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**Parent and Child Attitudes towards Educational and Occupational Achievement
as a Function of Acculturation**

**By
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**Thesis submitted in partial fulfillment of the requirements for the
degree of Master of Arts in the Department of Psychology
Lakehead University
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Abstract

As individuals and families move from India to Canada, they bring with them the values, attitudes, and beliefs they held in their native country. During the process of building new lives in a new country the immigrants are immersed in a culture different than their own. As the East Indian immigrant population has grown, so has the number of first-generation, Canadian born children of East Indian parents. The focus of this study was to identify the relationship between acculturation and attitudes held for both male and female children. In other words, this study looked at the relationship between cultural factors (as determined by the level of parental and child acculturation) within the family and attitudes toward occupational and educational achievement for male and female children.

Results of this study found that East Indian parents placed significantly high importance on both academic success and occupational success for their sons and daughters. These expectations were understood and accepted by their children. Finally, the importance with which parents viewed educational and occupational achievements and their expectations for their children were not related to their level of acculturation, their Canadian or Asian cultural values, or their level of endorsed sex-role egalitarianism.

Introduction

Much research has been conducted on the potential impact parents have on the lives of their children. Parental beliefs and values influence the environment they create for themselves, and, consequently, the environment in which they raise their children. As Okagaki and Sternberg (1991) argue, environment and cognitive functioning, including values, beliefs, and attitudes, are entwined. In other words, environment greatly influences cognition, and cognitions influence the environment. Therefore, cognitive functioning should not be considered without paying attention to environmental influences. Environmental contexts can vary from social to cultural to familial. It is the cultural (context) influences on values, beliefs, and attitudes within the individual and the family which were of interest in this study.

In the present societal milieu the definition of a family can vary from the nuclear family (i.e., mother, father, and offspring) to stepfamilies (i.e., with a stepparent, stepchild, and/or stepsibling) to single-parent families, among others. Regardless of the specific format, families generally develop rules which regulate behaviours by allocating roles and functions to individual members (Goldenberg & Goldenberg, 2000). It has been proposed that family functioning has also undergone a transformation as a result of changes in gender roles, the influence of new cultures to North America, and an understanding of the influence of these factors (Avis, 1996).

Some of the prior research in the area of family functioning has focused on an attempt to evaluate parental values and attitudes towards the educational and occupational success of their children. In addition, researchers have attempted to

identify the influence these values and attitudes have on children and on how children interpret their parents' values and attitudes. Frequently, the evaluation has been in terms of gender and culture. The present study will attempt to identify the relationship between these variables (i.e., values, attitudes, gender, and culture) within an East Indian population.

Education and Occupation Studies

For the purpose of this study, parental aspirations for their child's educational and occupational attainments were thought of as "standards or goals for performance that organize and direct parents' behaviour toward their children" (Wentzel, 1998, p.21). These standards or goals are cognitive representations of what the parent would like to see their child achieve.

The study of the effect parental attitudes have on child outcome is of interest to social psychologists concerned with status attainment processes and the intergenerational transmission of values and beliefs within families. Smith (1991) has outlined four steps required in the intergenerational communication of values within a family. These four steps are as follows: (a) the parent either exhibits or relays the value within the family; (b) the child understands the value correctly, as it was intended; (c) the child is interested in or willing to incorporate the value into her own value system; and (d) the child successfully includes the value into her own value system (Smith, 1991). Although the present study focused on the child's perception of the parent's value and perceived agreement or disagreement, it is nevertheless important since this agreement is considered an important factor in successful socialization, as well as the outcome of status attainment.

Many studies have attempted to understand the influence parents have on child achievement. For example, a longitudinal study conducted by Tomlinson-Keasey and Little (1990) focused on 1,069 men and women over a 60-year period as part of the Terman Genetic Studies of Genius. Their goal was to ascertain factors that might predict adult achievement and personal adjustment other than cognitive ability. Other factors included childhood personality traits, parental education, and early home environment variables (i.e., supportive parents).

For the final analyses in the Terman study, a path model was constructed to describe the relationships between childhood predictors and intellectual, educational, and occupational outcomes as adults. Tomlinson-Keasey and Little concluded that parental education was the only predictor of child educational attainment. The researchers interpreted this result as suggesting that parents modeled “appropriate” behaviour, and well-educated parents held high expectations for their children. Parents not as educated did not model similarly “appropriate” behaviour. As for occupational achievement, intellectual skill and educational attainment of the child were the only significant predictors. The researchers also claimed to provide evidence of a sex difference in the occupational achievement-educational attainment path, with stronger relationships witnessed for the males (i.e., the greater the educational attainment of males, the greater the occupational achievement of males). However, this sex difference could be explained as a result of the culture at the time, where it may have been difficult for the females to convert educational skills into occupational success.

Other studies have related educational and occupational success to a plethora of variables such as parental aspirations, sibling relationships, and family functioning. A 10-year longitudinal study by Marjoribanks (1988) found that parental aspirations, and the adolescents' perceptions of their parents' aspirations, had differential associations with education and occupation outcome of young adults of different social status. Results of this study indicated that parental aspirations were significantly related to child outcome in the lower and higher income strata. For example, greater parental aspirations had a positive relationship with child outcomes of increasing educational and occupational attainment. No similar association was found for middle income parents.

Another longitudinal study by Marjoribanks (1989) investigated the relationship between sibling variables and young adults' status attainment based on earlier educational and occupational aspirations. Results of this study indicated that the number of children within the family and birth order were both significantly associated with status attainment.

Penick and Jepsen (1992) found that family functioning as a unit (i.e., family members' perceptions of the whole family) explained twice as much variance in adolescent career development choices than educational achievement or gender. The beliefs of the 11th grade students about their parents' perceptions was a stronger, more frequent predictor of career development than the more traditional predictor variables of gender, socio-economic status, and educational achievement.

As the research cited indicates educational and occupational attainment have been found to be related to both parent variables (i.e., education level, aspirations

as understood by children) and familial variables such as birth order and the number of children within a family. Along with these factors the literature also contains a number of studies focusing on educational and occupational achievement as it relates to gender and/or cultural variables. The literature, as it pertains to gender focused research, tends to fall into one of two groups: an analysis of males and/or females related to educational or occupational achievements, or studying the impact of sex-role stereotyping on these same achievements. Culture related studies, on the other hand, are mainly interested in qualitative ethnic group differences, or the study of single cultures.

Gender Studies Related to Educational and Occupational Variables

While some inconsistent findings in gender research exist, the bulk of the literature indicates that parents frequently hold differential gender specific attitudes and values. As Jacobs (1991; Jacobs & Weisz, 1994) discussed, much of the social psychological research on stereotyping was seen as testifying to the influence parents' gender stereotypes had on their beliefs regarding their children's abilities. In his study of 424 mothers and 390 fathers of children in grades 6-11, Jacobs' (1991) purpose was to determine if parents' gender stereotypes about math ability would interact with the sex of the child. It was questioned if this interaction would influence parental beliefs about the child's math ability, as well as the probability of future math success. While parents' gender stereotypes were found to have no direct effect on children's self-perceptions of mathematical ability, a path analysis revealed that parents' stereotypes did interact with the sex of their child, directly influencing beliefs regarding the child's abilities. Stronger gender stereotypes were related to

higher beliefs for parents of sons relative to parents of daughters. Parents of sons were influenced more by gender stereotypes. The same relationship was witnessed for expectancies of future success (i.e., the stronger gender stereotypes held by parents of sons lead to greater expectancies of future success for sons).

As for the influences parents' attitudes may have on child outcome, Klebanov and Brooks-Gunn (1992) found that, during the middle school years, mothers had strong influences on their daughters' math grades. In other words, mothers' attitudes for daughters' math and cognitive ability were positively associated with math grades. If mothers believed in their daughter's mathematical ability, then daughter's were more likely to have better math grades.

Another study trying to ascertain differential parental perceptions for male and female children asked the parents of 3- and 4-year olds to assess specific child characteristics (i.e., use of leisure time, early indications of intellectual ability, and favorite books) (Johnson & Smith Lewman, 1990). Results indicated that, even at such an early age, parents perceived their children's abilities along gender-stereotypic patterns. For example, parent responses portrayed sons as being more involved in science/nature, and convergent games and building. Daughters, on the other hand, were said to spend more of their leisure time involved in dancing and fine motor/art activities.

Scarr and Weinberg (1994) also found differences between brothers and sisters. Their study took a unique approach by looking at both adoptive and biologically related siblings, and the various determinants of young adults' educational and occupational achievements. It was found that achievements of

biological sons were the most influenced by family backgrounds. Sons' (adopted and biological) achievements were also more predictable from their own earlier achievement than their sisters were. Finally, Scarr and Weinberg found that, regardless of sons' abilities and achievements, parents invested more in their sons' educational futures.

As a final note on occupation related studies, many researchers have found that prestige of any given occupation, as well as the degree of success associated with that occupation is heavily influenced by gender. For example, Bose and Rossi (1983) asked household and college respondents to rate 110 occupations. They found that prestige ratings of occupations were modified by whether it was a male or female filling a particular position. Along the same line, both the male and female high school students in a study by Janman (1989) wrote more fear of success stories for females succeeding than for males succeeding.

If one were to look only at the previously cited literature, it would appear as though parents do seem to hold some gender stereotypes, specifically in regards to mathematics ability of sons and daughters. In addition, there seems to be a relationship between parents' beliefs and the outcomes which children exhibit and the beliefs they hold about their own ability. Finally, the literature indicates a particular belief held by people when considering prestige occupations, as well as occupational success, in gender specific terms. Women may be seen as fearing success more than their male counterparts.

Although these studies generally testify to some degree of difference in attitudes based on child or subject gender, there are studies that find no such

difference. For example, Kracke (1997), in a study of 236 9th grade German middle-track students, found that the degree to which these students explored different occupations and careers was significantly related to parental authoritativeness and openness. However, this relationship was independent of the students' gender. Parental variables were not significantly related to the gender of the child, nor was the students' gender related to the degree or type of career or occupation explored. Similarly, a study by Garland and Smith (1981) of 87 female and 91 male undergraduate students found that while the highest achievement motivation was for sex appropriate occupations, females did not show significantly lower motivation than males toward high prestige masculine occupations. Such findings are not consistent with previous research.

The current academic knowledge of the influence of parental attitudes is limited in the area of educational and occupational success as a function of both gender and culture. While many stereotypical statements can be made, research into the area has shown that while there does tend to be a greater emphasis on following traditional sex-role expectations, there is considerable value placed on scholastic achievement and occupational success. This highly valued education applies to both male and female children (Burns, Homel, & Goodnow, 1984).

Culture Studies Related to Educational and Occupational Variables

Much like studies of educational achievement and occupational success that focus on gender, studies focusing on culture generally pertain to one of two areas. The first of these two concentrations is interested mainly in qualitative ethnic group differences. The second is concerned with analyses of single cultures. While the

majority of these studies suggest that there may be ethnic group differences, some research has begun to indicate this difference may not always exist.

Studies which attempt to ascertain ethnic group differences tend to invariably find those differences, albeit to varying degrees. For example, Wentzel (1998), in her study of African-American and European-American parents, found an indirect relationship between ethnic background and parental aspirations. African-American parents held higher educational attainment aspirations for their children.

A similar study by Okagaki and Frensch (1998) examined the relationship between parental attitudes and expectations (i.e., educational attainment, and grades) and children's school performance, and how this relationship may differ across ethnic groups. Their sample consisted of 75 Asian American, 109 Latino, and 91 European-American families. The data revealed that there were group differences. More specifically, Asian-American parents were said to have set higher educational expectations for their children. Parents from this particular ethnic group, more so than the other groups, wanted their children to have more education. They also set higher minimum standards of acceptable academic achievement in terms of grades and amount of education completed.

An interesting suggestion by Lugin (1997) relating educational achievement and immigrant status proposed that immigrant students suffered academically due to their unfamiliarity with the North American educational system. However, recent studies have provided evidence against this theory, suggesting that family background has more of an influence on academics than immigrant status. Fuligni (1997) had 1,100 Latino, East Asian, Filipino, and European adolescents report on

their own and their parents' academic attitudes and behaviours. To determine actual academic performance, these students' grades were obtained from official school records. His results showed that first- and second-generation students received higher mathematics and English grades than their native born peers. Furthermore, only a small share of this success was attributable to socio-economic background. A more significant correlate of their academic success was the strong emphasis the students, their parents, and their peers placed on education.

For more personal accounts of immigrant occupational success, Lugris (1997) interviewed 15 adult children of immigrants. Of these fifteen children, all of the women and all but one of the men had an interest in their current careers from a very early age. In addition, most of these men and women stated that their parents supported them in the career decisions they made. Lugris suggested this might support the idea that immigrants view the (North) American educational system as offering opportunities for mobility and success. It was also found that negative academic experiences did not discourage immigrant children from achieving success. The belief held by Lugris was that these children's families had imparted the notion that education would allow any obstacles to be overcome.

When the results of these studies are taken together a general trend becomes apparent: There are ethnic group differences. These differences range from parents in one ethnic group having higher educational or academic expectations than parents from another group, to children of immigrants achieving greater academic success than children of non-immigrant parents.

Despite these differences, a few studies have suggested that there may be more similarity between groups than previously believed. For example, a study by Neidert and Farley (1985) found that, by the third generation, ethnic background was no longer an important determinant of socio-economic and occupational achievement. In addition, a study by Wentzel (1998) of 363 parents found that the community in which one lived (as opposed to ethnic background or children's age and sex) was a more consistent predictor of parental beliefs and aspirations for their children's educational attainment.

Regarding the second area of concentration of culture related research, studies are often conducted to ascertain qualitative information about specific ethnic groups or cultures. For example, the Kracke (1997) study mentioned earlier looked only at German middle-track students. Another such study looked at attitudes of Italian-Australian female students towards the stereotyped female gender role (Rosenthal & Grieve, 1990). It was determined that Italian-Australian women who considered themselves to be highly "Italian" held more traditional attitudes toward a range of issues. Those women who identified with the Italian culture to a lesser degree held attitudes closer to the dominant culture. However, these women were also the least satisfied with the prescribed female sex role.

Acculturation

Acculturation has been defined as a dynamic process, occurring when two autonomous cultural groups are in continuous contact with one another, and resulting in a change in one or both cultures. This change can occur on two different levels: at the individual (psychological) level, and at the level of the group (cultural)

(Berry, 1980). At the individual level, acculturation involves the change in cultural values.

According to Rokeach (1973), values are beliefs about preferable modes of conduct or end states. Societal values refer to those beliefs someone may hold about people in general, preferred goals for other people, means for achieving those goals, and various conditions of life. They represent people's beliefs about how the world should be. As already stated, of importance to acculturation are cultural values. Cultural values are ways of behaviour or norms passed from generation to generation within any group of people. This passing of cultural values can be thought of as passing through the same process of intergenerational transmission of values within a family discussed earlier.

Berry, Trimble, and Olmedo (1986) have identified some key elements required for acculturation to occur. First, and foremost, there needs to be contact, or some interaction, between cultures. This contact must be constant and experienced first hand. Second, there must be some resulting change in the cultural or psychological aspect of the people in question. Finally, there must be recognition that there is both a process and a state. In other words, activity occurs during and after contact that is continuously changing (process). The result of this process may be a relatively stable end or change (state). It should be noted that, when acculturation finally does occur, the goal or end result is not necessarily toward modern values or any one alternative.

While cultural values are passed down through generations within a family, of interest is how these cultural values can change through the process of

acculturation. Since not every individual of an acculturating group goes through the acculturation process in the same manner, of particular interest is what happens, psychologically, at the individual level. To this end, a small but growing number of studies have begun to look at the effects of acculturation on psychological well being, as well as the effect of acculturation (or sometimes assimilation) on other psycho-social variables.

One of the most important understandings to come out of this research trend is the acknowledgement of acculturation as a two-dimensional process. In other words, the relationship with the traditional (or familial) culture, as well as the relationship with the new culture, needs to be considered. By this end, people can have either strong or weak identifications with both their own and the majority cultures. A strong identification with both groups is an indication of integration or biculturalism. Assimilation is understood to be the state in which an individual develops and maintains strong identification with the majority (or new) culture while no longer identifying with their original culture. On the other hand, identification with neither group is representative of a marginalized individual.

One particular study which looked at the effects of acculturation on psychological well being found that a bicultural orientation among Chinese Americans predicted the healthiest psychological state (Ying, 1995). Along the same line, Pawliuk, et al. (1996) found that children of parents who had accepted the majority culture scored higher in terms of social competence. However, many of the children who were said to have extreme behavioural problems were children who had completely rejected their parents' ethnic culture. These two studies suggest that

the healthiest or most productive state would be one where the individual had successfully integrated both the new majority culture and the traditional ethnic culture.

Limitations of Previous Research

In the preceding pages, the various studies and research areas involving the relationship between gender and occupational and educational achievement were discussed. There was an additional discussion of the identified ethnic group differences in occupational and educational aspirations and attainment. However, since many ethnic labels are imposed on various groups by external forces, these labels are often meaningless. Identifying ethnic group differences, or proclaiming that different groups have differing gender specific attitudes toward education and occupation can be as meaningless as the ethnic labels.

In a study by Wang (1993), it was not ethnicity but, rather, cultural-familial variables that had an effect on the development of children's metacognitive abilities and academic achievement. Wang proposed that an emphasis on racial differences needed to be reconsidered in terms of cultural-familial factors such as parental emphasis on education, and educational aspirations for the child. Following from this assertion, the purpose of the present study was to identify the relationship between cultural factors (as determined by the level of parental and child acculturation) within the family and attitudes toward occupational and educational achievement.

Only one article could be found which made an attempt to predict the causal influence of culture on a specific cultural group. McWhirter, Hackett, and Bandalos

(1998) developed a structural model to predict the educational and career expectations of 282 Mexican American high school girls. Findings from the analyses provided some support for the primacy of cultural influences over gender in predicting the educational and occupational/career expectations of Mexican American girls.

As Kagitcibas and Berry (1989) outline, many groups are beginning to be viewed as culturally distinct, as opposed to marginalized "minority" groups on the edge of mainstream society. As such, these groups need to be understood in their own right, much like "mainstream" groups are understood. For this reason, the present study focused specifically on an East Indian population.

The Present Study

Within an East Indian family, roles are emerging for women that are quite ambivalent in nature. It is expected that the female child retain characteristics at home that are traditional in East Indian families such as obedience, dependence, and conformity. However, the value of a good education and the potential of wage-earning are also stressed; assets that provide for independence, non-conformity, and experiences with more modern attitudes. These differing roles suggest that contemporary Indian women endure a constant tug-of-war between traditional and modern role expectancies (Parikh & Garg, 1989), and the result can be feelings of guilt and inadequacy.

The experience of women which Parikh and Garg (1989) detailed in their book was based on the lives of women in present day India. It may be questioned whether this experience is relevant in present day Canada. As individuals and

families move from one country to another, they bring with them the values, attitudes, and beliefs they held in their country of origin. During the process of building new lives in a new country the immigrants often experience and interact with a culture different than their own. This experience and interaction has the potential to effect values, beliefs, and attitudes, as well as the potential level of acculturation within an individual.

East Indians first immigrated to Canada in the late 1800s, but the majority of arrivals were in the early to mid 1970s (Parikh & Garg, 1989). As the East Indian immigrant population has grown, so has the number of first-generation, Canadian born children of East Indian parents. First (and subsequent) generation children may experience culturally different environments at home (i.e., with more traditional attitudes) and in other influential environments such as school (i.e., with more attitudes associated with western culture). Or, the two environments can be congruent in their attitudes, whether traditional or modern.

The purpose of this study was to understand the relationship between level of acculturation (i.e., adopting "Canadian" values and/or maintaining "East Indian" values) and the attitudes that East Indian parents held with regards to the educational and occupational achievement of their children. In addition, the relationship between acculturation and sex-role egalitarianism was studied, and its association with parental attitudes. It was hoped that the research findings would illustrate a more substantive relationship between cultural-familial variables and attitudes.

Method

Participants

The participants in this study were East Indian families from an urban centre in Southern Ontario. These families consisted of both a mother and a father, or only one parent, with a minimum of one son and one daughter over the age of 14. Four members of the family (mother, father, one son, and one daughter) each completed a separate questionnaire.

The data collection required approximately 5 months to complete, as participants were often recruited through word of mouth. Potential participants were approached by the researcher and asked if they would be willing to take part in this study. The only restrictions placed on the participants was a minimum age of 14 years for the sons and daughters, based on the age at which individuals can give their own consent. Frequently, the participants would return to the researcher with knowledge of other families who would be willing to participate. These potential participants were then contacted and either agreed to take part, or declined. In total, questionnaire packages were distributed to 200 families. Of these 200 families, 107 packages with signed consent forms were returned, and a total of 55 packages were used in the final analysis. The questionnaire packages not used were either incomplete or left completely blank.

As stated the sample population for this study consisted of 55 East Indian families of four; three if a parent was divorced or widowed. Within the sample, each family consisted of a mother ($n = 55$; $M = 48.46$ years, $SD = 6.8$), a daughter

($n = 55$; $M = 21.80$ years, $SD = 6.11$), a son ($n = 55$; $M = 22.58$ years, $SD = 5.89$), and in 51 of the cases, a father ($M = 52.40$ years, $SD = 8.02$).

Sample Characteristics

In the final analyses four families did not include data for a father. In two of the cases the mother was listed as divorced. In the other two cases the mothers reported that they were widowed. For all remaining families, both parents responded to the questionnaires, and identified themselves as married and living together. In 76% of the cases ($n = 42$), the daughter identified herself as single, never been married, with the remaining daughters ($n = 13$) stating they were married and still with their spouses. For the sons, 43 (78%) were reported as being single, never been married, while the other 12 were married and still with their spouses.

Additional information gathered on the participants included citizenship status, and country in which the participant was born. The General Information questionnaire also asked whether or not the participant "felt Canadian"; a yes or no question they were able to expand on if they wished. Of the mothers involved in the study, the majority were born in India, currently held Canadian citizenship, and stated that they felt Canadian. Similar trends appeared for the father participants. As with the parents, the information gathered on the children indicated the majority were born in either India or Canada. The largest percent of the children were Canadian citizens, and endorsed that they did feel Canadian (see Tables 1-3). Of those that stated they did not feel Canadian, for all but one of these participants the reason provided was that they had either not been born in Canada and/or they did

not hold Canadian citizenship. The one participant who provided a different answer expressed a feeling of not being “welcomed and accepted by Canadian society”.

Table 1

Frequencies for Country of Birth

Country	Mother		Father		Daughter		Son	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
India	51	92.7	45	88.2	23	41.8	25	45.5
Pakistan	1	1.8	1	2.0	0	0	0	0
Canada	0	0	1	2.0	26	47.3	22	40.0
England	0	0	0	0	5	9.1	4	7.3
Africa	2	3.6	0	0	1	1.8	2	3.6
Other	0	0	0	0	0	0	2	3.6
Missing	1	1.8	4	7.8	0	0	0	0

Tests and Materials

General Information, Parent. This questionnaire required parents to provide brief demographic information such as age, marital status, country of origin, number of children, years in this country, income, and level of education. Other questions asked the parent to define their own ethnicity, and what it meant to them to be ‘Canadian’ (see Appendix A).

Table 2

Frequencies for Citizenship Status

	<u>Type of Citizenship</u>					
	Canadian		Landed Immigrant		Citizen of other Country	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Mother	39	70.9	14	25.5	2	3.6
Father	42	82.4	9	17.6	0	0
Daughter	45	81.8	9	16.4	1	1.8
Son	45	81.8	8	14.5	2	3.6

Table 3

Frequency of Feelings Regarding Being Canadian

	Feel Canadian		Do Not Feel Canadian		Missing	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
	Mother	30	54.5	15	27.3	10
Father	38	74.5	9	17.6	4	7.9
Daughter	40	72.7	8	14.5	7	12.7
Son	42	76.4	4	7.3	9	16.4

General Information, Child. This questionnaire was similar to the parent version and was designed to gather brief demographic information from the children. The only additional question was in regard to whether the child lived with his/her parents (see Appendix B).

Personal Values Scale. This is a self-administered questionnaire that assessed values that people held in regards to 12 specific domains: intellectualism, kindness, social skills, loyalty, academic achievement, physical development, status, honesty, religiousness, self-control, creativity, and independence (Scott, 1965). Values were defined as “an individual’s concept of an ideal relationship (or state of affairs)” (Scott, 1965, p. 3) (see Appendix C).

A separate subscale measured each of these 12 distinct domains. A short form of the scale, comprised of shortened versions of the 12 subscales, was administered to both parents and children. Participants were asked to read a value related statement and then indicate if this is something that they “always admire” in other people, something they “always dislike”, or something that “depends on the situation”.

When scoring this scale, a response of “depends on the situation” was deemed to be non-acceptance of the value. Therefore, for positively worded items, responses of “always dislike” or “depends on situation” were scored ‘0’; “always admire” was scored ‘1’. For the three negatively worded items, a score of ‘1’ was given for “always dislike”, while “depends on situation” and “always admire” were scored ‘0’. Subscale scores were obtained by summing across items. Possible values ranged from ‘0’ (total non-acceptance of a value) up to ‘4’ for Kindness,

academic Achievement, and Honesty; up to '5' for Intellectualism, Physical Development, Status, Religiousness, Self-Control, and Independence; up to '6' for Social Skills, Loyalty, and Creativity. Higher scores indicated greater acceptance of a value. For example, a higher score on the academic achievement subscale indicated that the person placed higher value on such items as getting good grades, working hard at academics, and being studious. High scores on the intellectualism subscale were indicative of someone who placed greater value on having a strong intellectual curiosity, active interests in all things scholarly, and an appreciation of the fine arts.

The PVS had been found to have internal consistency reliabilities ranging from .55 (Independence) to .78 (Religiousness) for the short form, and from .80 (Honesty) to .89 (Physical Development) for the long form. Correlations between the short and long forms were reasonably high for each value, ranging from .58 (Loyalty) to .77 (Religiousness) (Scott, 1965).

Participants were asked to complete the PVS twice. For the second presentation, the items remained the same as the original questionnaire described above. However, the instructions provided were altered. The instructions on the PVS-1, included in the parent questionnaire package, asked parents to indicate their response to each statement in terms of how it applied to *their children*. The instructions on the PVS-2, included in the child questionnaire package, asked children to indicate their response to each statement in terms of what the child felt the *parent* believed about the child.

Sex Role Egalitarianism Scale. Parent and child sex-role beliefs were

measured using Sex Role Egalitarianism Scale (King & King, 1993). This scale was designed to measure sex-role egalitarianism defined as " an attitude that causes one to respond to another independently of the other individual's sex. One who possesses this attitude believes that the sex of an individual should not influence the perception of an individual's abilities or the determination of an individual's rights, obligations, and opportunities. Consequently, a sex-role egalitarian does not discriminate against or relate differentially to another on the basis of the other's sex" (King & King, 1993, pp. 18-19). The full form SRES measured attitudes in various domains such as parental roles, employment roles, educational roles, social-interpersonal-heterosexual roles, and marital roles. King and King (1993) indicated that the SRES is a reliable instrument, with an internal consistency of .94, and a three-week interval test-retest reliability of .88.

For the purpose of this study, the SRES short version Form KK was used (see Appendix D). Form KK was made up of 25 items to which respondents indicated whether they strongly agree, agree, neutral or undecided, disagree, or strongly disagree. Each item was scored on a scale of 1 to 5, with 1 being the least egalitarian attitude, and 5 representing the most egalitarian attitude. For each participant, a total SRES score was computed by adding the 25 item response scores. Scores ranged from 25 to 125, with higher scores indicating more egalitarian attitudes, and lower scores being indicative of holding more traditional sex-role attitudes.

Parental Attitudes – Academic, Education, Educational Aspirations, and Occupation (PPA-SA, PPA-SE, PPA-SEA, PPA-SO, PPA-DA, PPA-DE, PPA-DEA,

PPA-DO). These four scales were developed for this study based on similar scales created by Fuligni (1997). The scales by Fuligni were originally created to assess students' perceptions of their parents' value of academic success, parental expectations for academic performance, and parental aspirations for their children's educational attainment (see Appendix E).

The PPA-SA, was based on the Fuligni scale which measures parents' values of academic success. Instructions had been altered so that instead of asking children what they believed their parents think, parents were asked directly whether the item was something they considered "not at all important", to "very important" for their son. Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated parents who put greater value on academic success, where academic success was defined as doing well in school, getting good grades, going to college/university after highschool, getting an "A" on tests, being one of the best students in the class, and going to the best university after highschool. Later in the questionnaire, parents were asked to complete the same scale for their daughter (PPA-DA).

The PPA-SE was based on the Fuligni scale that measured parents' values of academic expectations. Instructions had been altered so that instead of asking children what they believed their parents think, parents were asked directly whether the item was something they "never" felt towards their son, to "always". Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated parents who had greater academic expectations for their son, while lower scores represented less academic expectations. Academic

expectations were tapped by looking at how disappointed parents would be if their child did not get very high grades, did not receive mostly "A's" on report cards, and was not one of the best students in the class. Later in the questionnaire, parents were asked to complete the same scale for their daughter (PPA-DE).

The PPA-SEA was based on the Fuligni scale that measures parents' values in regards to educational attainment. Instructions had been altered so that instead of asking children what they believed their parents think, parents were asked directly how much education they wished their son, to complete. Items ranged from "finish some high school", to "graduate from Law, Medical, or Graduate school", and were scored from 1 to 5. Because this was a single question item, the value attributed to level of education they wished their son to attain served as the scale score. Higher scores indicated parents who wished their son to complete more education. Later in the questionnaire, parents were asked to complete the same scale for their daughter (PPA-DAE).

The PPA-SO was created specifically for this study. Instructions asked parents to indicate the importance of each occupational status item from "not at all important" to "very important". Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated parents who placed greater value on occupational status for their son, while lower scores were representatives of less value placed on occupational status. Occupational status was defined as being in a prestigious occupation such as doctor or lawyer, or working in a prestigious company. An additional question was asked regarding parents' beliefs about life outcome for their son ('What do you feel would be the

ideal or best life outcome for your son?") This question was asked to allow parents to relay any additional information/ beliefs in regards to occupational/educational achievement. Later in the questionnaire, parents were asked to complete the same scale for their daughter (PPA-DO).

Perceived Parental Attitudes – Academic, Education, Educational Aspirations, and Occupation (PPA-CA, PPA-CE, PPA-CEA, PPA-CO). These four scales were developed for this study based on scales created by Fuligni (1997). The scales by Fuligni were originally created to assess students' perceptions of their parents' value of academic success, parental expectations for academic performance, and parental aspirations for their children's educational attainment (see Appendix F).

The PPA-CA, was based on the Fuligni scale which measured perceived parents' values of academic success. Instructions had been altered to allow children who had already completed their education to also answer the questions (i.e., If you have already completed your education, think back to a time when you were still in school). For this scale, children were asked to comment on whether they believed their parents considered the item to be something that was "not at all important", to "very important" for their child. Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated children believing their parents put greater value on academic success.

The PPA-CE was based on the Fuligni scale that measured parents' perceived values of academic expectations. Instructions had been altered to allow children who had already completed their education to also answer the questions.

For this scale, children were asked to comment on what they believed their parents felt in regards to the item, and whether this was felt “never”, to “always”. Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated children who believed their parents had higher academic expectations.

The PPA-CEA was based on the Fuligni scale that measured perceived parents' values in regards to educational attainment. Instructions had been altered to allow children who have already completed their education to also answer this scale. Items range from “finish some high school” to “graduate from Law, Medical, or Graduate school”, and were scored from 1 to 5. Because this was a single question item, the value that was attributed to the level of education that children believed their parents wished them to attain, was the scale score. Higher scores indicated parents who were perceived to want their child to complete more education.

The PPA-CO had been created specifically for this study. Instructions asked children to indicate the importance of each occupational status item to them. Responses ranged from “not at all important to myself” to “very important to myself”. Items were scored from 1 to 5, and total scale scores were established by adding all of the item values. Higher scores indicated children who placed greater value on occupational status for them, while lower scores were representatives of less value placed on occupational status. An additional question was asked regarding their beliefs about their life outcome (“What do you feel would be the ideal or best life outcome for you?”) This question was asked to allow participants to relay any additional information/ beliefs in regards to occupational/educational achievement.

Ghuman Acculturation Scale (GAS). The GAS was originally developed in 1974, and used more recently (1991) with British adolescents. In 1994, Ghuman investigated the acculturation attitudes of Indo-Canadian young people, in an attempt to determine reliability and validity of the scale in a different culture (see Appendix G). Split-half reliability of the scale was quite high: Spearman-Brown Index = .85, and Cronbach's alpha = .75 (Ghuman, 1994).

For the purpose of the scale, acculturation was defined as “the degree to which the migrant communities take up the norms, values, customs and social practices of the host society” (Ghuman, 1994, p. 232). The scale, therefore, was designed to assess the attitudes people held with respect to their home culture (or their parents' culture) and the Canadian culture respectively.

The scale, administered to the children in the format provided by Ghuman, consisted of 30 items. Of these 30 items, half (15) sampled opinions on Asian culture, while the remaining 15 related to Canadian culture. Items were scored from '1' for “strongly disagree”, to '5' for “strongly agree”. Scoring was reversed for negatively worded items. An item that was not answered was scored as a missing item.

Scale scores were obtained by summing across items, and could range from a minimum of 30 to a maximum of 150. In this situation, higher scores represented a more acculturated outlook, while lower scores represented a more traditional attitude. However, this was a simplified method of obtaining scores. More relevant to the present study was a calculation of a score for the 15 items which were indicative of Canadian values (the Canadian cultural value score) and a

separate score for the 15 items which were indicative of more traditional values (the Asian cultural value score). To obtain the Canadian cultural value score, the 15 items indicating acceptance or rejection of a Canadian value were added. This included items with values such as gender equality, dating or building relationships with males and females who were “white” Canadians, showing little or no desire to return to their parents’ country of origin, less rigid social expectations (i.e., being allowed to go out with friends, have friends of different cultures), greater individualism, and greater autonomy. Scores could range from 15 to 75, with higher values representing a higher acceptance of “Canadian” attitudes. To obtain the Traditional or Asian cultural value score, the 15 East Indian items were not reverse scored as required for the original GAS Acculturation score, but added as they had been endorsed on the participant questionnaires. Possible score values could range from 15 to 75 with higher scores being representatives of holding more traditional East Indian attitudes such as strict roles for men and women (i.e., the male is the breadwinner, and women’s place is in the home), not exposing oneself to other foods or social settings, accepting larger authority of parents and elders and not expressing a wish for autonomy, and interacting mainly with people of the same ethnic background.

Ghuman Acculturation Scale, Parent (GAS-P). The GAS-P was based on the GAS administered to children. Scoring and interpretation remained the same. Slight changes were made to five items to make them more relevant to adults (see Appendix H). Item 4 had been changed to “I have no wish to go back to live in the country from where I came”; item 7 had been changed to “Children should always

try to fulfil their parents' wishes"; item 14 had been changed to "We should learn/know how to speak and write our language"; item 16 had been changed to "We should alter our names so that people can say them more easily"; and item 27 had been changed to "Children should be allowed to choose their own clothes".

Procedure

Once a family had agreed to take part in the study, participants (the four members of the family) were provided with their respective questionnaire package. Each package consisted of one questionnaire for the mother which had a green cover letter attached, one questionnaire for the father with a yellow cover letter, one questionnaire for the daughter identified by the purple cover letter, and one questionnaire for the son having a white cover letter. For families with more than one son or daughter over the age of 14, it was suggested that the older child fill out the questionnaire. To add to the assurance of confidentiality of responses within the family, each participant was provided with an envelope in which they were to place, and seal their questionnaire. The individual envelopes were then placed in a larger manila envelope, at which point each family was assigned an identification number.

Before agreeing to participate, the family was presented with a brief verbal description of the study from the researcher, as well as a written description outlining the requirements to participate and the procedure to be followed (see Appendix I). Participants were also told of the voluntary nature of the study, including their right to discontinue participation at any point. Each participant was asked to sign a consent form stating that they understood the nature of the study and his or her involvement (see Appendix J).

Results

The questions posed in the study were organized into four sections. The first set of questions and analyses focused on the relationship between parental overall acculturation, as measured by the Ghuman Acculturation Scale – Parent, and their attitudes as indicated by the general values of intellectualism and academic achievement (subscales of the Personal Values Scale). Bivariate Pearson correlations were run on the mothers' total acculturation and cultural values score by the personal value of academic achievement, and by the personal value of intellectualism. The same set of analyses were then conducted for the fathers' data.

T-tests of mothers' value score (i.e., academic achievement and intellectualism) and fathers' value score, and t-tests of mothers' culture scores (i.e., total acculturation score, Canadian cultural value score, and Asian cultural value score) and fathers' culture scores were used to determine any differences between mothers' and fathers' indicated level of acculturation and personal values.

The second set of analyses were completed to assess the relationship between levels of parent acculturation and their attitudes with respect to occupation and education as they pertain to their own children. Initially, the relationships were described by separate Bivariate Pearson correlations between the mothers' culture scores and the values they held for their children (i.e., academic achievement and intellectualism). To determine if parents' expectations for academic and occupational success were different for sons than for daughters, paired sample t-tests were calculated for the parent expectation variable scores, as assessed by the PPA scales (i.e., PPA-SA "importance of academic success for son" and PPA-DA

"importance of academic success for daughter"; PPA-SO "importance of occupational success for son" and PPA-DO "importance of occupational success for daughter"; PPA-SE "academic expectations for son" and PPA-DE "academic expectations for daughter"; PPA-SEA "education you want(ed) your son to complete" and PPA-DEA "education you want(ed) your daughter to complete"). Identical analyses were completed for the fathers in the sample.

To determine the relationship between parent acculturation, parent sex-role egalitarianism, and parental attitudes, a series of multiple regressions constituted the third set of analyses. For both the mothers and fathers separate standard multiple regressions were executed on the culture scores, parental attitudes for their own children as measured by the PPA scales, and their scores on the Sex-Role Egalitarianism Scale. Of interest was also the relationship between mothers' scores and fathers' scores on these same scales. As such, paired sample t-tests were used on the culture scores of the mothers and the culture scores of the fathers, and on the sex-role egalitarian scores of the mothers and the sex-role egalitarian scores of the fathers.

The final set of analyses looked at the relationship between the parents' attitudes and the children's attitudes, the children's acculturation, and the children's desire or actual attainment of educational and occupational success. Also of interest was the relationship between the parents' acculturation and the children's attitudes, the children's acculturation, and the children's desire or actual attainment of educational and occupational success. Bivariate Pearson correlations and paired sample t-tests were calculated to determine these relationships. Finally, parents

were analyzed for differences in their academic and occupational values based on the age of their child. An alpha level of .05 was used for all statistical tests to be significant. Cronbach's alpha reliabilities for all measures used in the study are available in Appendix K.

Analysis 1: Relationship of Parent Acculturation to General Attitudes

To determine if a relationship existed between parent acculturation and their general attitudes, a series of Bivariate Pearson correlations were conducted on both the mothers' data and fathers' data, respectively.

For the mothers in the sample, a Bivariate Pearson correlation was first run on their total acculturation score and the general value of academic achievement, and total acculturation score and the general value of intellectualism. This was followed by a correlation of the Canadian cultural values score and the general value of academic achievement, the Canadian cultural values score and the general value of intellectualism, the Asian cultural values score and the general value of academic achievement, and the Asian cultural values score and the general value of intellectualism. For the most part, no significant relationships were found. However, it was established that the mothers' Canadian cultural value score was significantly and negatively correlated with the general value of intellectualism, $r(53) = -.27, p = .05$. (See Table 4 for summary of correlations).

The same analyses as conducted on the mothers' data was repeated for the fathers' data set. Bivariate Pearson correlations were completed on total acculturation score and the general value of academic achievement, total acculturation score and the general value of intellectualism, Canadian cultural

Table 4

Correlation of Mothers' Acculturation to General Values Academic Achievement and Intellectualism

Acculturation	Academic Achievement	Intellectualism
Total acculturation	-.06	-.14
Canadian cultural values	-.21	-.27*
Asian cultural values	-.09	-.02

* $p = .05$

values score and the general value of academic achievement, Canadian cultural values score and the general value of intellectualism, Asian cultural values score and the general value of academic achievement, and Asian cultural values score and the general value of intellectualism. No significant relationships were found for any of these correlations. Table 5 presents a summary of these data.

Of interest were any differences which may have been present between the mothers' scores (both acculturation and values) and the fathers' scores (both acculturation and values). As such, paired sample t-tests were completed for mothers' culture scores and fathers' culture scores, and mothers' value scores and fathers' value scores. However, there were no significant differences between mothers and fathers in their level of acculturation or in the general attitudes they held. Table 6 and Table 7 presents a summary of these data respectively.

Table 5

Correlation of Fathers' Acculturation to General Values Academic Achievement and Intellectualism

Acculturation	Academic Achievement	Intellectualism
Total acculturation	-.21	-.11
Canadian cultural values	-.19	-.08
Asian cultural values	.08	.13

Table 6

Paired Sample T-Tests for Mothers' Cultural Values Scores and Fathers' Cultural Values Scores

Cultural Values Scores	<u>M</u>	<u>SD</u>	t	df	p
1. Mothers' total acculturation score	93.92	12.61			
Fathers' total acculturation score	93.80	13.41	0.07	48	.94
2. Mothers' Canadian score	46.98	6.98			
Fathers' Canadian score	46.37	6.98	-0.55	48	.58
3. Mothers' Asian score	43.27	8.48			
Fathers' Asian score	42.35	9.13	0.83	50	.41

Table 7

Paired Sample T-Tests for Mothers' General Values and Fathers' General Values

General Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Mothers' academic achievement score	3.04	1.22			
Fathers' academic achievement score	3.04	1.07	0.00	47	1.00
2. Mothers' intellectualism score	2.96	1.61			
Fathers' intellectualism score	2.90	1.67	0.27	47	.27

Analysis 2: Relationship of parent acculturation to attitudes for children

As the relationship of parent acculturation to general attitudes had been determined, of further interest was what, if any, relationship existed between parent acculturation and their attitudes concerning their children. To this end, a series of Bivariate Pearson correlations were conducted on both the mothers' data and fathers' data, respectively.

Similar to the previous analyses, the mothers' data and fathers' data were examined independently. The first set of bivariate correlations focused on the mothers' total acculturation score and the value of academic achievement held for their children, and total acculturation score and the value of intellectualism held for their children. The second set of correlations were concentrated on the mothers' Canadian cultural values score and the value of academic achievement held for their children, Canadian cultural values score and the value of intellectualism held for their children, Asian cultural values score and the value of academic

achievement held for their children, and Asian cultural values score and the value of intellectualism held for their children. None of these relationships were found to be significant. There was no relationship found between mothers' cultural values and their values for their children. (See Table 8 for summary of correlations).

Table 8

Correlation of Mothers' Acculturation to Values Academic Achievement and Intellectualism as held for their Children

Acculturation	Academic Achievement	Intellectualism
Total acculturation	.11	.07
Canadian cultural values	-.10	-.18
Asian cultural values	-.26	-.26

The same set of correlations was conducted for the fathers' data. Bivariate correlations were executed on the fathers' total acculturation score and the value of academic achievement held for their children, and total acculturation score and the value of intellectualism held for their children. Bivariate correlations were also executed for fathers' Canadian cultural values score and the value of academic achievement held for their children, Canadian cultural values score and the value of intellectualism held for their children, Asian cultural values score and the value of academic achievement held for their children, and Asian cultural values score and the value of intellectualism held for their children. As with the mothers' data, none of

the relationships were found to be significant. Table 9 presents the summary of these correlations.

Table 9

Correlation of Fathers' Acculturation to Values Academic Achievement and Intellectualism as held for their Children

Acculturation	Academic Achievement	Intellectualism
Total acculturation	.01	.05
Canadian cultural values	-.02	.11
Asian cultural values	-.08	-.02

In addition to general attitudes held for both children, data was collected for both mothers and fathers with respect to the expectations they held regarding occupational and academic success specific to sons and daughters. To determine if the expectations held for sons were different than those held for daughters, paired sample t-tests were performed. A summary of the analysis is provided in Table 10 . It was found that mothers' held similar expectations for both sons and daughters with the exception of the "academic expectations" values. Mothers held significantly greater academic expectations for daughters than for sons, anticipating higher grades, being the best student in the class, and maintaining 'A' averages.

Table 10

Paired Sample T-Tests for Mothers' Expectation Values For Sons and Daughters

Expectation Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Academic success for son	26.25	4.58			
Academic success for daughter	26.03	5.27	-0.62	54	.54
2. Occupational success for son	24.28	5.21			
Occupational success for daughter	24.70	5.21	0.82	52	.42
3. Academic expectations for son	13.20	4.60			
Academic expectations for daughter	13.89	4.27	2.66	54	.01
4. Education want son to complete	4.50	0.87			
Education want daughter to complete	4.38	0.90	-1.69	52	.11

Paired sample t-tests of the fathers' expectations on the same variable pairs revealed no significant differences. Fathers' held the same expectations for both sons and daughters for all of the expectation values. See Table 11 for a summary of the data.

For the most part both mothers and fathers, respectively, held the same expectations for their sons and daughters. The one exception stated earlier being mothers holding greater academic expectations, expecting better grades and higher class standings, for daughters than for sons.

Table 11

Paired Sample T-Tests for Fathers' Expectation Values For Sons and Daughters

Expectation Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Academic success for son	25.75	5.29			
Academic success for daughter	25.45	5.38	-0.53	50	.60
2. Occupational success for son	23.97	5.11			
Occupational success for daughter	24.04	5.30	0.16	47	.87
3. Academic expectations for son	13.41	4.59			
Academic expectations for daughter	13.69	4.44	0.77	50	.45
4. Education want son to complete	4.36	0.83			
Education want daughter to complete	4.38	0.73	1.07	49	.29

One final, and important, consideration for the parents' educational and occupational values and acculturation was that of the child's age. It was important to determine if there were differences in values held based on the age of the child. For example, did mothers of daughters of high school age place higher values on academic success and achievement than mothers of daughters already in the workforce? When comparing mothers of daughters aged 14-18, mothers of daughters aged 19-24, and mothers of daughters aged 25 and older, one-way analysis of variance were used to determine any differences in values between the three groups. These analyses were important in order to compare the values of mothers whose children were currently in high school, those who were post high

school but still in college/university, and those who had already completed most of their education (i.e., retrospective attitudes versus prospective attitudes).

Analyses indicated that the three groups of mothers did not differ for daughters on the values: academic success, $F(2,52) = 0.73$, $p = 0.49$, education want(ed) daughter to complete, $F(2, 52) = 0.78$, $p = 0.46$, academic expectations, $F(2, 52) = 3.01$, $p = 0.07$, and occupational success, $F(2, 50) = 0.71$, $p = 0.49$. The same held true for the three groups of mothers and their values for their sons: academic success, $F(2,52) = 1.10$, $p = 0.34$, education want(ed) son to complete, $F(2, 50) = 1.47$, $p = 0.24$, academic expectations, $F(2, 52) = 1.61$, $p = 0.21$, and occupational success, $F(2, 50) = 0.62$, $p = 0.54$.

One-way analysis of variance conducted for fathers also indicated no differences between the three age groups for daughters and for sons. ANOVA values for daughters were as follows: academic success, $F(2,48) = 1.95$, $p = 0.15$, education want(ed) daughter to complete, $F(2, 47) = 1.08$, $p = 0.35$, academic expectations, $F(2, 48) = 1.63$, $p = 0.21$, and occupational success, $F(2, 45) = 0.34$, $p = 0.71$. The values for their sons were: academic success, $F(2,48) = 1.34$, $p = 0.26$, education want(ed) son to complete, $F(2, 48) = 1.43$, $p = 0.25$, academic expectations, $F(2, 48) = 0.95$, $p = 0.39$, and occupational success, $F(2, 48) = 1.65$, $p = 0.20$. Although no significant differences were found between the subjects in this sample, it was determined that for the F values reported to be significant, with 2 degrees of freedom and at the .05 level, a total n greater than 120 mothers (or fathers) would have been required.

As with academic and occupational values, no significant differences were found for mothers in the three groups based on their daughters age for their total acculturation score, $F(2, 52) = 0.55, p = 0.58$, Asian cultural values, $F(2, 52) = 0.47, p = 0.62$, and Canadian cultural values, $F(2, 52) = 0.33, p = 0.72$. For mothers in the three groups based on sons' ages, there were also no significant differences on total acculturation, $F(2, 52) = 2.46, p = 0.10$, Asian cultural values, $F(2, 52) = 2.32, p = 0.09$, and Canadian cultural values, $F(2, 52) = 1.19, p = 0.31$. Fathers of daughters in the three age groups did not significantly differ on total acculturation, $F(2, 48) = 1.00, p = 0.37$, Asian cultural values, $F(2, 48) = 0.80, p = 0.45$, and Canadian cultural values, $F(2, 48) = 1.18, p = 0.32$. Nor were there differences between fathers based on their sons age groups on total acculturation, $F(2, 46) = 1.22, p = 0.31$, Asian cultural values, $F(2, 46) = 0.75, p = 0.48$, and Canadian cultural values, $F(2, 46) = 0.62, p = 0.54$

Analysis 3: Relationship between Acculturation, Sex-role Egalitarianism, and Attitudes of Mothers and Fathers

Because the study also focused on what, if any, differences existed between parent attitudes and expectations for sons and daughters, an additional variable examined was sex-role egalitarianism. A paired sample t-test determined that there was a significant difference between mothers ($M = 93.35, SD = 15.08$) and fathers ($M = 88.49, SD = 14.34$), $t(49) = -2.38, p < .05$. The mothers in the sample endorsed significantly more egalitarian attitudes than the fathers. As stated previously, no differences for mothers and fathers were found on the three acculturation and cultural values scores or for the general values of academic

achievement and intellectualism. Additional paired sample t-tests for the expectation variables indicated no differences between mothers' and fathers' endorsed attitudes in academic and occupational areas. See Table 12 for complete data and analysis.

Table 12

Paired Sample T-Tests for Mothers' and Fathers' Expectation Values For Sons and Daughters

Expectation Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Academic success for son					
Mother	26.53	4.23			
Father	25.74	5.29	-1.05	50	.30
2. Academic success for daughter					
Mother	26.43	4.46			
Father	25.45	5.37	-1.69	50	.11
3. Occupational success for son					
Mother	24.54	5.09			
Father	23.82	5.21	-1.07	49	.29
4. Occupational success for daughter					
Mother	24.56	5.25			
Father	23.98	5.33	-0.84	45	.41

Table 12 (cont'd)

Expectation Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
5. Academic expectations for son					
Mother	13.23	4.36			
Father	13.41	4.59	0.30	50	.76
6. Academic expectations for daughter					
Mother	13.90	4.05			
Father	13.68	4.44	-0.37	50	.72
7. Education want son to complete					
Mother	4.50	0.88			
Father	4.36	0.83	-1.31	49	.20
8. Education want daughter to complete					
Mother	4.38	0.92			
Father	4.44	0.73	0.57	49	.57

However, to ascertain if there was any association between sex-role egalitarianism, acculturation, and attitudes, both bivariate correlations and multiple regressions provided detailed information. For example, the bivariate correlations indicated that mothers' sex-role egalitarianism scores were positively and significantly associated with mothers' total acculturation score, "importance of academic success for daughters", "education you want(ed) daughter to complete", "importance of occupational success for daughter", "importance of academic

success for son", "education you want(ed) son to complete", and "importance of occupational success for son". For complete analysis, see Table 13 and Table 14.

Following the bivariate correlations, multiple regressions were conducted to ascertain how sex-role egalitarianism and acculturation together effectively predict the expectation attitudes. However, because the two predictor variables (sex-role egalitarianism and acculturation) were positively and significantly correlated, results of the multiple regression were interpreted with caution.

A series of standard multiple regressions were conducted with mothers' total acculturation score and sex-role egalitarian score as the independent variables and the four expectation attitudes as the respective dependant variables. The first standard multiple regression examined if sex-role egalitarianism and acculturation predicted "the importance of academic success for daughters" . R for regression was significantly different from zero, $F(2, 51) = 4.46, p < .05$. Only the sex-role egalitarianism score contributed significantly to prediction of the importance of academic success for daughters, $B = .13, SE B = .05$, and $\beta = .37$, and $R^2 = .15$. Therefore, 15% (12% adjusted) of the variability in "the importance of academic success for daughters" was predicted by knowing the values of the two independent variables. Table 15 displays the unstandardized regression coefficient (B), the standardized regression coefficient (β), and R , R^2 and adjusted R^2 for all regressions on mothers' data with respect to their daughters.

A multiple regression with the same independent variables used to predict the "education mothers' want(ed) their daughters to complete" found that 24% (21%

Table 13

Bivariate Correlations for Mothers' Sex-Role Egalitarianism (SRES), Acculturation, and Expectation Attitudes

	1	2	3	4	5	6	7	8	9	10
1. Total acculturation score	--	.44**	.23*	.19	-.01	-.01	.02	.01	.04	.26*
2. Sex-role egalitarianism score		--	.42**	.39**	.27*	.42**	.08	.13	.34**	.49**
3. Academic success for son			--	.87**	.60**	.70**	.44**	.46**	.46**	.64**
4. Academic success for daughter				--	.78**	.76**	.55**	.60**	.54**	.70**
5. Occupational success for son					--	.75**	.46**	.44**	.57**	.57**
6. Occupational success for daughter						--	.48**	.52**	.48**	.62**
7. Higher education for son							--	.91**	.37**	.36**
8. Higher education for daughter								--	.48**	.41**
9. Education want(ed) son to complete									--	.78**
10. Education want(ed) daughter to complete										--

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

Table 14

Bivariate Correlations for Fathers' Sex-Role Egalitarianism (SRES), Acculturation, and Expectation Attitudes

	1	2	3	4	5	6	7	8	9	10
1. Total acculturation score	--	.36**	-.23	-.19	-.11	-.01	-.10	-.06	.25*	-.04
2. Sex-role egalitarianism score		--	.12	-.17	.16	.18	.01	-.06	.18	.07
3. Academic success for son			--	.72**	.53**	.54**	.68**	.46**	.46**	.51**
4. Academic success for daughter				--	.75**	.82**	.59**	.63**	.53**	.50**
5. Occupational success for son					--	.87**	.58**	.64**	.43**	.35*
6. Occupational success for daughter						--	.55**	.61**	.33*	.30*
7. Higher education for son							--	.84**	.41**	.26
8. Higher education for daughter								--	.45**	.26
9. Education want(ed) son to complete									--	.69**
10. Education want(ed) daughter to complete										--

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

Table 15

Standard Multiple Regression of Sex-Role Egalitarianism and Acculturation on Mothers' Expectation Variables for Daughters

Variables	<u>B</u>	<u>β</u>	<u>R^a</u>	<u>R²</u>	<u>Adjusted R²</u>
1. Importance of academic success for daughters (DV)					
Sex-role egalitarianism	.13*	.05			
Total acculturation score	.01	.03			
			.39	.15	.12
2. Amount of education want(ed) daughter to receive (DV)					
Sex-role egalitarianism	.03**	.46			
Total acculturation score	.04	.06			
			.49	.24	.21
3. Importance of occupational success for daughters (DV)					
Sex-role egalitarianism	.17**	.51			
Total acculturation score	-.08	-.21			
			.47	.22	.19
4. Academic expectations for daughter (DV)					
Sex-role egalitarianism	.04	.16			
Total acculturation score	-.02	-.07			
			.15	.02	-.02
a. Predictors: (Constant), Acculturation Score, Sex-Role Egalitarianism Score					
*p < .05, **p < .01					

adjusted) of the variability in the expectation variable was predicted by the combination of sex-role egalitarianism and acculturation, $F(2, 51) = 8.07, p = .001$. Again, only sex-role egalitarianism contributed significantly to prediction, $B = .03$, $SE B = .01$, and $\beta = .46$.

For the dependant variable "importance of occupational success for daughter", the combination of sex-role egalitarianism and acculturation predicted 22% (19% adjusted) of the variability, $F(2, 49) = 6.80, p < .01$. As with the previous two regressions, only sex-role egalitarianism contributed significantly to prediction, $B = .17$, $SE B = .05$, and $\beta = .51$. For "academic expectations for daughters", sex-role egalitarianism combined with acculturation did not significantly predict variability within the dependant variable, $F(2,51) = 0.56$.

Further standard multiple regressions were conducted on the mothers' data with respect to the expectations held for the son. Results of the regression for the variable "importance of academic success for the son", with acculturation and sex-role egalitarianism as the independent variables, showed that only sex-role egalitarianism contributed significantly to prediction of the variability of mothers' expectations, $B = .12$, $SE B = .04$, and $\beta = .40$. The combination of both variables predicted 18% (15% adjusted) of the variability in "importance of academic success for the son", $F(2,51) = 5.57, p < .01$. Table 16 displays the unstandardized regression coefficient (B), the standardized regression coefficient (β), and R , R^2 and adjusted R^2 for all regressions on mothers' data with respect to their sons.

Table 16

Standard Multiple Regression of Sex-Role Egalitarianism and Acculturation on Mothers' Expectation Variables for Sons

Variables	<u>B</u>	<u>β</u>	<u>R^a</u>	<u>R²</u>	Adjusted <u>R²</u>
1. Importance of academic achievement for sons (DV)					
Sex-role egalitarianism	.12**	.40			
Total acculturation score	.02	.06			
			.42	.18	.15
2. Amount of education want(ed) son to receive (DV)					
Sex-role egalitarianism	.02*	.37			
Total acculturation score	-.05	-.08			
			.35	.12	.09
3. Importance of occupational success for sons (DV)					
Sex-role egalitarianism	.11*	.33			
Total acculturation score	-.05	-.14			
			.29	.09	.05
4. Academic expectations for sons (DV)					
Sex-role egalitarianism	.02	.08			
Total acculturation score	-.06	-.02			
			.08	.01	-.03
a. Predictors: (Constant), Acculturation Score, Sex-Role Egalitarianism Score					
*p < .05, **p < .01					

For the dependant variable "education you want(ed) son to complete", the regression analysis was significant, $F(2, 49) = 3.39, p < .05$. The combination of the two independent variables predicted 12% (9% adjusted) of the variability in the dependant variable, and sex-role egalitarianism significantly contributing to prediction, $B = .02, SE B = .01, \text{ and } \beta = .37$. The regression analyses for both "academic expectations for son", $F(2,51) = 0.16$, and "importance of occupational success for son", $F(2,50) = 2.37$, did not reveal significant results with sex-role egalitarianism and acculturation as the independent variables.

To determine the relationships between fathers' sex-role egalitarianism and acculturation, and expectation variables for sons and daughters, standard multiple regressions formatted the same as regressions for mothers' data were conducted. However, unlike the mothers' analyses, none of the regressions proved significant. For complete results please see Table 17.

The previous analyses determined that the mothers held significantly more egalitarian attitudes than the fathers in the sample. Additionally, while there were no significant relationships for fathers' sex-role egalitarianism, cultural values, and their expectations for their children, the mothers within the sample did have significant relationships. Mothers' egalitarianism was positively related to many of their expectations and desires with respect to their children's academic and occupational achievements.

Table 17

Standard Multiple Regression of Sex-Role Egalitarianism and Acculturation on Fathers' Expectation Variables for Daughters and Sons

Variables	<u>B</u>	<u>β</u>	<u>F</u>	<u>df</u>	<u>R^a</u>	<u>R²</u>	Adjusted <u>R²</u>
1. Importance of academic success for daughters (DV)							
Sex-role egalitarianism	.10	.27					
Total acculturation score	-.12	-.29					
			2.56	2, 45	.32	.10	.06
2. Amount of education want(ed) daughter to receive (DV)							
Sex-role egalitarianism	.004	.10					
Total acculturation score	-.004	-.08					
			.23	2, 44	.10	.01	-.04
3. Importance of occupational success for daughters (DV)							
Sex-role egalitarianism	.09	.25					
Total acculturation score	-.08	-.20					
			1.41	2, 42	.25	.06	.02
4. Academic expectations for daughters (DV)							
Sex-role egalitarianism	-.01	-.04					
Total acculturation score	-.01	-.04					
			.11	2, 45	.07	.01	-.04

Table 17 (cont'd)

Variables	<u>B</u>	<u>β</u>	<u>F</u>	<u>df</u>	<u>R^a</u>	<u>R²</u>	Adjusted <u>R²</u>
5. Importance of academic achievement for sons (DV)							
Sex-role egalitarianism	.08	.23					
Total acculturation score	-.12	-.32					
			2.53	2, 45	.32	.10	.06
6. Amount of education want(ed) son to receive (DV)							
Sex-role egalitarianism	.01	.10					
Total acculturation score	.01	.21					
			1.75	2, 45	.27	.07	.03
7. Importance of occupational success for sons (DV)							
Sex-role egalitarianism	.08	.23					
Total acculturation score	-.07	-.19					
			1.36	2, 45	.24	.06	.02
8. Academic expectations for sons (DV)							
Sex-role egalitarianism	.02	.05					
Total acculturation score	-.04	-.12					
			.29	2, 45	.11	.01	-.03

a. Predictors: (Constant), Acculturation Score, Sex-Role Egalitarianism Score

Analysis 4: Relationship of Parent Acculturation and Attitudes to Child Acculturation and Attitudes

As the final set of analyses, importance was placed on what, if any, significant relationships existed between parent acculturation and attitude scores and the acculturation and attitudes endorsed by their children. When looking at the relationship between parent acculturation levels and children acculturation levels, paired sample t-tests determined that children frequently had significantly different cultural value scores than their parents. For complete data analysis see Table 18.

Table 18

Paired Sample T-Tests for Parents' Total Acculturation Scores and Children's Total Acculturation Scores

Acculturation Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Fathers' scores	93.80	13.41			
Daughters' scores	100.35	8.02	3.28	48	.002
2. Mothers' scores	92.42	14.11			
Daughters' scores	99.84	8.41	3.67	54	.001
3. Fathers' scores	93.80	13.41			
Sons' scores	100.08	9.16	-2.86	48	.006
4. Mothers' scores	92.46	14.23			
Sons' scores	98.98	9.48	-3.39	53	.001

By looking at the means it was clear that both sons and daughters respectively held significantly more acculturated views than their mothers and fathers. For the most part, both sons and daughters held significantly more Canadian views than their parents, and held significantly less Asian views than their parents. The exceptions to this were the mothers' Asian cultural values score and sons' Asian cultural values score which were not significantly different, and fathers' Asian cultural values score and sons' Asian cultural values score which were not significantly different. See Table 19 for complete values.

Table 19

Paired Sample T-Tests for Parents' Canadian and Asian Cultural Values Scores and Children's Canadian and Asian Cultural Values Scores

Cultural Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
1. Mothers' Canadian score	46.56	7.74			
Daughters' Canadian score	48.85	5.27	1.85	54	.069
2. Mothers' Asian score	44.15	9.05			
Daughters' Asian score	38.91	6.21	-4.33	54	.001
3. Fathers' Canadian score	46.37	6.98			
Daughters' Canadian score	48.96	5.16	2.35	48	.023
4. Fathers' Asian score	42.35	9.13			
Daughters' Asian score	38.65	6.20	-2.73	50	.009
5. Mothers' Canadian score	46.32	7.59			
Sons' Canadian score	50.98	6.53	-4.22	53	.001

Table 19 (cont'd)

Cultural Values Scores	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
6. Mothers' Asian score	44.15	9.05			
Sons' Asian score	42.13	9.11	1.39	54	.189
7. Fathers' Canadian score	46.37	6.98			
Sons' Canadian score	51.78	6.20	-4.47	48	.001
8. Fathers' Asian score	42.35	9.13			
Sons' Asian score	41.92	9.29	0.24	50	.810

To determine if parent acculturation scores were related to children's values, bivariate correlations were used to illustrate associations. Neither the mothers' Canadian cultural values scores, nor the mothers' Asian cultural values scores was significantly correlated to any of the children's perceived parent attitude scores (i.e., parents' perceived value of academic success, parents' perceived academic expectations, and parents' perceived value of educational achievement). The fathers' Canadian cultural values scores and Asian cultural values scores were also not significantly correlated to the same variables. See Table 20 for all the correlations.

A final set of bivariate correlations were conducted on the parent cultural scores to determine if they had a significant relationship with the amount of occupational success the children expressed they wished (or had) attained. However, the correlations did not indicate any such associations.

Table 20

Bivariate Correlations of Parent Cultural Values scores and Children's Perceived Parent Values

Children's Perceived Scores	<u>Parent Cultural Values Scores</u>			
	Mothers' Canadian	Mothers' Asian	Fathers' Canadian	Fathers' Asian
Academic success				
Daughter	-.11	.01	-.17	.15
Son	-.27	-.14	-.03	-.09
Education aspirations				
Daughter	.05	.05	-.10	.15
Son	-.20	-.03	.18	-.15
Educational attainment				
Daughter	-.14	-.19	-.05	.17
Son	-.22	-.20	.07	-.02
Occupational success wished to be obtained				
Daughter	-.08	.11	.02	.19
Son	-.14	-.22	.04	-.14

As with parental cultural views, the relationship between their respective values and children's values was also of interest. A large number of bivariate correlations illustrated what these relationships were. See Table 21 and Table 22 for complete analysis. The bivariate analyses indicated that the expectations that

Table 21

Bivariate Correlations of Mothers' Expectation Values and Children's Perceived Parent Expectation Values

Children's Perceived Values	Mothers' Expectation Values							
	1	2	3	4	5	6	7	8
1. Academic success – daughter	.34*							
2. Academic success – son		.55**						
3. Educational aspirations – daughter			.50**					
4. Educational aspirations – son				.50**				
5. Educational attainment – daughter					.23			
6. Educational attainment – son						.42**		
7. Occupational success – daughter							.24	
8. Occupational success – son								.56**

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

Table 22

Bivariate Correlations of Fathers' Expectation Values and Children's Perceived Parent Expectation Values

Children's Perceived Values	Fathers' Expectation Values							
	1	2	3	4	5	6	7	8
1. Academic success – daughter	.27							
2. Academic success – son		.35*						
3. Educational aspirations – daughter			.45**					
4. Educational aspirations – son				.47**				
5. Educational attainment – daughter					.43**			
6. Educational attainment – son						.57**		
7. Occupational success – daughter							.12	
8. Occupational success – son								.37**

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

parents' held for their children were usually positively and significantly correlated with what children perceived their parents' expectations to be or what they hoped to attain (or had attained) for themselves. As indicated in Table 21 and Table 22, the only correlations which were not significant were for daughters and mothers or daughters and fathers.

While the correlations indicated linear relationships between the parent and child variables, of further interest was differences in the mean scores of the parent expectations and what the children perceived their parents expectations to be. The pairs used in the t-tests were the same ones as indicated in the above correlations. The complete data analysis is available in Table 23.

The majority of the variable pairs show no significant differences in endorsed expectations and perceived expectations. However, there was one pair of parent expectations and children's perceptions which was significantly different. That pair was fathers' expectations of academic success for their daughters ($M = 25.45$, $SD = 5.38$) and what the daughters' perceived their fathers' expectations to be ($M = 27.33$, $SD = 4.00$), $t(51) = 0.02$, $p < .05$. Daughters' perceived their fathers' expectations to be significantly higher than that indicated by the fathers' themselves (see Table 23).

When looked at as a whole, there were no significant linear relationships between parents' level of acculturation (both Canadian and Asian) and children's acculturation. However, a general trend was witnessed where children, with some exceptions, held significantly more Canadian views compared to their parents, and significantly less Asian views when compared to their parents. Conversely,

significant linear relationships were observed between parents' expectations of their children in the academic and occupational realm, and what their children perceived these expectations to be.

Table 23

Paired Sample T-Tests for Parents' Expectations and Children's Perceived Expectations

Expectations	<u>M</u>	<u>SD</u>	t	df	p
1. Academic success - mother	26.04	5.27			
Academic success - daughter	27.20	4.02	1.59	54	.12
2. Educational aspirations - mother	13.89	4.27			
Educational aspirations - daughter	14.07	4.34	0.31	54	.76
3. Educational attainment - mother	4.37	0.90			
Educational attainment - daughter	4.44	0.57	0.57	53	.57
4. Occupational success - mother	24.70	5.21			
Occupational success - daughter	24.40	4.81	-0.35	52	.72
5. Academic success - mother	26.52	4.18			
Academic success - son	26.43	4.49	0.17	53	.87
6. Educational aspirations - mother	13.20	4.60			
Educational aspirations - son	14.09	4.13	-1.51	54	.14
7. Educational attainment - mother	4.58	0.72			
Educational attainment - son	4.40	0.57	1.77	51	.08

Table 23 (cont'd)

Expectations	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
8. Occupational success - mother	24.35	5.18			
Occupational success - son	25.06	5.03	-1.08	53	.28
9. Academic success - father	25.45	5.38			
Academic success - daughter	27.33	4.00	2.32	50	.02
10. Educational aspirations - father	13.69	4.44			
Educational aspirations - daughter	14.06	4.34	0.58	50	.57
11. Educational attainment - father	4.44	0.73			
Educational attainment - daughter	4.46	0.58	0.20	49	.84
12. Occupational success - father	24.04	5.31			
Occupational success - daughter	24.33	4.58	0.31	47	.76
12. Academic success - father	25.75	5.29			
Academic success - son	26.65	4.32	-1.16	50	.25
13. Educational aspirations - father	13.41	4.59			
Educational aspirations - son	13.96	4.15	-0.87	50	.39
14. Educational attainment - father	4.38	0.81			
Educational attainment - son	4.42	0.54	-0.42	49	.67
15. Occupational success - father	23.76	5.17			
Occupational success - son	25.02	5.10	-1.55	50	.13

Discussion

The objective of this study was to ascertain what, if any, relationships existed between cultural values and acculturation, and attitudes and expectations for academic achievement and occupational achievement. Moreover, of interest was how these relationships existed and were associated for parents and children. The analyses recounted above followed a logical sequence in attempting to answer questions from the general to the more specific. Therefore, the first step was to explore the association between parents' identified levels of acculturation, of Canadian cultural values, and of Asian cultural values, and two general values of academic achievement and intellectualism. Following this exploration was the determination of parents' identified levels of acculturation and cultural values, and the same two broad values of academic achievement and intellectualism as they pertained to their children. Once a general understanding of these relationships was made more apparent, the natural progression was to dissect the broad values of academic achievement and intellectualism into more specific areas of expectations of success. These expectations were further broken down for male and female children, respectively. As gender of the child had been introduced into the equation, so had the concept of sex-role egalitarianism, or the attitude where one would not see an individual's abilities, potentials, and opportunities to be determined by their gender. To this end, what role did an (non-) egalitarian attitude play in the relationship of culture and values? The culmination of these three steps was a final look at how the existing relationships of the parents' culture and values manifested for, and within, the cultural portrayal of their children as well as the children's

understanding of their parents' cultural values and academic/occupational expectations.

One of the key elements of acculturation identified by Berry, et al. (1986) was the acknowledgement of acculturation being a two-dimensional process. The relationship with the traditional culture, as well as the relationship with the new culture was considered very important. Following this thought, all analyses and subsequent interpretations considered three different values. First was the total acculturation score, calculated from both Canadian values and Asian values. Second was the Canadian values score which indicated the level to which the individual adhered to Canadian values as defined by the Ghuman Acculturation scale. Third was the Asian values score, or the level to which an individual held Asian values as defined by the Ghuman Acculturation scale.

The first question and analysis was an exploration of the relationships that might exist between acculturation and some general values. Previous research looking at various psychosocial variables had found a relationship between these variables and acculturation. For example, a study by Ying (1995) reported that a bicultural attitude (holding values of both the traditional and new culture) was predictive of a healthier psychological state in Chinese Americans. While the current study was not investigating psychological well being, it was attempting to ascertain whether acculturation or cultural values were in any way related to how much value an individual placed on academic achievement or intellectualism. The initial results indicated no such relationship. Regardless of whether mothers' and fathers' had high or low levels of acculturation, high or low endorsement of Canadian values, or

high or low endorsement of Asian values, there did not appear to be any significant relationship to the types of values they had concerning academic achievement or intellectualism. While there might not, in fact, be any relationship as indicated by the results, it was not entirely inconceivable that a significant relationship between cultural values and high regard of academic achievement and intellectualism would appear with a larger sample size. Had a significant relationship between either Canadian or Asian cultural scores and one or both of the values been made apparent, it would be reasonable to suggest that appreciating academic achievement and intellectualism were more closely associated with one of the cultures.

In addition, this particular question asked about regard for academic achievement and intellectualism in other people. As both mothers and fathers did not differ in the levels to which they held these values, one suggestion is that the parents in this study were individuals not overly concerned with what did and did not manifest in people not of immediate importance to themselves. If the questions were asked in regard to (i.e.) friends or other family members, perhaps some relationship would appear between cultural values and general values.

However, this particular interpretation was later weakened when it was found that mothers' and fathers' acculturation scores, Canadian values scores, and Asian values scores did not appear to have any significant relationships with the value they placed on academic achievement and intellectualism for their children. For both of these analyses, the data were collected with the same questionnaire. For the two exposures the instructions were altered with respect to who the questions

were regarding (i.e., either "people in general", or "your children"). The possibility remained that it was the method by which the data were collected (i.e., the questionnaire used) that led to the finding of a nonsignificant relationship. When asked to comment and provide feedback, members of the first five families who filled out the questionnaire packages did not indicate any difficulties or criticisms with these packages. However, a few members of the subsequent participating families had commented on the length of this questionnaire in particular when returning the packages to the researcher. They felt the questionnaires themselves were quite time consuming, involving a large number of items. These participants, as well as potentially other participants who had not commented, may have found the task too tedious. Answers to these items may have been provided randomly, or in a haphazard fashion simply to complete the task, creating some form of response bias. As such, the data collected may not have been representative of the participants true opinions. Unfortunately, the body of research in this area is limited and these findings and interpretations had no comparable investigative findings with which to bolster or refute them.

The second major question in this study was an investigation of more specific academic and occupational values. Unlike the previous findings, both mothers and fathers held high expectations of academic success, occupational success and prestige, the academic performance they would accept from their children, and the amount of post-secondary education the children would complete. The parents in the samples expected both sons and daughters to get good grades (i.e., mostly A's), were disappointed if they did not receive mostly A's or were not one of the best

students in the class, and generally expected them to complete a minimum 4 year university degree. Parents also expected their child to be in an occupation where he or she would receive a high salary, carry a professional title, or work in a management/administrative position.

Mothers and fathers did not significantly differ in their high expectations, nor did their respective expectations differ significantly for sons and daughters. The one exception to this was that mothers held greater academic expectations for their daughters than their sons. They were more disappointed when daughters received lower grades or were not the best students in the class. These findings of similar parental expectations for sons and daughters are not consistent with a large number of studies that suggest parents do hold different expectations for male and female children (i.e., Jacobs & Weisz, 1994; Johnson & Smith Lewman, 1990). For example, Scarr and Weinberg (1994) found that parents placed greater expectations and invested more into their sons' educational futures.

However, there exist a small number of studies that concur with the finding of similar expectations for both male and female children. While there are those studies which show a preference for following traditional sex-role expectations, high value is still placed on scholastic achievement and occupational success for both male and female children (Burns, et al., 1984). Even though mothers' did endorse greater academic expectations for daughters, this may be a reflection of knowing that their daughters now had greater opportunities within their reach. Wishing them to do even better may have been in the hopes that they did not miss out on taking advantage of these new opportunities. Parikh and Garg (1989) had made the point

that contemporary Indian women were now bestowed modern roles not previously experienced. And, as Lugris (1997) suggested, immigrants may be viewing the North American educational system as offering openings for mobility and success. Perhaps the available data mirror these same sentiments.

An important consideration at this point was also whether the age of the child had a relationship to the academic and occupation values expressed by the parent. For example, it would be a reasonable assumption that parents of children who had already completed their education and were currently in the workforce may not place as high a value on academic success than parents of children who are currently in the midst of completing some level of education. Although it was established in the analyses that there was no significant relationship in the sample between age of child and parents' values, it is not possible to rule out that a larger sample size would find significant differences.

One can also offer an interpretation for the occurrence of a difference for mothers' and not for fathers' on this particular variable. This may have been a function of differing degrees of sex-role egalitarianism. As the third question and analyses discovered, mothers in the sample were found to be significantly more egalitarian in their attitudes than the fathers. As such, mothers may have been more likely, and more willing, to recognize a greater opportunity for their daughters. As both mothers and fathers held similar levels of acculturation, Canadian values, and Asian values, no similar claims could be made for this variable.

For the most part, it was found that the mother's sex-role egalitarianism contributed more to the admitted expectations than acculturation. This is consistent

with a number of studies previously cited (i.e., Jacobs & Weisz, 1984; Johnson & Smith Lewman, 1990) that found sex-role stereotyping (holding stereotyped gender views as opposed to egalitarian views) interacted with the gender of the child. Even though these stereotypes did not affect the child's self-perceptions of (math) abilities, it did influence parents' beliefs regarding the child's abilities. The same was true for expectancies of future success (Jacobs, 1991). However, unlike the studies cited above, mothers in the sample did not have stereotyped expectations favouring sons over daughters. Fathers, on the other hand, did not show significant relationships between either sex-role egalitarianism or acculturation and their expectations for their sons and daughters.

As previously stated, both mothers' and fathers' in the present study did not show a relationship between acculturation, and academic and occupational expectations. This lack of a relationship might very well have been due to the nonexistence of any relationship within the population of East Indian parents. In addition, it was possible that the tests and materials used could not adequately measure an existing relationship between acculturation and expectations, nor could these tests and measures uncover more subtle changes in this same relationship. Finally, one must consider the possibility of participants biasing their responses to portray themselves in a more favourable light. For example, parents who did hold differing expectations for their sons and their daughters, or parents who did hold more traditional views (as would be measured by the acculturation scale) might want to appear more "egalitarian" or "liberal" to the researcher and subsequent audiences of the research results. As such, results would then not accurately

represent, or even acknowledge, any relationship between acculturation and attitudes.

Although a study with a larger sample might remedy the situation outlined above, Berry et al. (1986) did caution that when acculturation finally did occur, regardless of degree, the end result was not necessarily toward modern values or any one alternative at all. Even though the mothers and fathers had acculturated, held both Canadian and Asian values, these cultural values were not directly related to the beliefs they held pertaining to scholastics and occupational realizations. It should be noted that, while this relationship did not exist within the East Indian sample, this should not be generalized to all ethnic or immigrant groups and their processes of acculturation.

The focus of the final question became the association of the parents' acculturation, attitudes, and expectations with their children's acculturation, attitudes, and expectations. It had been determined (see results) that, overall, sons and daughters were significantly more acculturated than their parents were. In addition, children also adhered to more Canadian values than their parents did. It would seem probable that this was a result of the majority of the children in the sample being raised in both Canadian and Asian cultures (i.e., Canadian culture through school, friendships, social settings; Asian culture through familial interactions and home environment), which could account for the greater level of acculturation. By virtue of being born in Canada, the children had lived a larger proportion of their lives exposed to Canadian values from a very young age. Their parents, however, would have spent a greater proportion of their lives, as well as

their formative years, immersed in an Asian culture (i.e., India or Pakistan).

An interesting finding was that, while daughters held significantly lower Asian values than their parents did, sons did not differ significantly from their parents' Asian values. It would appear that the male children were slightly more accepting of traditional values than the female children. However, as witnessed by the items on the Ghuman Acculturation Scale, many of the traditional value items were more lenient for males. For example, several of the items provided greater freedom and more leeway in accepted behaviours for males (i.e., a woman's place is in the home, men should make all the decisions about the affairs of the family, and I would not like our women to behave like white Canadian women).

When comparing children's perceived parents' expectations to parents' actual expectations, there were no real differences found. Children were fairly accurate in judging what their parents' expected of them, although they did have a slight tendency to overestimate their parents' expectations. These results would be a clear example of the first two steps in Smith's (1991) intergenerational communication of values within a family: namely, (a) the parent either exhibits or relays the value within the family, and (b) the child understands the value correctly. The few exceptions to this were for daughters' perceptions of their mothers' expectations and daughters' perceptions of their fathers' expectations. For example, daughters' underestimated the amount of education mothers' expected for them, as well as the amount of occupational success both parents expected of them. It is possible that this underestimation could have been a result of parents not fully communicating these expectations to their daughters, or the daughters did not

understand when/if the expectation was expressed.

It was important to note that, as with parents' expectations, parents' acculturation and cultural values were also not significantly related to the children's perceptions of their parents' expectations. Regardless of whether parents endorsed more Canadian and/or Asian values, and whether these values were expressed within the family environment, no variation was apparent in what the children believed was expected of them. Their expectations appeared independent of their parents' cultural attitudes.

To determine the extent to which the third and fourth steps of Smith's communication of values played out in the East Indian sample, parents' expectation for child occupational outcome (the end result of the scholastic pursuits) were compared to what the children endorsed as the outcome. No significant differences had been found between what parents wanted for their children and what children wanted for themselves or had already attained with respect to occupational outcome (i.e., the prestige involved in their job, their salaries, having a professional title, etc.). In other words, the children were willing to incorporate their parents' values into their own value system (step 3), and had successfully included their parents' values into their own value systems as witnessed by their outcomes (step 4). These results closely replicate findings of other studies such as Marjoribanks (1988) longitudinal research which concluded that parental aspirations, and the child's perception of these aspirations were associated with the education and occupational outcome of young adults. In addition, Fuligni (1997) also determined that a significant correlate of success was the strong emphasis both students and

their parents placed on education.

Limitations and Future Research

One of the more apparent limitations was the relatively small sample size of families. With only 55 families participating, more sophisticated analyses could not be conducted due to low power. Much of the analyses conducted consisted of univariate statistics due to the type and limited quantity of data collected. Future research on acculturation and attitudes would benefit from a larger sampling of East Indian families. In addition, increasing sample size might also identify relationships that previously appeared as statistically insignificant.

However, future researchers would do well to consider the large percentage of non-responses. Frequently, families would return the questionnaire packages stating they did not feel comfortable with, nor did they necessarily believe, the assurances of anonymity. For example, one mother from a participating family was quite adamant about not divulging her age, income, or what she wanted for her children. Despite assurances that none of the information she provided would be identified with her name (i.e., each family was known only by their subject number), the individual would not answer with particulars which could then be used against her. She stated that she knew "Indian people talk"; the implication being that other East Indian participants and the researcher would then gossip about her responses. While other potential participants were not as intense in their unwillingness to complete the questionnaires, a fair number did remark on their uneasiness. They were then reminded that the decision to participate was theirs, their responses would remain anonymous, and that they would not experience any negative

consequences should they decide not to take part.

Because the results of the present study were correlational in nature, causal inferences could not be made. Any significant relationships remained descriptive in nature. The study could not provide a conclusive answer as to what, if any, effect acculturation and cultural values had on attitudes, expectations, and perceptions.

It was also postulated in the discussion that a lack of significant result might have been related to the actual measures used. The questionnaire packages were fairly large and perhaps overly time-consuming with the hope of adequately measuring all variables. However, in an attempt to be comprehensive the result may have actually been a laborious task: one which people did not want to complete, or with a wish to complete it quickly, did not pay as much attention to the questions asked. This may have been an additional contributing factor to the low number of complete questionnaire packages returned. Finally, this might have resulted in an increase of the attrition rate of individuals with poor reading skills, potentially biasing the sample.

Future research should attempt to minimize the number or length of the questionnaires involved while maximizing the data made available. In addition, should results of future research remain consistent with the present study, including additional ethnic groups would benefit in the interpretation and utility of results.

Implications and Conclusions

The main purposes of this study were to investigate and attempt to understand the relationship between acculturation and cultural values and the attitudes that East Indian parents held with regards to educational and occupational

achievement of their children. It was hoped that the research would find a more substantive association between cultural-familial variables and attitudes. A review of previous literature suggested the strong relationship between parents' attitudes and expectations and their children's perceptions of these attitudes and expectations. There was also a suggestion of culture being related to attitudes and other psychosocial variables.

The present study closely replicated results of the studies (Lugris, 1997; Fuligni, 1997) that showed that parents' expectations were clearly expressed and understood by their children. In addition, it was determined that children also expressed a desire for the high degree of occupational and educational success that their parents wanted for them. However, divergent from the initial expectation of this study, it was not possible to determine how, or even if, these relationships were at all associated with an individual's level of acculturation and his or her cultural views.

The greatest implication of this study is the need for a much larger scale investigation into the role acculturation and the process of changing or cementing attitudes and values. One suggestion would be a cross-cultural study between a Canadian sample and a comparable sample from India, which could actively explore differences between a Canadian culture and an Asian culture. Another possible study suggestion would be to longitudinally follow individuals subsequent to their immigrating to Canada. This would enable the researcher to not only measure the acculturation (or lack of) as it happens on an individual level, but to also measure changes which may occur in attitudes and values.

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Appendix A

General Information, Parent

General Information

1. Please indicate who is filling out this questionnaire: (circle one)

Mother Father Step-Mother Step-Father
 Other(Specify): _____

2. Please indicate your current marital status:

Single (Never married) _____ Widowed _____
 Married (Together) _____ Divorced _____
 Married (Separated) _____ Common - Law _____
 Other (Specify) _____

3. Your Date of Birth _____/_____/_____
 (Year) (Month) (Day)

4. How many children do you have (include step-children living with you)? ____

Please indicate the age and sex of each of your children:

Child #1: Sex **M** **F** Age _____
 Child #2: Sex **M** **F** Age _____
 Child #3: Sex **M** **F** Age _____
 Child #4: Sex **M** **F** Age _____
 Child #5: Sex **M** **F** Age _____

5. Please check your approximate yearly household income:

less then \$20 000 _____
 \$21 000 - 40 000 _____
 \$41 000 - 60 000 _____
 \$61 000 - 80 000 _____
 more then 81 000 _____

6. Have you completed all of your education? Yes _____ No _____

If yes, how far did you go:

- _____ 1. Finished some high school.
- _____ 2. Graduated from high school.
- _____ 3. Graduated from a 2-year college.
- _____ 4. Graduated from a 4-year college/university.

_____ 5. Graduated from Law, Medical, or Graduate school.

If no, how far do you plan to go:

_____ 1. Finish some high school.

_____ 2. Graduate from high school.

_____ 3. Graduate from a 2-year college.

_____ 4. Graduate from a 4-year college/university.

_____ 5. Graduate from Law, Medical, or Graduate school.

7. If someone were to ask you about your ethnicity or ethnic background, what would your answer be? (i.e., East-Indian; Canadian-Indian; Canadian; Pakistani; etc.) _____

8. How long have you been in Canada? (i.e., 11 years, and 8 months)
 _____ years, and _____ months

In what year did you arrive? (i.e., 1975) _____

9. In what country were you born? _____

10. What do you believe it means to be 'Canadian'? _____

11. Do you feel 'Canadian'? **Yes** **No**
 Please explain your answer: _____

12. Please indicate all of the languages you speak at home: _____

13. Of these languages, which one(s) do you use most frequently?

14. Please indicate your citizenship status: **Canadian Citizen** _____
Landed Immigrant _____
Citizen of another country _____ Please specify Country _____
Refugee Status _____
Other (Specify) _____

Appendix B

General Information, Child

General Information

1. Please indicate who is filling out this questionnaire: (circle one)

Son Daughter Step-Son Step-Daughter Other(Specify)_____

2. Please indicate your current marital status:

Single (Never married) _____	Widowed _____
Married (Together) _____	Divorced _____
Married (Separated) _____	Common - Law _____
Other(Specify) _____	

3. Your Date of Birth _____/_____/_____

(Year) (Month) (Day)

4. In what country were you born? _____

5. Do you currently live with your parents? Yes _____ No _____

6. Have you completed all of your education? Yes _____ No _____

If yes, how far did you go:

- _____ 1. Finished some high school.
- _____ 2. Graduated from high school.
- _____ 3. Graduated from a 2-year college.
- _____ 4. Graduated from a 4-year college/university.
- _____ 5. Graduated from Law, Medical, or Graduate school.

If no, how far do you plan to go:

- _____ 1. Finish some high school.
- _____ 2. Graduate from high school.
- _____ 3. Graduate from a 2-year college.
- _____ 4. Graduate from a 4-year college/university.

_____ 5. Graduate from Law, Medical, or Graduate school.

7. Please check your approximate personal yearly income:

- less than \$20 000 _____
- \$21 000 - 40 000 _____
- \$41 000 - 60 000 _____
- \$61 000 - 80 000 _____
- more than 81 000 _____

8. If someone were to ask you about your ethnicity or ethnic background, what would your answer be? (i.e., East-Indian; Canadian-Indian; Canadian; Pakistani; etc.) _____

9. How long have you been in Canada? (i.e., 11 years, and 8 months)
 _____ years, and _____ months

In what year did you arrive? (i.e., 1975) _____

10. What do you believe it means to be 'Canadian'?

11. Do you feel 'Canadian'? **Yes** **No**

Please explain your answer: _____

12. Please indicate all of the languages you speak at home: _____

13. Of these languages, which one(s) do you use most frequently?

14. Please indicate your citizenship status: **Canadian Citizen** _____

Landed Immigrant _____

Citizen of another country _____ Please specify country _____

Refugee Status _____

Other (Specify): _____

Appendix C
 Personal Values Scale

PVS
 (Scott, 1965)

Instructions: Please read over the following statements, and for each one indicate (by a check in the appropriate space) whether it is something you *always admire* in **other people** or something you *always dislike*, or something that *depends on the situation* whether you admire it or not.

Always Admire	Depends on Situation	Always Dislike	
_____	_____	_____	Having a keen interest in international, national, and local affairs.
_____	_____	_____	Being kind to people, even if they do things contrary to one's beliefs.
_____	_____	_____	Being well mannered and behaving properly in social situations.
_____	_____	_____	Defending the honour of one's group whenever it is unfairly criticised.
_____	_____	_____	Studying hard to get good grades in school.
_____	_____	_____	Being graceful and well co-ordinated in physical movements.
_____	_____	_____	Being respected by people who are themselves worthwhile.
_____	_____	_____	Never cheating or having anything to do with cheating situations, even for a friend.
_____	_____	_____	Being devout in one's religious faith.
_____	_____	_____	Practising self-control.
_____	_____	_____	Being able to create beautiful and artistic objects.
_____	_____	_____	Being outspoken and frank in expressing one's likes and dislikes.

- | | | | |
|-------|-------|-------|---|
| _____ | _____ | _____ | Having a strong intellectual curiosity. |
| _____ | _____ | _____ | Helping another person feel more secure, even if one doesn't like him. |
| _____ | _____ | _____ | Dressing and acting in a way that is appropriate to the occasion. |
| _____ | _____ | _____ | Working hard to improve the prestige and status of one's groups. |
| _____ | _____ | _____ | Working hard to achieve academic honours. |
| _____ | _____ | _____ | Taking good care of one's physical self, so that one is always healthy. |
| _____ | _____ | _____ | Gaining recognition for one's achievements. |
| _____ | _____ | _____ | Always telling the truth, even though it may hurt oneself or others. |
| _____ | _____ | _____ | Always living one's religion in his daily life. |
| _____ | _____ | _____ | Replying to anger with gentleness. |
| _____ | _____ | _____ | Being poised, gracious, and charming under all circumstances. |
| _____ | _____ | _____ | Developing new and different ways of doing things. |
| _____ | _____ | _____ | Thinking and acting freely, without social restraints. |
| _____ | _____ | _____ | Developing an appreciation of the fine arts - music, drama, literature, and ballet. |
| _____ | _____ | _____ | Helping another achieve his own goals, even if it might interfere with your own. |
| _____ | _____ | _____ | Being able to get people to co-operate with one. |
| _____ | _____ | _____ | Helping organize group activities. |

- _____ _____ _____ Striving to get the top grade-point average in the group.
- _____ _____ _____ Being good in some form of sport.
- _____ _____ _____ Being in a position to direct and mold others' lives.
- _____ _____ _____ Never telling a lie, even though to do so would make the situation more comfortable.
- _____ _____ _____ Always attending religious services regularly and faithfully.
- _____ _____ _____ Never losing one's temper, no matter what the reason.
- _____ _____ _____ Constantly developing new ways of approaching life.
- _____ _____ _____ Being independent, original, nonconformist, different from other people.
- _____ _____ _____ Having an active interest in all things scholarly.
- _____ _____ _____ Turning the other cheek, and forgiving others when they harm you.
- _____ _____ _____ Being able to get along with all kinds of people, whether or not they are worthwhile.
- _____ _____ _____ Treating an attack on one's group as an attack on oneself.
- _____ _____ _____ Studying constantly in order to become a well-educated person.
- _____ _____ _____ Developing physical strength and agility.
- _____ _____ _____ Having the ability to lead others.
- _____ _____ _____ Helping a close friend get by a tight situation, even though one may have to stretch the truth a bit to do it.

- | | | | |
|-------|-------|-------|--|
| _____ | _____ | _____ | Avoiding the physical pleasures that are prohibited in by your religion. |
| _____ | _____ | _____ | Not expressing anger, even when one has a reason for doing so. |
| _____ | _____ | _____ | Inventing gadgets for the fun of it. |
| _____ | _____ | _____ | Conforming to the requirements of any situation and doing what is expected of one. |
| _____ | _____ | _____ | Being an intellectual. |
| _____ | _____ | _____ | Being the person in the group who is most popular with the opposite sex. |
| _____ | _____ | _____ | Concealing from outsiders most of one's dislikes and disagreements with fellow members of the group. |
| _____ | _____ | _____ | Developing an attractive body that others will admire. |
| _____ | _____ | _____ | Showing great leadership qualities. |
| _____ | _____ | _____ | Encouraging others to attend services and lead religious lives. |
| _____ | _____ | _____ | Always being patient with people. |
| _____ | _____ | _____ | Creating beautiful things for the enjoyment of other people. |
| _____ | _____ | _____ | Doing all one can to build up the prestige of the group. |
| _____ | _____ | _____ | Working and living in harmony with other people. |
| _____ | _____ | _____ | Devoting one's entire energy to the development of new theories. |

Appendix D

Sex-Role Egalitarianism Scale, Form KK

SRES Form KK

L.A. King & D.W. King (1993)

Below are statements about men and women. Read each statement and decide how much you agree or disagree. We are not interested in what society says. We are interested in *your personal opinions*. For each statement, circle the letter(s) that describe(s) your opinion. Please *do not omit* any statements. Remember to circle *only one* of the five choices for each statement:

SA = Strongly Agree A = Agree N = Neutral or undecided or no opinion D = Disagree SD = Strongly Disagree

- 1. Women should have as much right as men to go to a bar alone. SA A N D SD
- 2. Clubs for students in nursing should admit only women. SA A N D SD
- 3. Industrial training schools ought to admit more qualified females. SA A N D SD
- 4. Women ought to have the same chances as men to be leaders at work. SA A N D SD
- 5. Keeping track of a child's activities should be mostly the mother's task. SA A N D SD
- 6. Things work out best in a marriage if the husband stays away from housekeeping tasks. SA A N D SD
- 7. Both the husband's and wife's earnings should be controlled by the husband. SA A N D SD
- 8. A woman should not be President of the United States. SA A N D SD
- 9. Women should feel free to "drop in" on a male friend and vice versa. SA A N D SD
- 10. Males should be given first choice to take courses that train people as school principals. SA A N D SD
- 11. When both husband and wife work outside the home, housework should be equally shared. SA A N D SD
- 12. Women can handle job pressures as well as men. SA A N D SD

- | | |
|--|-------------|
| 13. Male managers are more valuable to a business than female managers. | SA A N D SD |
| 14. A woman should have as much right to ask a man for a date as a man has to ask a woman for a date. | SA A N D SD |
| 15. The father, rather than the mother, should give teenage children permission to use the family car. | SA A N D SD |
| 16. Sons and daughters ought to have an equal chance for higher education. | SA A N D SD |
| 17. A marriage will be more successful if the husband's needs are considered first. | SA A N D SD |
| 18. Fathers are better able than mothers to decide the amount of a child's allowance. | SA A N D SD |
| 19. The mother should be in charge of getting children to after-school activities. | SA A N D SD |
| 20. A person should be more polite to a woman than to a man. | SA A N D SD |
| 21. Women should feel as free as men to express honest opinion. | SA A N D SD |
| 22. Fathers are not as able to care for their sick children as mothers are. | SA A N D SD |
| 23. An applicant's sex should be important in job screening. | SA A N D SD |
| 24. Wives are better able than husbands to send thank you notes for gifts. | SA A N D SD |
| 25. Choice of college is not as important for women as for men. | SA A N D SD |

Appendix E

Parental Attitudes, Parent

PPA-SA

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you consider *not at all important* (1), *not too important* (2), *somewhat important* (3), *important* (4), or *very important* (5).

How important do you feel it is for your **son** to do the following (if your son has already completed his education, while he was in school how important did you feel it was for your son to):

- | | | | | | |
|---|---|---|---|---|---|
| 1. Do well in school. | 1 | 2 | 3 | 4 | 5 |
| 2. Get good grades. | 1 | 2 | 3 | 4 | 5 |
| 3. Go to college/university after high school. | 1 | 2 | 3 | 4 | 5 |
| 4. Get an 'A' on almost every test. | 1 | 2 | 3 | 4 | 5 |
| 5. Be one of the best students in his class. | 1 | 2 | 3 | 4 | 5 |
| 6. Go to the best college/university after high school. | 1 | 2 | 3 | 4 | 5 |

PPA-SE

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you feel *never* (1), *almost never* (2), *sometimes* (3), *almost always* (4), or *always* (5).

How do you feel towards your **son** in the following situations (if your son has already completed his education, while he was in school how did you feel towards your son to):

- | | | | | | |
|---|---|---|---|---|---|
| 1. Disappointed if he doesn't get very high grades. | 1 | 2 | 3 | 4 | 5 |
| 2. Disappointed if he doesn't get mostly 'A's on his report card. | 1 | 2 | 3 | 4 | 5 |
| 3. You expect him to be one of the best students in his class. | 1 | 2 | 3 | 4 | 5 |
| 4. You are not satisfied if he receives a 'B+' on a test. | 1 | 2 | 3 | 4 | 5 |

PPA-SEA

How much education do you/did you want your **son** to complete (please check one):

- _____ 1. Finish some high school.
- _____ 2. Graduate from high school.
- _____ 3. Graduate from a 2-year college.
- _____ 4. Graduate from a 4-year college/university.
- _____ 5. Graduate from Law, Medical, or Graduate school.

PPA-SO

By circling the appropriate number, indicate whether this is something you feel is *not at all important* (1), *not too important* (2), *somewhat important* (3), *important* (4), or *very important* (5).

How important do you feel it is for your **son** to do the following (if your son has not completed his education, once he enters the "working world" how important do you feel it will be for your son to): *not at all important* (1), *not too important* (2), *somewhat important* (3), *important* (4), or *very important* (5).

- | | | | | | |
|---|---|---|---|---|---|
| 1. Do well in his job. | 1 | 2 | 3 | 4 | 5 |
| 2. Receive a large salary. | 1 | 2 | 3 | 4 | 5 |
| 3. Have a "professional" title (i.e., Doctor, Lawyer, etc). | 1 | 2 | 3 | 4 | 5 |
| 4. Have a management or administrative role. | 1 | 2 | 3 | 4 | 5 |
| 5. Be "one of the best" in his field. | 1 | 2 | 3 | 4 | 5 |
| 6. Work for a well-known company. | 1 | 2 | 3 | 4 | 5 |

What do you feel would be the ideal or best life outcome for your son?

PPA-DA

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you consider *not at all important* (1), *not too important* (2), *somewhat important* (3), *important* (4), or *very important* (5).

How important do you feel it is for your **daughter** to do the following (if your daughter has already completed her education, while she was in school how important did you feel it was for your daughter to):

- | | | | | | |
|---|---|---|---|---|---|
| 1. Do well in school. | 1 | 2 | 3 | 4 | 5 |
| 2. Get good grades. | 1 | 2 | 3 | 4 | 5 |
| 3. Go to college/university after high school. | 1 | 2 | 3 | 4 | 5 |
| 4. Get an 'A' on almost every test. | 1 | 2 | 3 | 4 | 5 |
| 5. Be one of the best students in her class. | 1 | 2 | 3 | 4 | 5 |
| 6. Go to the best college/university after high school. | 1 | 2 | 3 | 4 | 5 |

PPA-DE

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you feel *never* (1), *almost never* (2), *sometimes* (3), *almost always* (4), or *always* (5).

How do you feel towards your **daughter** in the following situations (if your daughter has already completed her education, while she was in school how did you feel towards your daughter to):

- | | | | | | |
|--|---|---|---|---|---|
| 1. Disappointed if she doesn't get very high grades. | 1 | 2 | 3 | 4 | 5 |
| 2. Disappointed if she doesn't get mostly 'A's on her report card. | 1 | 2 | 3 | 4 | 5 |
| 3. You expect her to be one of the best students in her class. | 1 | 2 | 3 | 4 | 5 |
| 4. You are not satisfied if she receives a 'B+' on a test. | 1 | 2 | 3 | 4 | 5 |

PPA-DEA

How much education do you/did you want your **daughter** to complete (please check one):

- _____ 1. Finish some high school.
- _____ 2. Graduate from high school.
- _____ 3. Graduate from a 2-year college.
- _____ 4. Graduate from a 4-year college/university.
- _____ 5. Graduate from Law, Medical, or Graduate school.

PPA-DO

How important do you feel it is for your **daughter** to do the following (if your daughter has not completed her education, once she enters the "working world" how important do you feel it will be for your daughter to): *not at all important (1), not too important (2), somewhat important (3), important (4), or very important (5).*

- | | | | | | |
|---|---|---|---|---|---|
| 1. Do well in her job. | 1 | 2 | 3 | 4 | 5 |
| 2. Receive a large salary. | 1 | 2 | 3 | 4 | 5 |
| 3. Have a "professional" title (i.e., Doctor, Lawyer, etc). | 1 | 2 | 3 | 4 | 5 |
| 4. Have a management or administrative role. | 1 | 2 | 3 | 4 | 5 |
| 5. Be "one of the best" in her field. | 1 | 2 | 3 | 4 | 5 |
| 6. Work for a well known company. | 1 | 2 | 3 | 4 | 5 |

What do you feel would be the ideal or best life outcome for your daughter?

Appendix F

Perceived Parental Attitudes, Child

PPA-CA

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you feel is *not at all important to my parents* (1), *not too important to my parents* (2), *somewhat important to my parents* (3), *important to my parents* (4), or *very important to my parents* (5).

(If you have already completed your education, think back to the period in which you were in school.)

- | | | | | | |
|--|---|---|---|---|---|
| 1. Doing well in school. | 1 | 2 | 3 | 4 | 5 |
| 2. Getting good grades. | 1 | 2 | 3 | 4 | 5 |
| 3. Going to college/university after high school. | 1 | 2 | 3 | 4 | 5 |
| 4. Getting an 'A' on almost every test. | 1 | 2 | 3 | 4 | 5 |
| 5. Being one of the best students in the class. | 1 | 2 | 3 | 4 | 5 |
| 6. Going to the best college/university after high school. | 1 | 2 | 3 | 4 | 5 |

PPA-CE

Please read each of the following statements. For each statement, indicate (by circling the appropriate number) whether this is something you believe your parents feel (or felt, if you have already completed your education) *never* (1), *almost never* (2), *sometimes* (3), *almost always* (4), or *always* (5).

- | | | | | | |
|--|---|---|---|---|---|
| 1. I feel that my parents will be disappointed if I don't get very good grades. | 1 | 2 | 3 | 4 | 5 |
| 2. My parents will be disappointed if I don't get mostly 'A's on my report card. | 1 | 2 | 3 | 4 | 5 |
| 3. My parents expect me to be one of the best students in my class. | 1 | 2 | 3 | 4 | 5 |
| 4. My parents would not be satisfied if I received a 'B+' on a test. | 1 | 2 | 3 | 4 | 5 |

PPA-CEA

How much education do you believe your parents want you (or wanted you) to complete (please check one):

- _____ 1. Finish some high school.
- _____ 2. Graduate from high school.
- _____ 3. Graduate from a 2-year college.
- _____ 4. Graduate from a 4-year college/university.
- _____ 5. Graduate from Law, Medical, or Graduate school.

PPA-CO

By circling the appropriate number, indicate whether this is something you feel is *not at all important to myself* (1), *not too important to myself* (2), *somewhat important to myself* (3), *important to myself* (4), or *very important to myself* (5).

How important do you feel it is for you to do the following (if you have not completed your education, once you enter the "working world" how important do you feel it will be for you to):

- | | | | | | |
|---|---|---|---|---|---|
| 1. Do well in your job. | 1 | 2 | 3 | 4 | 5 |
| 2. Receive a large salary. | 1 | 2 | 3 | 4 | 5 |
| 3. Have a "professional" title (i.e., Doctor, Lawyer, etc). | 1 | 2 | 3 | 4 | 5 |
| 4. Have a management or administrative role. | 1 | 2 | 3 | 4 | 5 |
| 5. Be "one of the best" in your field. | 1 | 2 | 3 | 4 | 5 |
| 6. Work for a well-known company. | 1 | 2 | 3 | 4 | 5 |

What do you feel would be the ideal or best life outcome for you?

Appendix G

Ghuman Acculturation Scale

GAS

(Ghuman, 1994)

Please read over the following statements, and for each one indicate (by circling the appropriate response) whether it is something with which you *strongly agree* (SA), *agree* (A), *undecided* (U), *disagree* (D), or *strongly disagree* (SD).

- | | | | | | |
|--|----|---|---|---|----|
| 1. Girls and boys should be treated the same. | SA | A | U | D | SD |
| 2. Schools should accept our traditional clothes. | SA | A | U | D | SD |
| 3. We should attend our places of worship (e.g. temple, Gurudwara). | SA | A | U | D | SD |
| 4. I have no wish to go back to live in the country my parents came from. | SA | A | U | D | SD |
| 5. I would like to see boys and girls from our community going out with white Canadian boys and girls. | SA | A | U | D | SD |
| 6. I would rather eat our own food all the time. | SA | A | U | D | SD |
| 7. We should always try to fulfil our parents' wishes. | SA | A | U | D | SD |
| 8. We should celebrate Christmas as we celebrate our own religious festivals. | SA | A | U | D | SD |
| 9. We are better off living with people from our own countries. | SA | A | U | D | SD |
| 10. Parents and children should live on their own and not with grandparents and uncles. | SA | A | U | D | SD |
| 11. A woman's place is in the house. | SA | A | U | D | SD |
| 12. Only our own doctors can understand our illnesses. | SA | A | U | D | SD |
| 13. We should learn something about Christianity. | SA | A | U | D | SD |
| 14. We should learn to speak and write our language. | SA | A | U | D | SD |

15. Sometimes we should cook Canadian food in our own homes. SA A U D SD
16. We should alter our names so that our teachers can say them more easily. SA A U D SD
17. I would only like to make friends with my countrymen. SA A U D SD
18. Boys and girls should be allowed to meet each other in youth clubs. SA A U D SD
19. I would prefer to live in an area where there are families from our own community. SA A U D SD
20. We should visit the homes of our white Canadian friends. SA A U D SD
21. Our films are more entertaining than English language films. SA A U D SD
22. We should ignore our own language if we want to get on in this country. SA A U D SD
23. I feel very uneasy with white Canadians. SA A U D SD
24. There should be more marriages between our people and white Canadians. SA A U D SD
25. Men should make all the decisions about the affairs of the family. SA A U D SD
26. I would not like our women to behave like white Canadian women. SA A U D SD
27. We should be allowed to choose our own clothes. SA A U D SD
28. We should visit English language cinemas and playhouses. SA A U D SD
29. Marriages should be arranged by the family. SA A U D SD
30. Our women should wear Canadian (European style) clothes. SA A U D SD

Appendix H

Ghuman Acculturation Scale, Parent

GAS-P

Please read over the following statements, and for each one indicate (by circling the appropriate response) whether it is something with which you *strongly agree* (SA), *agree* (A), *undecided* (U), *disagree* (D), or *strongly disagree* (SD).

- | | | | | | |
|--|----|---|---|---|----|
| 1. Girls and boys should be treated the same. | SA | A | U | D | SD |
| 2. Schools should accept our traditional clothes. | SA | A | U | D | SD |
| 3. We should attend our places of worship (e.g. temple, Gurudwara). | SA | A | U | D | SD |
| 4. I have no wish to go back to live in the country from where I came. | SA | A | U | D | SD |
| 5. I would like to see boys and girls from our community going out with white Canadian boys and girls. | SA | A | U | D | SD |
| 6. I would rather eat our own food all the time. | SA | A | U | D | SD |
| 7. Children should always try to fulfil their parents' wishes. | SA | A | U | D | SD |
| 8. We should celebrate Christmas as we celebrate our own religious festivals. | SA | A | U | D | SD |
| 9. We are better off living with people from our own countries. | SA | A | U | D | SD |
| 10. Parents and children should live on their own and not with grandparents and uncles. | SA | A | U | D | SD |
| 11. A woman's place is in the house. | SA | A | U | D | SD |
| 12. Only our own doctors can understand our illnesses. | SA | A | U | D | SD |
| 13. We should learn something about Christianity. | SA | A | U | D | SD |
| 14. We should learn/know how to speak and write our language. | SA | A | U | D | SD |
| 15. Sometimes we should cook Canadian food in our own homes. | SA | A | U | D | SD |

- | | | | | | |
|--|----|---|---|---|----|
| 16. We should alter our names so that people can say them more easily. | SA | A | U | D | SD |
| 17. I would only like to make friends with my countrymen. | SA | A | U | D | SD |
| 18. Boys and girls should be allowed to meet each other in youth clubs. | SA | A | U | D | SD |
| 19. I would prefer to live in an area where there are families from our own community. | SA | A | U | D | SD |
| 20. We should visit the homes of our white Canadian friends. | SA | A | U | D | SD |
| 21. Our films are more entertaining than English language films. | SA | A | U | D | SD |
| 22. We should ignore our own language if we want to get on in this country. | SA | A | U | D | SD |
| 23. I feel very uneasy with white Canadians. | SA | A | U | D | SD |
| 24. There should be more marriages between our people and white Canadians. | SA | A | U | D | SD |
| 25. Men should make all the decisions about the affairs of the family. | SA | A | U | D | SD |
| 26. I would not like our women to behave like white Canadian women. | SA | A | U | D | SD |
| 27. Children should be allowed to choose their own clothes | SA | A | U | D | SD |
| 28. We should visit English language cinemas and playhouses. | SA | A | U | D | SD |
| 29. Marriages should be arranged by the family. | SA | A | U | D | SD |
| 30. Our women should wear Canadian (European style) clothes. | SA | A | U | D | SD |

Appendix I

Cover Letter

Dear Participant:

Thank you for volunteering to participate in a study concerning parental values and how their children understand these values.

I, Reena Chopra, under the supervision of Dr. K.P. Satinder, am conducting the study entitled "Predicting Parent and Child Attitudes towards Educational and Occupational Achievement as a Function of Acculturation", in partial fulfillment of the MA Clinical Psychology program at Lakehead University.

The purpose of my study is to provide information concerning the effect of the acculturation process (how immigrants adapt to a new culture) on the values that they hold regarding educational and occupational achievement. An additional concern is how values held by parents are passed on to, and understood by, their children.

During the study, four (4) members of your family will be asked to complete a questionnaire that will take approximately 30 minutes of your time. Questions include, but are not limited to the following: age, gender, years in country, and ethnic identity. The four members of the family who are to participate would be the **mother, father, one son, and one daughter**. In addition, the children (son and daughter) must be at least fourteen (14) years of age

Each of these four members will be required to fill out a separate questionnaire, identified by the different colored consent form (page 1): **green** is to be filled out by the **mother**, the **yellow** is to be completed by the **father**, the **purple** questionnaire is for the **son**, and the **white** is for the daughter to complete. Once received by the researcher, the written consent will be kept separate from the questionnaires to maintain confidentiality and anonymity. In addition, envelopes have been provided for each individual questionnaire to ensure confidential answers. The four envelopes should then be placed in the larger yellow envelope and returned to the researcher.

Please note that all answers are accepted and will be kept completely anonymous. You may withdraw from the study at any time. The information from all the questionnaires will be coded, analyzed, and securely stored at Lakehead University for seven years. No individual will be identified in any report of the results. Once the study is complete, a summary of the results may be obtained from me at any time.

Sincerely,

Reena Chopra

MA Candidate, Clinical Psychology, Lakehead University

Appendix J

Consent Form

My signature on this sheet indicates I agree to participate in a study by Reena Chopra, on Predicting Parent and Child Attitudes towards Educational and Occupational Achievement as a Function of Acculturation.

My signature also indicates that I understand the following:

1. I am a volunteer and can withdraw at any time from the study.
2. There is no apparent risk of physical or psychological harm.
3. The data I provide will remain confidential.
4. I will receive a summary of the project, upon request, following the completion of the project.

Signature of Participant

Date

If you would like a summary of the results once the research is completed, please provide the following information:

Name: _____

Address: _____

Or, e-mail: _____

Appendix K

Reliabilities for Study Scales

1. Cronbach's Alpha Reliabilities – Mothers

	<u>n</u>	<u>α</u>
Ghuman Acculturation Scale (GAS-P)		
Canadian Values	55	.82
Asian Values	55	.88
Total Scale	55	.88
Personal Values Scale – Other people (PVS)		
Intellectualism	55	.67
Academic Achievement	55	.65
Personal Values Scale – Children (PVS-1)		
Intellectualism	55	.38
Academic Achievement	55	.76
Parental Attitudes for Daughters		
Academic Success (PPA-DA)	55	.94
Academic Expectations (PPA-DE)	55	.86
Occupational Status (PPA-DO)	53	.92
Parental Attitudes for Sons		
Academic Success (PPA-SA)	55	.92
Academic Expectations (PPA-SE)	55	.89
Occupational Status (PPA-SO)	54	.91
Sex Role Egalitarian Scale (SRES)	54	.92

2. Cronbach's Alpha Reliabilities – Fathers

	<u>n</u>	<u>α</u>
Ghuman Acculturation Scale (GAS-P)		
Canadian Values	49	.72
Asian Values	51	.84
Total Scale	49	.83
Personal Values Scale – Other people (PVS)		
Intellectualism	50	.70
Academic Achievement	51	.64
Personal Values Scale – Children (PVS-1)		
Intellectualism	51	.79
Academic Achievement	51	.69
Parental Attitudes for Daughters		
Academic Success (PPA-DA)	51	.97
Academic Expectations (PPA-DE)	51	.91
Occupational Status (PPA-DO)	48	.95
Parental Attitudes for Sons		
Academic Success (PPA-SA)	51	.95
Academic Expectations (PPA-SE)	51	.90
Occupational Status (PPA-SO)	51	.95
Sex Role Egalitarian Scale (SRES)	50	.90

3. Cronbach's Alpha Reliabilities – Daughters

	n	α
Ghuman Acculturation Scale (GAS)		
Canadian Values	55	.53
Asian Values	55	.69
Total Scale	55	.64
Personal Values Scale – Other people (PVS)		
Intellectualism	55	.55
Academic Achievement	55	.61
Personal Values Scale – Parent (PVS-2)		
Intellectualism	55	.47
Academic Achievement	55	.67
Parental Attitudes towards -		
Academic Success (PPA-CA)	55	.90
Academic Expectations (PPA-CE)	55	.90
Occupational Status (PPA-CO)	55	.87
Sex Role Egalitarian Scale (SRES)	55	.88

4. Cronbach's Alpha Reliabilities – Sons

	<u>n</u>	<u>α</u>
Ghuman Acculturation Scale (GAS)		
Canadian Values	54	.69
Asian Values	55	.85
Total Scale	54	.67
Personal Values Scale – Other people (PVS)		
Intellectualism	55	.54
Academic Achievement	55	.60
Personal Values Scale – Parent (PVS-2)		
Intellectualism	55	.53
Academic Achievement	55	.74
Parental Attitudes towards -		
Academic Success (PPA-CA)	54	.91
Academic Expectations (PPA-CE)	55	.89
Occupational Status (PPA-CO)	55	.88
Sex Role Egalitarian Scale (SRES)	55	.92