the measures. Parental consent and signature was required for the participation of adolescents
under 18 years of age. Participants were reminded that their participation was entirely voluntary and that they may refuse to answer any item in the survey or withdraw from the survey at any time without any consequences. Half of the families (N = 30) chose to have the survey delivered by mail. Participants were given directions to complete the surveys independently of each other as well as the choice of mailing back adolescent responses in separate envelopes from the parent’s to ensure confidentiality of responses and the adolescent’s need for privacy. As well, an English survey was always administered to adolescents well-versed in either languages whereas parents usually indicated more difficulty in English comprehension and chose Chinese surveys. Adolescents completing surveys in a language parents had difficulty to comprehend provided extra privacy for the adolescents. Participants were asked to contact the co-investigator(s) any time they needed clarification during the completion of the survey.

The questionnaire was translated into Chinese by one of the co-investigators, backtranslated into English by a second co-investigator, and checked for conceptual equivalence by a third co-investigator. Pilot testing of the Chinese translations for both the parent and adolescent versions was conducted with 5 Chinese immigrant parents and 8 Chinese young adults to assess comprehensibility of questions and wording. Pre-test volunteers were asked to make comments and suggestions on the items and measures as well as on the length of the survey. Pre-test results were taken into consideration and appropriate changes were made.

Measures

Demographics, gender and socio-economic status. Parents and adolescents were asked their age, gender, country of origin and recency of arrival in Canada (Appendix B). As well, parents were asked for information on their education and occupation level. Education level
was classified on an ordinal scale ranging from 1 (Post-graduate education) to 5 (7 to 9 years of schooling). Ordinal classification of occupation status ranged from 1 (higher executives and major professionals) to 7 (unskilled/unemployed).

Parental moral goals. Four items on parental moral goals were adapted directly from the Hypothetical Stimulus Items for the Parental Authority Questionnaire (Smetana & Asquith, 1994) with minor modifications for better conceptual equivalence with the Chinese culture (See Appendix C, items a – f). For example, the child’s behavior in Smetana and Asquith’s questionnaire (1994) is directed more towards family members only: “hitting brothers and sisters” and “taking money from parents without permission”. These were adapted to extend proscription of such actions beyond the family realm, e.g. to “…not hit, harm or hurt others” and “…not take things (from anyone) without permission”, because a strong Confucian sense dictates that a virtuous and moral person act correctly under all situations (Bond & Hwang, 1986) and that circumstances cannot justify the propriety of an incorrect action (Ma, 1988).

A fifth moral goal was adapted from the conventional items of the same Parental Authority Questionnaire (Smetana & Asquith, 1994). “Answering or talking back to parents” is considered immoral under the traditional Chinese concept of filial piety (de Bary et al., 1960), therefore this item was incorporated into the moral domain. A last moral goal, that of “treat others kindly and fairly”, was added as it is a fundamental moral concept in the Confucian tradition (Yu, 1982). Morality goes beyond simply following rules to not trespass proscriptions, but is a proactive quality of being kind and humane towards another person. It is a prerequisite to moral attainment, a quality bestowed on the virtuous.

Parents were administered this scale of six items. The items were responded to on a 5-point Likert scale ranging from “Not very important” to “Extremely important”. Items were summed so that higher scores reflect the greater importance parents place on the goals. The
items from Smetana and Asquith’s (1994) study had been extensively tested by previous and on-going research on domain-specificity since the early 1980s (Smetana, 1983, 1989, 1994, 1995; Asquith & Smetana, 1994). For the present study, no variance was reported for item 3, “How important is it for you to help your child learn to not take money or goods from anyone without permission?” All parents selected 5 “Extremely Important”. Due to the lack of variability of responses to this item, it was dropped from the scale. Internal consistency for the items remaining in the scale was .74.

**Parental prudential goals.** Four items adapted directly from the Parental Authority Questionnaire (Smetana & Asquith, 1994) assess health and safety issues (see Appendix C, items g-j). This scale was administered to parents only. One item was changed from “Driving with friends who are new drivers” to “Went into a car with a driver who had been drinking” to better tap the levels of prudence and harm avoidance. The responses range from “Not very important” to “Extremely important” on a 5-point Likert scale. Items were summed so that higher scores reflect the greater importance parents place on the goals. The reliability and validity of the items in the prudential goals had been extensively tested in previous research on domain-specificity (Smetana, 1983, 1989, 1994, 1995; Asquith & Smetana, 1994). Cronbach’s alpha for this study was .73.

**Parents’ learning/academic achievement goals.** Six items (Appendix C, items k-p) adapted from Chao’s (1994) scale for the Chinese concept of “training” were administered to parents. This instrument reflects not only the Confucian concept of “learning” (scholarly/literary achievement), but also the social role and responsibility of a Chinese parent (Ho, 1986). An example of an item is “How important is it for you to let your child know that you express your love by helping him/her succeed, especially in school?”. Responses range from “Not very important” to “Extremely important” on a 5-point Likert
scale. Items were summed so that higher scores reflect the greater importance parents place on the goals. Chao’s (1994) scale was able to distinctly discriminate Chinese parents from their European-American counterparts. In the present study, internal consistency for this scale was .71.

**Parental rule-setting.** Prescribing or setting rules is a principal parenting role in the Chinese culture (Ho, 1986). Rule-setting has been extensively studied under different names such as control or discipline in both North American (Kelley, Power, & Wimbush, 1992), Chinese (Chen, 1997), and in comparison groups (Kriger & Kroes, 1972; Chiu, 1987; Lin & Fu, 1990; Kelley & Tseng, 1992; Chao, 1994). The parenting rule-setting scale contain six items (see Appendix D items, a-f) from the parental control scale of Block’s Child Rearing Practices Report (1986) and was administered to parents only. An example of an item is “I use punishment when rules are broken”. Responses range from “Never” to “Very often” on a 5-point Likert scale. Items were summed so that higher scores reflect a greater use of rule-setting and discipline. The scale had been used in previous studies with Chinese groups where Chinese parents consistently scored higher than their western counterparts (Lin & Fu, 1990; Chao, 1994). An alpha coefficient of .76 for fathers and .71 for mothers was reported for Chen’s (1997) adapted version. The internal consistency derived from data in this study was .65.

**Parental rule-enforcement.** Six items (see Appendix D, items g-l) adapted from the lax vs. consistent discipline subscale of the parent version of the Child Report of Parental Behaviour Inventory (CRPBI; Schaefer, 1965) were administered to parents. An example of a question is “I do not always manage to follow through on a punishment”. Responses on a 5-point Likert scale range from “Never” to “Always”. Items were summed so that higher scores reflect more consistent rule-enforcement.
The CRPBI has undergone many modifications and testing in numerous studies from its original 260 items to the abbreviated version of 56 items (Margolies & Weintraub, 1977). Three psychologists evaluated the original items for face validity. Their ratings were factor analyzed to produce loading of the parenting behaviours into the 3 constructs of lax discipline, control and acceptance. Convergent validity of the constructs was tested with other parenting support instruments with specific reliability and validity of the subscales confirmed. There was adequate test-retest reliability for all the factors for different age groups and Cronbach's alpha for the lax vs. firm discipline subscale was reported at .74 (Margolies & Weintraub, 1977). Data from the present study yielded a Cronbach's alpha of .51.

Parental training. Administered only to the parent, six items were adapted from Chao's (1994) concept of “training” (see Appendix D, items m-r). In an involved and caring way, parents “train” their children to learn to work hard as hard work often brings success in educational and personal achievement (Yu, 1982). The item from Chao's (1994) scale which reads “When child continues to disobey you, he/she deserves a spanking” was modified to “I praise or reward my child for good behavior and scold or punish him/her for bad behavior” to suit the adolescent age group. Responses range from “Never” to “Always” on a 5-point Likert scale. Items were summed so that higher scores reflect greater use of “training” practices by parents.

Face validity was assumed in view of the well thought-out and in-depth review of Chinese cultural contents in the design process of the instrument while discriminant validity was established by Chao's (1994) study. Based on data from the present study, internal consistency was .52.
Adolescent moral competence. Given that parents do not always know their adolescent’s thoughts and behaviors exactly or thoroughly (Maggs, Almeida & Galambos, 1995), the sections on adolescent competence in the various domains were administered to the adolescent only. The six items on moral competence (see Appendix E, items a-f) were adapted from the “disobeying parents” and “antisocial behavior” subscales of the Problem Behavior Inventory (Maggs et al., 1995). These items correspond well to the moral goals of Smetana and Asquith (1994). The questions asked adolescents how frequently they engaged in behaviors such as “taken something without payment or permission” or “lied to parents”. The items were scored on a 5-point Likert scale ranging from “Never” to “Very often”. Items were summed so that higher scores reflect more frequent engagement in the undesirable behaviors while low scores reflected a higher level of competence.

Maggs et al. (1995) tested the subscales in a longitudinal study that spanned almost 3 years. Reliability was tested at four intervals with alphas for the “disobeying parents” and “antisocial behavior” subscales reported at T3 at .68 and .82 respectively. A year later, additional items were added which increased the reliability to .85 and .84 respectively. Based on the present study, the internal consistency of the scale with all six items was .46. Deletion of item 6 which reads “How often have you done something kind or fair to others?” raised Cronbach alpha to .60. This item was dropped from the scale to obtain the higher alpha of .60.

Adolescent prudential competence. Four items assess the adolescents’ self-perception of his/her competence on prudential issues (see Appendix E, items g-j). The items were adapted from the domain of “substance abuse” of the Problem Behavior Inventory (Maggs et al., 1995). A sample question is how frequent the adolescent engaged in behaviors such as “used alcohol”. Responses range from “Never” to “Very often” on a 5-point Likert scale. Items
were summed so that higher scores reflect more frequent risk-taking behaviors while low scores reflect a higher level of competence regarding safety issues. The reliability of the “substance abuse” items was .86.

The internal consistency for this scale of the original 4 items was .49. Deletion of item 10 which reads “How often have you gone into a car with a driver who had been drinking?” yielded an alpha of .55. This item was dropped from the scale to increase the alpha to an acceptable level.

**Adolescent academic competence.** Academic competence was assessed in two ways, by the adolescents’ self-perceived school engagement (see Appendix F) and their self-reports of school grades.

The school engagement scale consists of six items (Welhlage et al., 1989) which measure the sense of competence and reward children derive from school life. A sample item asks respondents how well a statement such as “I find school boring” describes the adolescent’s feelings and perceptions about school. Responses range from “Not well at all” to “Extremely well” on a 5-point Likert scale. Items were summed so that higher scores reflect a more positive attitude towards school life. The original scale was developed for studies on students at risk for dropping out of school and adequate reliability was reported (Welhlage et al., 1989). Data from the present study yielded a Cronbach’s alpha of .71.

**Parental warmth.** Ten parallel items (see Appendix G) from the “acceptance” subscale of the Children’s Report of Parental Behaviour Inventory (CRPBI; Schaefer, 1965) were administered to parents and adolescents. A sample question asks how often the parent “tries to understand (the adolescent’s) worries and problems”. Responses range from “Never” to “Most of the time” on a 5-point Likert scale. Items were summed so that higher scores reflect a higher level of parental warmth.
This subscale was selected because the CRPBI is a well-tested instrument in terms of face validity, construct and convergent validity as described under the measure for parental rule-enforcement (Margolies & Weintraub, 1977). Test-retest reliability for all the factors for different age groups was reported and Cronbach's alpha for the acceptance subscale was reported at .78 (Margolies & Weintraub, 1977). Data from the present study yielded a Cronbach's alpha of .87 and .90 for parent and adolescent reporting respectively.

Results

A power analysis was performed to determine the minimum sample size required to test the mediator or moderator model within a domain. Results of the power analysis showed the minimum sample size to be 77. The present sample size of 60 makes it difficult to detect significant effects. However, this study proceeded to test the models in view of the shortage of participants despite huge efforts in the recruitment process. The caveat for proceeding is that the study might commit a Type II-error. The low power due to the small sample increases the likelihood that the study will fail to reject the null hypothesis when it should. Caution is therefore needed in the interpretation of the findings.

According to Table 1, descriptive statistics showed a high mean, a small standard deviation, a narrow range on a 5 point Likert scale and skewness for several variables. Most notable were the moral and learning goals. The ranges for moral and prudential competence were only slightly broader. The most extreme skewness occurred in the distribution of scores for prudential goals at 2.6 ($z = 8.39$, $p < .01$).

Preliminary analyses were conducted to assess any possible differences in the means of responses of the three groups from Taiwan, Hong Kong and mainland China. One-way repeated-measures analysis of variance revealed no significant difference across all variables for the three groups except for moral and prudential goals, $F$s (2, 58) = 4.4 and 3.8
Table 1

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>Std.</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental moral goal</td>
<td>60</td>
<td>1.6</td>
<td>4.71</td>
<td>.38</td>
<td>-1.57</td>
</tr>
<tr>
<td>Parental prudential goal</td>
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<td>3</td>
<td>4.11</td>
<td>.66</td>
<td>-1.14</td>
</tr>
<tr>
<td>Parental learning goal</td>
<td>60</td>
<td>1.5</td>
<td>4.53</td>
<td>.43</td>
<td>-.77</td>
</tr>
<tr>
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<td>2.67</td>
<td>3.70</td>
<td>.58</td>
<td>-.00</td>
</tr>
<tr>
<td>Parental rule-enforcement</td>
<td>60</td>
<td>2.8</td>
<td>3.52</td>
<td>.60</td>
<td>.31</td>
</tr>
<tr>
<td>Parental training</td>
<td>60</td>
<td>2.5</td>
<td>3.67</td>
<td>.57</td>
<td>-.22</td>
</tr>
<tr>
<td>Adolescent moral behavior</td>
<td>60</td>
<td>2.2</td>
<td>2.07</td>
<td>.50</td>
<td>.43</td>
</tr>
<tr>
<td>Adolescent prudential behavior</td>
<td>60</td>
<td>2.33</td>
<td>1.26</td>
<td>.45</td>
<td>2.63</td>
</tr>
<tr>
<td>Adolescent school engagement</td>
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<td>3</td>
<td>3.74</td>
<td>.68</td>
<td>-.67</td>
</tr>
<tr>
<td>Adolescent school grades</td>
<td>60</td>
<td>4</td>
<td>4.15</td>
<td>.80</td>
<td>-1.11</td>
</tr>
<tr>
<td>Parental warmth (parent report)</td>
<td>60</td>
<td>2.9</td>
<td>4.11</td>
<td>.61</td>
<td>-.81</td>
</tr>
<tr>
<td>Parental warmth (adolescent)</td>
<td>60</td>
<td>3.1</td>
<td>3.69</td>
<td>.75</td>
<td>-.45</td>
</tr>
</tbody>
</table>

respectively, p < .05. A post-hoc Dunnett’s C test was performed to determine which groups differed significantly in terms of the moral and prudential goals parents had for their adolescents. A mean difference of .23 between the moral goals of Taiwanese and Hong Kong parents was significant at p < .05 whereas the mean difference between the prudential goals of the three groups did not reach a level of significance. A further step was taken by conducting a one-way analysis of variance to assess if the difference in the moral goals could be attributable to the recency of arrival of the groups. Results showed a significant difference at p < .01 between the mean arrival year of 1996 and 1993 of the Taiwanese and Hong Kong
parents respectively. This was followed by a post-hoc Dunnett's C test which further confirmed the mean difference of arrival date for the two groups of 2.66 was significant at p < .05. Finally, Pearson-product moment correlation was conducted to detect any relationship between arrival date and moral goals. The correlation was significant, r = .28, p < .05. Findings suggest that differences may emerge from time of arrival rather than country of origin.

Given the separate processes for survey returns, the present study checked for potential bias from compromise of confidentiality or privacy for the adolescents who completed their surveys at home and returned the survey by mail (N = 29). A t-test was conducted to detect any difference in the mean responses of adolescents who completed the survey in the presence of the co-investigator versus those who returned surveys by mail. Results showed no significant difference across the moral, prudential and academic behaviours of the adolescents regardless of the mode of survey completion and return.

The first hypothesis of the present study proposed positive associations between parental goals, parenting behaviors, and adolescent competence. It consisted of several parts and each will be treated separately. A graphical summary of all the correlations found for the study is provided in Figure 3. Given the small sample size, correlations significant at p < .10 have also been included in the tables and figure for reporting purposes only. These are not considered for testing of mediator or moderator models for which correlations need to be at a level of significance of at least p < .05.

**Hypothesis 1(a)**

Hypothesis 1(a) proposed that (i) parental moral and prudential goals will be positively related to parental rule-setting and parental rule-enforcement, and (ii) parental learning/academic goals will be positively related to parental rule-setting, parental rule-
Figure 3 – Correlations between parental goals, parenting behaviors, adolescent competence and parental warmth by domain

Solid arrows – p < .05  
Broken arrows – p < .10  
Double broken arrows – quadratic relationship
Table 2

Correlations between (i) parental moral and prudential goals and parental rule-setting and rule-enforcement and (ii) parental learning goals and parental rule-setting, parental rule-enforcement and parental training

<table>
<thead>
<tr>
<th>Parental Behaviors</th>
<th>Rule-setting</th>
<th>Rule-enforce</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental moral goals</td>
<td>.51**</td>
<td>.40**</td>
<td></td>
</tr>
<tr>
<td>Parental prudential goals</td>
<td>.32*</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Parental learning goals</td>
<td>.57**</td>
<td>.43**</td>
<td>.48**</td>
</tr>
</tbody>
</table>

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

Parental moral goals were significantly related both to parental rule-setting and to parental rule-enforcement at p < .01. Parental prudential goals were significantly correlated with rule-setting at p < .05 but not with parental rule-enforcement. Parental learning goals were significantly related to all three parenting behaviors of rule-setting, rule-enforcement, and training at p < .01.

Hypothesis 1(b)

Hypothesis 1(b) proposed that, within each domain, parental goals will be associated with adolescent competence. Pearson product-moment correlations were conducted between each set of variables and the zero-order correlations are shown in Table 3. Parental moral goals were related to adolescent moral competence at p < .10, parental prudential goals were significantly related to adolescent prudential competence at p < .05, and parental learning goals were significantly related to adolescent school grades at p < .05 but not to adolescent school engagement.
Table 3

Correlations between parental goals and adolescent competence by domain

<table>
<thead>
<tr>
<th>Parental goals</th>
<th>Adolescent competence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moral</td>
</tr>
<tr>
<td>Parental moral goals</td>
<td>-.24†</td>
</tr>
<tr>
<td>Parental prudential goals</td>
<td></td>
</tr>
<tr>
<td>Parental learning goals</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05. † p < .10

In regards to the relationship between learning goals and adolescent school engagement, descriptive statistics of learning goals (see Table 1) showed a narrow range which could affect its spread of scores and attenuate its correlation with other variables. However, examination of a scatterplot revealed a quadratic relationship. A hierarchical regression analysis was conducted to test the significance of the curved relationship. First, a quadratic term was created by squaring parental learning goal scores. Adolescent school engagement was entered into a regression equation as the dependent variable. The parental learning goal was entered into the first step, and the quadratic term entered into the second step. As shown in Table 4, a significant curvilinear relationship between parental learning goals and adolescent school engagement was found. Lower levels of importance placed on learning goals were in a negative relationship, whereas higher levels of learning goals were in a positive relationship, with adolescent school engagement.
Table 4

Summary of Hierarchical Regression Analyses for parental learning goals predicting adolescent school engagement

<table>
<thead>
<tr>
<th></th>
<th>FA</th>
<th>Beta</th>
<th>R²</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goals</td>
<td>1.64</td>
<td>.17</td>
<td>.03</td>
<td>2, 54</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goals</td>
<td></td>
<td>-6.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goals²</td>
<td>7.54**</td>
<td>6.94**</td>
<td>.12**</td>
<td>3, 57</td>
</tr>
</tbody>
</table>

** p < .01

Hypothesis 1(c)

The first part of hypothesis 1(c) proposed that parental rule-setting and parental rule-enforcement are positively associated with adolescent moral, prudential and academic competence. The second part expected parental training to be related to adolescent academic competence. Pearson product-moment correlations were conducted and are reported in Table 5. Parental rule-setting was significantly correlated only with adolescent school engagement at p < .05, and parental rule-enforcement correlated with both measures of academic competence at p < .10. No significant relationships were found between parental training and either of the adolescent academic competence measures.

Hypothesis 2 (a)

The present study hypothesized that parental rule-setting and parental rule-enforcement mediate the relationship between parental goals and adolescent competence in the moral and
Table 5

Correlations between (i) parental rule-setting and parental rule-enforcement and adolescent moral, prudential and academic competence and (ii) training and adolescent academic competence

<table>
<thead>
<tr>
<th></th>
<th>Adolescent competence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moral</td>
</tr>
<tr>
<td>Parental rule-setting</td>
<td>-.12</td>
</tr>
<tr>
<td>Parental rule-enforcement</td>
<td>-.20</td>
</tr>
<tr>
<td>Parental training</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05. † p < .10

prudential domains. According to Baron and Kenny (1986), evidence for potential mediating effects is present when the following conditions are met: significant relationships between (a) the predictor and the outcome, (b) the predictor and the mediator, and (c) the mediator and the outcome. As the zero-order correlations in Table 5 demonstrate, no significant relationship was found between the mediating variable of parenting behaviors and the outcome variable of adolescent competence in either the moral or prudential domain. The conditions for testing a mediator model were not met.

Hypothesis 2 (b)

It was proposed that parental rule-setting, parental rule-enforcement and parental training mediate the relationship between parental learning goal and adolescent academic competence. According to the protocol of Baron and Kenny (1986), evidence for potential mediating effects is present when significant relationships are found between (a) the predictor and the outcome, (b) the predictor and the mediator, and (c) the mediator and the outcome.
As the zero-order correlations in Tables 2, 4 and 5 show, significant relationships were found between (a) the predicting variable of parental learning goal and the mediating variable of parental rule-setting, (b) the mediating variable of parental rule-setting and the outcome variable of adolescent school engagement, and (c) the predicting variable of parental learning goal and the outcome variable of adolescent school engagement. The conditions for testing a mediator model were present and hierarchical ordinary least squares regression was conducted to test for mediation. This was done by entering adolescent school engagement as the dependent variable. Parental learning goal and parental learning goals\(^2\) were entered in the first step, followed by parental rule-setting entered in the second step. Findings are summarized in Table 6. The F change indicates the change in the regression model after introduction of the mediator term. The strength of this effect is reflected by the standardized beta. The R square change is included to illustrate the increase in variance which can be explained by the model after introduction of the mediator term.

As the results in Table 6 show, the effects of the predictor variable of parental learning goals remained significant after introduction of the mediating variable of parental rule-setting. The lack of diminished effects of the predictor after introduction of the mediator suggests a lack of support for the mediator hypothesis.

**Hypothesis 3**

Lastly, the present study hypothesized moderating effects of parental warmth on the relationships between parental rule-setting and parental rule-enforcement and adolescent competence in each domain. As outlined by Baron and Kenny (1986), testing the moderator model assumes three causal paths feeding into the outcome variable: between (a) the predictor and the outcome, (b) the moderator and the outcome, and (c) the interaction or product of paths (a) and (b).
Table 6

Summary of hierarchical regression analysis testing mediating effects of parental learning goals, parental rule-setting and adolescent school engagement

<table>
<thead>
<tr>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental learning goal</td>
<td></td>
<td>-6.76*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goal$^2$</td>
<td></td>
<td>4.69*</td>
<td>6.94*</td>
<td>.15*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goal</td>
<td></td>
<td>-6.33**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental learning goal$^2$</td>
<td></td>
<td></td>
<td>6.39**</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>Parental rule-setting</td>
<td></td>
<td>2.10</td>
</tr>
</tbody>
</table>

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

Preliminary analyses were first performed by conducting Pearson product-moment correlations to assess the associations between parental warmth and parenting behaviors and adolescent competence. Separate analyses were conducted for parent and adolescent report of parental warmth. As can be seen in Table 7, the zero-order correlations showed parental warmth as reported by the parent to be significantly correlated with parenting behaviors of rule-setting and rule-enforcement at p < .10. No correlation, however, was found between adolescents' reports of parental warmth and parenting behaviors. With regard to parental
Table 7

Correlations between parental warmth and parenting behaviors and adolescent competence

<table>
<thead>
<tr>
<th>Parental warmth</th>
<th>Parent report</th>
<th>Adolescent report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental rule-setting</td>
<td>.25†</td>
<td>.08</td>
</tr>
<tr>
<td>Parental rule-enforcement</td>
<td>.22†</td>
<td>.42</td>
</tr>
<tr>
<td>Adolescent moral competence</td>
<td>-.23†</td>
<td>-.40**</td>
</tr>
<tr>
<td>Adolescent prudential competence</td>
<td>-.02</td>
<td>-.10</td>
</tr>
<tr>
<td>Adolescent school engagement</td>
<td>.25†</td>
<td>.43**</td>
</tr>
<tr>
<td>Adolescent school grades</td>
<td>.34**</td>
<td>.28*</td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01. † p < .10

warmth and adolescent competence, parent report of parental warmth was correlated with adolescents' moral competence and with adolescents' school engagement at p < .10, and with adolescents' school grades at p < .01. Adolescent report of parental warmth was significantly correlated with adolescents' moral competence and adolescents' school engagement at p < .01, and with adolescents' school grades at p < .05. Neither parent nor adolescent report of parental warmth was, however, related to adolescents' prudential competence.

From the zero-order correlations in Table 5, no significant relationship was found between parental rule-setting or parental rule-enforcement and adolescent competence in either the moral or prudential domain. The only situation in which a potential moderator model could be tested occurred in the learning domain where there were significant associations between the predictor of parental rule-setting and the moderator of adolescent
warmth, and the outcome of adolescent school engagement. Analyses were conducted using hierarchical ordinary least squares regression. First, an interaction term between the predicting variable of rule-setting and the moderating variable of parental warmth as reported by the adolescent was created from the product of the two variables. Adolescent school engagement was entered as the dependent variable in the regression equation. Next, parental rule-setting and adolescent report of parental warmth were entered in the first step, and the interaction term entered in the second step. Moderating effects are present if there are significant differences in the model before and after the introduction of the interaction term. The findings are summarized in Table 8. The interaction term was not found to be significant.

Table 8

Summary of hierarchical regression analysis testing moderating effects of parental warmth on relationships between parental rule-setting and adolescent school engagement

<table>
<thead>
<tr>
<th>Model 1</th>
<th>FA</th>
<th>Beta</th>
<th>R²</th>
<th>df</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental warmth (adol report)</td>
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<td>.38**</td>
<td>.22*</td>
<td>2, 56</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>FA</th>
<th>Beta</th>
<th>R²</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental rule-setting</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental warmth (adol report)</td>
<td>1.21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>1.05</td>
<td>-1.10</td>
<td>.02</td>
<td>3, 56</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
significant. The results offered no support that parental warmth strengthens the relations between parental rule-setting and adolescent school engagement.

Discussion

This present study attempted to build a model linking parental beliefs to parenting behaviors and adolescent outcomes. Specifically, the chain association between parental goals, parenting behaviors and adolescent outcomes were examined by domain. The study further explored any potential mediating effects within the model as well as moderating effects of parental warmth. The results of the present study provided no support for the mediator or moderator model but offered new information and confirmatory evidence for various associations in each domain.

The first important finding is that no significant difference was found between the parental goals, parenting behaviors and adolescent outcomes among the participants from Taiwan, Hong Kong and Mainland China. This study is one of the first to involve different Chinese groups sharing a strong Confucian tradition but coming from three distinct regions of origin. The data from this sample showed no difference between the groups across all variables except in moral goals between Taiwanese and Hong Kong parents. The difference was found to be related to the recency of arrival of the group. This finding is similar to Rosenthal and Feldman’s (1989) results indicating that the tendency of Chinese-Australian immigrant families to keep a stronger hold on traditional family functioning and environments was found to be a function of the length of their residence in the new country. In other words, moral ideas and goals from the culture of origin may be retained until the parents have had sufficient time to adjust to, understand and feel more comfortable in the new environment.

Next, the present results reveal a substantial number of associations between parental goals and parenting behaviors, between parental goals and adolescent outcomes and a lesser
number of associations between parenting behaviors and adolescent outcomes. The findings not only add support to literature on associations between parental goals and parenting behaviors (McGilllicuddy-De Lisi, 1995), between parental goals and adolescent outcomes (Okagaki & Divecha, 1993), and between parenting behaviors and adolescent outcomes (Maccoby & Martin, 1983), the results also demonstrate the usefulness of uniting two areas of research to obtain a broader view of parenting dynamics within a Chinese immigrant group. The present findings supplement the scarce amount of literature available on the chain association between parental goals, parenting behaviors and adolescent outcomes. The scarcity of this kind of literature is even more accentuated where cultural groups are concerned.

The present study was not able to substantiate the association between parenting behaviors and adolescent outcomes to the degree predicted by existing literature (Baumrind, 1978; Maccoby & Martin, 1983; Shek, 1999). One explanation for the lack of expected significant associations between parenting behaviors and adolescent moral and prudential outcomes is the age- and domain-appropriateness of the variables. Whereas Chen (1997) found support for relationships between parents' control behaviors and positive moral and social development in preschool children in Taiwan, Gorman (1995) found mothers of immigrant Taiwanese adolescents in the United States (US) use more subtle ways of influence than direct imposition and enforcement of parental rules. Controlling behaviors such as rule-setting and rule-enforcement have been widely studied in research on Chinese parenting (Ho, 1986) and were found to be most common and effective among parents of young children (Chen, 1997). According to the results of the present study, controlling behaviors such as strict discipline may give way to other modes of parental influence as the child grows into adolescence (Gorman, 1995) or the rules have been firmly established. The level of rule-
setting and rule-enforcement employed by the sample of parents in the present study was in fact not very high. The mean was 3.7 and 3.5 within a response range of 2.3 to 5 and 2.2 to 5 respectively on a 5 point scale. It is possible that parents are less likely to employ behavioral control as adolescents make the transition to adulthood.

Domain-appropriateness is illustrated by contrasting the lack of expected significant correlations in the moral and prudential domains with the high number of significant associations in the learning domain. In the latter domain, the data was able to support 8 out of 11 hypothesized associations between parental goals, parenting behaviors and adolescent outcomes. Whereas parental rule-setting and parental rule-enforcement may not be appropriate for adolescents’ moral and prudential development, the results suggest that the same parenting behaviors have unique and specific relationships with both parental learning goals and adolescent academic outcomes. This is an important finding as the results testify to the importance of considering domain-specificity. By applying domain-specificity, the study has been able to discern the mechanism by which parental goals and beliefs are associated with specific parenting behaviors which are in turn associated with the targeted outcomes. Specifically, Chinese parents who believe in the importance of learning and academic achievement are more likely to use direct intervention of parental rule-setting and parental rule-enforcement given the positive association between the parenting behaviors and adolescents’ academic competence (Chao, 1996).

The difference in the number of significant associations between the learning domain on the one hand and the moral and prudential domains on the other can further be explained using the concept of parental goal-parenting behavior congruency (Kuczynski, 1984; Hastings & Grusec, 1998). Kuczynski (1984) demonstrated how parents’ long-term goals were related to a higher level of parents’ reasoning and nurturance while short-term goals were associated
with a higher level of power-assertive techniques and a lower level of nurturance. Hastings and Grusec (1998) further showed how the focus of goals could be classified along the same time dimensions and were predictive of behaviors parents employed. Long-term relationship-centered (RC) goals were associated with warm, negotiating and cooperative parenting behaviors, long-term child-centered (CC) goals with reasoning, and short-term parent-centered (PC) goals with power assertion (Hastings & Grusec, 1998). In other words, power-assertive parenting techniques may work better where the immediate compliance of the adolescent is concerned. In terms of lengthy processes or long-term goals such as the attainment of moral and prudential understanding, alternative parenting techniques such as reasoning and negotiation may be more appropriate (Hastings & Grusec, 1998) than parental rule-setting and rule-enforcement employed in this study. Given the power-assertive component inherent in behavioral control, there may be incongruence between the power-assertive nature of parental rule-setting and parental rule-enforcement with the long-term CC goal of moral and prudential development. On the other hand, much as learning may seem a long-term CC goal, school performance in and of itself could instead be viewed by parents as an immediate or short-term issue that requires more direct and immediate parental guidance and intervention (Gorman, 1995; Chao, 1996). In other words, parental rule-setting and parental rule-enforcement are appropriate parenting behaviors for adolescents where their day-to-day school performance is concerned.

An interesting observation emerging from the present data relates to the moral and learning domains. These two domains are considered interrelated and central to Confucian tradition (de Bary et al., 1960). Most studies have examined Chinese children and adolescents (Ma, 1988) in terms of Kohlberg’s (1969) stage theory of moral developmental, or have compared Chinese children to European or European-descent groups (Dien, 1994; Ma &
Cheung, 1996). Much as the studies underscored the culturally specific contextual problems in applying Kohlberg’s theory to the moral development of Chinese children and adolescents, little research has been advanced in alternative directions. The results of this study hint at potential important connections between moral development and learning. Findings revealed an association between parental moral goals and parental learning goals, while adolescents’ moral competence is associated with adolescents’ academic competence. The present results seem to confirm Li’s (1997) findings based on a Chinese motivation model for learning in which one of the prototypes, the moral/virtuous person, ‘self-cultivates’ through an integration of moral development and learning. Confucian tradition dictates that morality is the highest virtue to be attained and that the only path to becoming a truly moral and virtuous person is through learning (Yu, 1982). Learning is a life-long pursuit to cultivate oneself, to achieve breadth and depth of knowledge and character. The process of learning is intricately intertwined with that of moral development whereby development of one furthers the development of the other (Li, 1997). The numerous associations found in this study between the moral and learning domains seem to support Li’s (1997) suggestion that the interconnectedness of moral development and learning may be food for thought for future research on moral development in Chinese groups (Li, 1997).

Finally, despite the inability to find moderating effects of parental warmth, the present results showed parental warmth to be high among Chinese families with a mean of 4.1 on a response range from 2.1 to 4.7 and a mean of 3.7 on a response range from 1.8 to 4.9 for parents’ and adolescents’ report respectively on a 5 point scale. As well, present findings showed the level of parents’ report of parental warmth to be associated with the level of parental rule-setting and parental rule-enforcement. The results tend to support research studies indicating a positive association between parental warmth and control (Rohner et
Further, the present study provides clarification on ungrounded assumptions of previous research that a high level of behavioral control means a low level of parental warmth (Stewart et al., 1998). In particular, some researchers who have conducted studies with Chinese parents (e.g. Kriger & Kroes, 1972) have gone to the extent of describing Chinese mothers as hostile and rejecting because of their high behavioral control with children. Parental warmth needs to be measured and cannot be implied based solely on the level of behavioral control. Parental warmth may be the key to the unexpected finding in Dornbusch et al.'s (1987) study in which the academic performance of Asian students, unlike students of other groups, was positively associated with authoritarian parents. Parental warmth was not measured in Dornbusch et al.'s (1987) study but implied by proxy using the family's communication style. The same reasoning could be applied to Steinberg et al.'s (1992) findings in which a higher level of parental involvement and encouragement in adolescents' school life is suggested as characteristic of authoritative parenting and tends to be associated with more positive adolescent academic performance. However, the finding was, once again, not significant among Asian students. Steinberg et al.'s (1992) results seem to suggest that parental warmth of Asian parents may be expressed in different forms other than involvement in the adolescent's school life. When studying the parenting dynamics of various cultural groups, relevant variables should be incorporated.

Like any research, this study has its limitations. The lack of representativeness in a convenience sample consisting of respondents all coming from a Chinese background does not allow findings to be generalized to another cultural group. Furthermore, selectivity bias is evident in that participant families all chose and could afford to send their children to Chinese schools and spare the time to participate in this study. Above all, the enormous effort and time made to recruit families to participate in this survey was not matched by the number of
respondents. This is a setback as the small size of the sample did not provide the level of power needed to properly test the model of the present study (Pedhazur & Schmelkin, 1991).

Other methodological limitations include the restricted range in the moral and prudential competence scores and the significant level of skewness of prudential competence which may have affected the variance and attenuated the correlation with other variables (Kerlinger, 1986). The skewness in prudential competence scores was, however, not surprising as low scores on risk-taking behaviors was congruent with expectations of adolescents participating in the present study. The adolescents came from families with material and immaterial resources such as warm and well-educated parents who are likely to prepare and capable of guiding the adolescents in harm avoidance.

Further, reliable instruments are crucial to the design and proper functioning of the model (Pedhazur & Schmelkin, 1991). There were low internal consistencies reported for the parenting behavior scales of rule-setting, rule-enforcement and training on the one hand and for adolescent outcomes in the moral and prudential domains on the other. Despite efforts to choose well-researched instruments and to adapt them carefully, the items had not been previously tested for reliability.

Lastly, the model of this study implies unidirectional effects from the parent to the adolescent whereas research has shown how parenting is a bidirectional process (Kuczynski et al., 1997; Shek, 1999). It is also not possible to examine the influences between the parent and the adolescent over time with the cross-sectional data of this study. Future research should consider a longitudinal or cross-sequential design to be able to follow the influence parents and adolescents have on each other.

Taken together, the results, strengths and limitations of the present study open up different avenues for future research on parenting dynamics in Chinese families. Future
studies can build on the Chinese learning model using the domain-specific parenting behaviors of rule-setting and rule-enforcement. For example, parents' controlling behaviors have been found to negatively affect adolescents' self-esteem and well-being (Stewart et al., 1998; Shek, 1999). Whether or not the negative relationship between the parenting behaviors and the adolescent well-being would be verified in specific domains only can be useful information for parents, educators and health workers alike. Research based on the present learning model would, however, first need to make adjustments and improvements on the parenting behaviors and adolescent competence scales which have reported low reliabilities in this study.

Other researchers interested in the relationships between parental goal, parenting behavior and adolescent outcome on long-term issues such as morality and prudentiality, could look into parenting behaviors specific to the domains other than rule-setting and rule-enforcement. Alternative parenting behaviors to choose from include reasoning and negotiation (Gorman, 1995; Hastings & Grusec, 1998), subtle modes of influence such as persuasion, dissuasion, non-invasive monitoring, management (Gorman, 1995), and mutual expectations and compliance (Gorman, 1995; Kochanska & Thompson, 1997). These parenting behaviors have been shown to work well with adolescents in many spheres of parental influence and are more in line with long-term CC goals (Hastings & Grusec, 1998) such as adolescent moral and prudential competence.

Other useful information on parental goals, parenting behaviors and adolescent competence could be obtained by conducting in-depth interviews and qualitative analysis with the Chinese families themselves. Perhaps more open-ended questions would allow parents and adolescents to indicate various forms of parenting behaviors and alternative indicators of adolescent competence that may be relevant to the cultural group. Not only would this information be insightful given the limited amount of literature available on Chinese families,
adolescent competence that may be relevant to the cultural group. Not only would this information be insightful given the limited amount of literature available on Chinese families, it could also be used for the development of measures for future research. Reliable information provides a solid background against which more theorizing from past research and current findings could be made. A foundation built on theory and empirical support is the only base from which good quantitative analyses could be launched (Loevinger, 1957).

In conclusion, cultural relevance seems to hold the key to examining and to understanding the parenting dynamics of immigrant groups. Investigations based solely on Anglo-European models have sometimes been either inaccurate (e.g. Kriger & Kroes, 1972) or inconclusive (Dornbusch et al., 1987; Steinberg et al., 1992) as far as findings on Chinese groups are concerned. On the other hand, studies like the present one that have taken the sociocultural background of the sample into account have advanced the field in more concrete and constructive, albeit small steps. Given the current immigration trends in North America and the extremely scarce amount of literature on parenting in cultural groups, every effort should be made to build on new and potentially useful findings on immigrant families.
References


Appendix A-1

(Var consent for child)

UBC LETTERHEAD

Parental Informed Consent Form

Parenting Techniques in Chinese Immigrant Families

Principal investigators:
Dr. Sheila Marshall, School of Social Work and Family Studies, University of British Columbia.
Telephone number: (604) 822-5672.
Dr. James White, School of Social Work and Family Studies, University of British Columbia.
Telephone number: (604) 822-4683.

Co-investigators:
Sing Mei Chan, School of Social Work and Family Studies, University of British Columbia
Karen Kester, School of Social Work and Family Studies, University of British Columbia
Pansy Leung, School of Social Work and Family Studies, University of British Columbia

Purpose of study:
The purpose of this project is to examine the experiences of families who immigrate to Canada.
In particular, we are interested in the challenges and stresses that families feel they face in child-
rearing. We also desire to know what helps families with children adjust well to living in
Canada. This information will assist outreach services better meet the needs of Chinese
immigrant families. The research project is also for Sing Mei Chan, Karen Kester, Pansy
Leung's, master's theses at the University of British Columbia.

Procedures:
Your child will be asked for some demographic information and to answer a few questions about
his/her perception of immigrating to Canada, his/her activities, and his/her relationships with
friends and family. Participation will require approximately one hour of your child's time. The
survey may be in the language your child selects: English or Chinese. Your child may ask
questions about the study at any time during the interview.

Confidentiality:
Information resulting from this research will be kept strictly confidential. This will be
accomplished by having no names on any interview schedules. All documents will be identified
only by a family code number. All documents will be kept in a locked filing cabinet. All data
records that will be put on computer disk will be secured by saving the data files on a floppy disk
and storing the floppy disk in a locked filing cabinet. The attached consent form will not be
stored with any measures you complete. Further, only Dr. White or Dr. Marshall and their co-
investigators (Pansy Leung, Karen Kester, Sing Mei Chan) will have access to the materials that
you or your child complete as part of the study.

Once the data has been analyzed for publications, the copies of your child's responses will be
destroyed by Drs. White and Marshall by shredding the documents.

Your child's participation in this study is entirely voluntary. Further, your child has the right to terminate the interview any time without giving a reason. There are no penalties for not participating or withdrawing from the study.

If you have any concerns about your rights or treatment as a research participant, you may contact Dr. Richard Spratley, Director of the UBC Office of Research Services at (604) 822-8598.

Consent:

I understand that my child's participation in this study is entirely voluntary and that I may refuse for them to participate in this study.

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

Please indicate below your decision as to whether you would like your child to participate or refrain from participating in this study. Thank you for your help,

Circle your choice(s) of the following:

(a) I consent to my child participating in the study.

(b) I do not consent to my child participating in the study.

________________________  ______________________
parent signature          date
Informed Consent

Parenting Techniques in Immigrant Chinese Families

Principal investigators:
Dr. Sheila Marshall, School of Social Work and Family Studies, University of British Columbia.
Telephone number: (604) 822-5672.
Dr. James White, School of Social Work and Family Studies, University of British Columbia.
Telephone number: (604) 822-4683.

Co-investigators:
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University of British Columbia

Purpose of study:
The purpose of this project is to examine the experiences of families who immigrate to Canada. In particular, we are interested in what helps families with adolescents adjust well to living in Canada. This information will assist outreach services better meet the needs of Chinese immigrant families. The research project is also for Sing Mei Chan, Karen Kester, Pansy Leung's, master's theses at the University of British Columbia.

Procedures:
You will be asked for some demographic information and to answer several questionnaires about your well-being and your views about your relationship with your parents. Participation will require approximately one hour of your time. The survey will be in the language you choose: English or Chinese. You may ask questions about the study at any time while completing the survey.

Confidentiality:
Information resulting from this research will be kept strictly confidential. This will be accomplished by having no names on any interview schedules. All documents will be identified only by a family code number. All documents be kept in a locked filing cabinet. All data records that will be put on computer disk will be secured by saving the data files on a floppy disk and storing the floppy disk in a locked filing cabinet. The attached consent form will not be stored with any measures you complete. Further, only Dr. Marshall, Dr. White and their co-investigators (Karen Kester, Sing Mei Chan, and Pansy Leung) will have access to the materials that you or your child complete as part of the study.

Once the data has been analyzed for publications, the copies of your responses will be destroyed by Dr. Marshall by shredding the documents.

Your participation in this study is entirely voluntary. Further, you have the right to terminate the interview any time without giving a reason. There are no penalties for not participating or withdrawing from the study.
If you have any concerns about your rights or treatment as a research participant you may contact Dr. Richard Spratley, Director of the UBC Office of Research Services at (604) 822-8598.

We would like to thank you and your parents for your help in this study.
DEMOGRAPHICS

SECTION I: The following are general questions about you:

1. Your date of birth: 19____ (year) ____ (month) ____ (day)

2. Your gender/sex (Please circle) Female Male

3. What is your current marital status? (Please check one response that best fits your circumstance)
   - Never married
   - Common law
   - Married, living with partner
   - Married, astronaut family
   - Married, not living with partner
   - Legally separated, widowed, divorced

4. City and country you come from:

5. Date you left your country of origin: 19____ (year) ____ (month)

6. Date of your arrival in Canada: 19____ (year) ____ (month)

7. Five years from now, which country do you see yourself living in?

8. Before you immigrated to Canada,
   a) what was your highest level of education?
   b) if applicable, what was your partner’s highest level of education?

9. After you have immigrated to Canada,
   a) what was your highest level of education?
   b) if applicable, what was your partner’s highest level of education?

10. Before you immigrated to Canada
    a) what was your occupation?
    b) if applicable, what was your partner’s occupation?

11. In Canada
    a) what is your current occupation?
    b) if applicable, what is your partner’s occupation?

12. What is your religious preference?

13. In terms of ethnic group, you consider yourself to be

14. What is your postal code?
DEMOGRAPHICS

SECTION I: The following are general questions about you:

1. Your date of birth: 19____ (year) _____ (month) _____ (day)
2. Your gender/sex (Please circle): Female Male
3. City and country you come from: ________________________________
4. Date you left your country of origin: 19____ (year) _____ (month)
5. Date of your arrival in Canada: 19____ (year) _____ (month)
6. In terms of ethnic group, you consider yourself to be ________________________________
7. Grade you attend in school ________________________________
8. Name of your elementary/high school ________________________________
Parental Goals

Every parent has goals for their child. Please indicate how much you value the following goals for your child by circling the appropriate number.

How important is it for you to help your child learn to...

<table>
<thead>
<tr>
<th>Goal</th>
<th>Not Very Important</th>
<th>Somewhat Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) not hit, harm, or hurt others</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) tell the truth</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) not take money or goods from anyone without permission</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) treat people kindly and fairly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) not answer parents back</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) not break promises</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) not smoke cigarettes</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) not eat junk foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) not drink alcohol</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) not go into a car for cruising around with friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

How important is it for you to help your child know...

<table>
<thead>
<tr>
<th>Goal</th>
<th>Not Very Important</th>
<th>Somewhat Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>k) that he/she is a good child and is precious to you</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>l) the importance of education</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>m) that you express your love by helping him/her succeed, especially in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>n) that he/she can do almost anything by working hard</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o) that good grades lead to better opportunities in education and eventual employment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>p) that your most important interest is taking care of him/her</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1 (a) – (f) moral goals (g) – (j) prudential goals (k) – (p) learning/academic goals
# Parenting Behaviors

How often do you use the following ways to help your child attain their goals? (Circle the appropriate number).

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) I have strict, clear, and well-established rules for my child</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) I use punishment when rules are broken</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) I do not allow my child to question my decisions</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) I demand respect, proper language and conduct from my child</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) I teach my child to keep control of his/her feelings and behaviour</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) I do not allow my child to keep secrets from me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) I forget a rule that I’ve made</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) I do not manage to follow through on a punishment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) I check whether my child has done what I’ve told him/her to do</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) I excuse my child’s bad conduct too easily</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k) I enforce rules even when it takes up a lot of time and energy to do so</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>l) I look the other way when my child does not behave properly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>m) I train my child to work very hard and be disciplined</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>n) I do everything for my child’s education and make many sacrifices</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o) I teach my child by pointing out good behaviour in others</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>p) I let my child learn how adults behave by bringing him/her with me to places and events</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>q) I praise or reward my child for good behaviour and scold or punish him/her for bad behaviour</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>r) Taking care of my child is my priority in life</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

---

2 (a - f) – rule-setting (g - l) – rule-enforcement (m - r) – training/chiao-shun
Moral/Prudential Competence

Children have different ways of behaving in different situations. We are interested in how you see your child’s behaviour. Choose the rating that best describes your child’s behaviour and circle the number below.

How often has your child done the following? (Circle the appropriate number).

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) taken things without payment or permission</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) answered you back in a disrespectful manner</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) harm another person recklessly or intentionally</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) lied to you</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) did not keep his or her word on an agreement he or she made with you</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) do something kind or fair to others</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) used alcohol</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) gone “cruising” (driving around)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) smoked cigarettes</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) went into a car with a driver who had been drinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

\(^{3}\) (a) – (f) moral competence (g) – (j) prudential competence
Academic competence

What is the average grade of your child at school?

A    B    C    D    below D

How well do the following statements describe the impression you have about your child’s ideas and attitudes towards school? (Please circle the appropriate number)

<table>
<thead>
<tr>
<th></th>
<th>Not Well At All</th>
<th>Somewhat</th>
<th>Extremely Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) that success in life has little to do with the things studied in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) that she/he would stay in school even if there is a good job for her/him at this very moment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) she/he spends most of the time at school goofing around with friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) she/he finds school boring</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) she/he is satisfied because s/he is learning a lot</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) she/he tries hard to succeed in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix G

Parental Warmth

Parents have different ways of interacting with their children. We are interested to know the ways you feel your mother thinks and feel about, talks to and does things with and for, you. Indicate how much each statement is like your mother by circling the appropriate number.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all like her</th>
<th>Sometimes like her</th>
<th>Very much like her</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) She enjoys talking things over with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) She enjoys doing things with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) She almost always speaks to me with a warm and friendly voice</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) She is always doing things that will please me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) She tries to understand my problems and worries</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) She gives me a lot of care and attention</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) She enjoys staying at home with me than going out with friends on her own</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) She comforts me when I am upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) She’s proud of me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) She’s happy with the way I am and does not want to change me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>