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DIFFERENCES IN PERFECTIONISM ACROSS CULTURES: A STUDY OF
ASIAN-AMERICAN AND CAUCASIAN COLLEGE STUDENTS

A Thesis Presented

by

KATHLEEN Y. KAWAMURA

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University of Massachusetts Amherst in partial fulfillment
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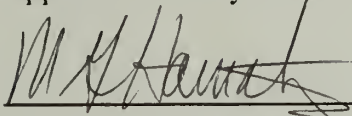
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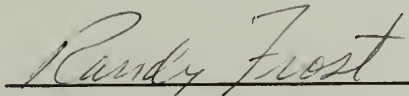
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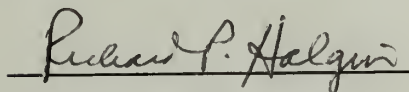
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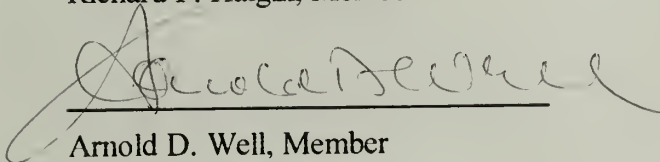
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DEDICATION

Dedicated to Denise Sicard, my guardian angel.

ABSTRACT

DIFFERENCES IN PERFECTIONISM ACROSS CULTURES: A STUDY OF ASIAN-AMERICAN AND CAUCASIAN COLLEGE STUDENTS

FEBRUARY 1999

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The primary purpose of this study was to examine differences between Asian-American and Caucasian college students in parental characteristics and perfectionism. This study also examined the relationship between perfectionism and various educational variables. An exploratory analysis of differences within the Asian-American group was conducted. 145 Asian-Americans and 192 Caucasians responded to a mail survey and completed the Multidimensional Perfectionism Scale, Parental Harshness Scale, Parental Authoritarianism Scale, and questions regarding educational concerns. Asian-American students were sent an additional acculturation scale. The findings indicated that Asian-American students reported their parents as being more harsh and as exhibiting more authoritarian behaviors than did Caucasian students. Asian-American students generally had higher levels of perfectionism than did Caucasian students. Furthermore, the relationship between parental characteristics and perfectionism was similar between the two ethnic groups. Within the Asian-American group, highly acculturated Asian-Americans had lower levels of Concern Over Mistakes. There were no significant differences between various Asian-American ethnic groups on measures of parental characteristics and perfectionism.

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CHAPTER 1

INTRODUCTION

Perfectionism has been defined as the tendency to set excessively high standards and engage in overly critical self-evaluations (Frost, Marten, Lahart, & Rosenblate, 1990). Many theorists have hypothesized that perfectionism develops more readily in those families with overly critical parents who hold high expectations of their children (Barrow & Moore, 1983; Frost, Lahart, & Rosenblate, 1991; Flett, Hewitt, & Singer, 1995c; Rice, Ashby, Preusser, 1996). If parents with these particular characteristics do in fact foster the development of perfectionism, one would believe that those cultures that emphasize harsh parenting styles would have higher incidences of perfectionism; Asian-American parenting styles have been characterized in just this manner (Kelley & Tseng, 1992). Chang (1998) found that Asian-American students did indeed have higher levels of perfectionism as compared to Caucasian students, but it is unclear whether these differences in perfectionism are more attributable to differences in parenting styles. Broad cultural comparisons between Asian-Americans and Caucasian-Americans may help us to further understand the development and function of perfectionism.

Recent conceptualizations of perfectionism have come to view it as a multidimensional construct (Frost et al., 1990; Hewitt & Flett, 1990). In the Frost et al. (1990) conceptualization, five core dimensions of perfectionism based on evaluative tendencies are identified (concern over mistakes, personal standards, parental expectations, parental criticism, and doubts about actions). The Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) was developed to measure these five dimensions. The Total Perfectionism scale has been found to be related to symptoms of

depression (Minarek & Ahrens, 1995), procrastination (Frost et al., 1990), and higher levels of negative affect when evaluative components of a task are emphasized (Frost & Marten, 1990). The Concern Over Mistakes subscale reflects negative reactions to mistakes, a tendency to interpret mistakes as indicative of failure, and a tendency to believe that failure will result in the loss of respect from others. This subscale has been found to be most closely related to symptoms of psychopathology (Frost et al., 1990). The Personal Standards subscale refers to the setting of extremely high standards and the importance of these standards for self-evaluation. As compared to the Concern Over Mistakes subscale, this subscale has been associated with more positive achievement striving (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). The Parental Expectations subscale reflects the tendency to perceive one's parents as having high expectations, and the Parental Criticism subscale refers to the extent to which parents are perceived as being overly critical. Lastly, the Doubts about Actions subscale reflects the tendency to doubt the quality of one's performance.

Perfectionism has been associated with a wide variety of psychological and physical disorders (Pacht, 1984). For example, perfectionism has been found to be related to depression (Hewitt & Dyck, 1986), eating disorders (Bastiani, Rao, Weltzin & Kaye, 1995), personality disorders (Hewitt & Flett, 1991), procrastination (Saddler & Sacks, 1993), and abdominal pain (Pacht, 1984). Many studies have examined the relationship between perfectionism and depression in particular (Flett, Hewitt, Blankstein, and Mosher, 1995a; Frost et al., 1990; Frost et al., 1993; Minarik & Ahrens, 1995). Frost et al. (1993) examined the relationship between the MPS and measures of affect. The MPS, the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the

Positive Affect - Negative Affect Scale (PANAS; Watson, Clark & Tellegen, 1988) were administered to 553 undergraduate students. Total Perfectionism and the subscales Concern over Mistakes, Parental Criticism, and Doubts about Actions were all significantly and positively correlated with scores on the BDI and with negative affect. On the other hand, the Personal Standards subscale was positively correlated with positive affect which suggests that this particular subscale reflects a more positive aspect of perfectionism.

Minarik and Ahrens (1995) also examined the relationship between dimensions of perfectionism and pathology. 56 undergraduate women completed a battery of tests that included the MPS and the BDI. As in Frost et al.'s study (1993), depressive symptoms were related to perfectionism scales; specifically, they too found that Total Perfectionism, Concern Over Mistakes, and Doubts About Actions were positively correlated with the BDI and that Personal Standards were inversely related to depressive symptoms. Unlike Frost et al., Minarik and Ahrens found that Parental Expectations, but not Parental Criticism, were related to depressive symptoms.

The role of perfectionism in the academic functioning of college students has also been examined. Several studies using student samples have found a relationship between perfectionism and procrastination (Flett, Blankstein, Hewitt, & Koledin, 1992; Flett, Hewitt, & Martin, 1995b; Frost et al., 1990). Furthermore, Frost and Marten (1990) found that during a writing task in which evaluation of the writing was emphasized, perfectionistic students reported more negative affect before and during the writing task. In addition, the writing of perfectionistic students was judged to be of significantly poorer quality than that of nonperfectionistic students. Lastly, Brown, Makris, Juster, Leung,

Heimberg, and Frost (1997) examined the relationship between perfectionism and academic performance in college students. They found that Personal Standards was associated with better grades, but Concern Over Mistakes was not related to better grades.

Most of the literature on perfectionism have conceptualized perfectionism as a product of the child's interaction with parents (Barrow & Moore, 1983; Burns, 1980; Driscoll, 1982; Flett et al., 1995c; McCranie & Bass, 1984; Missildine, 1963; Pacht, 1984; Rice, Ashby, & Preusser, 1996). According to Barrow and Moore (1983) there are four factors that can lead to the development of perfectionism: overtly critical and demanding parents, criticism that is implied through the parents' standards, the ideals and expectations of the parents, the absence of standards, and perfectionistic parents who act as models for perfectionistic attitudes and behaviors. All four factors indicate the role of the parents in the development of perfectionism. Barrow and Moore contend that the perfectionistic tendencies that are formed in the child are then maintained by a number of factors such as the emphasis that is placed on achievement in the educational system and unrealistic models in the popular culture.

Similarly, Burns (1980) theorized that a perfectionistic self-critical parent personalizes the child's difficulties by viewing the mistakes and failures of the child as indicative of faulty parenting. The perfectionistic parent's self-esteem is based on the success of the child, and therefore, the parent pressures the child to attain success and avoid failure. The child learns that love and approval from the parent is contingent upon outstanding performance while mistakes and failures are met with disappointment. Burns

states that the child then develops an inner dialogue that continues to reinforce success and punish failures.

Frost et al. (1991) measured perfectionism in both daughters and their parents, parental characteristics, and levels of psychopathology among the daughters. 72 female undergraduates completed the MPS, the Father/Mother Trait Scales, and the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983). The trait scales were designed to assess the level of parental harshness, and subjects were to indicate the extent to which a trait was characteristic of their parent, and the BSI is a shorted version of the SCL-90R which assesses general psychopathology and psychiatric symptoms. Three global indices were used to assess symptoms of psychopathology - General Symptom Index (GSI), Positive Symptom Total (PST), and a measure of symptom intensity (Positive Symptom Distress Index, PSDI). Of these 72 subjects, 50 of their mothers and 43 of their fathers completed the MPS and a self-descriptive trait scale which used the same descriptors as those in the daughters' Father/Mother Trait Scale. Perfectionism among mothers was correlated with perfectionism among daughters whereas no significant relationship was found for perfectionism among fathers and their daughters. Findings also indicated that daughters' ratings of fathers' and mothers' harshness were associated with perfectionism in the daughters.

Many other studies have provided further evidence of the relationship between parenting styles and perfectionism (Flett et al, 1995c; McCranie & Bass, 1984; Rice et al., 1996). In particular, Flett et al. (1995c) examined the relationship between perfectionism and parental authority styles. The Parental Authority Questionnaire was used to measure parenting style - authoritative parenting, authoritarian parenting, or permissive parenting.

Since authoritarian parents are often characterized as restrictive, punitive, and overcontrolling, an authoritarian parenting style is most similar to the concept of parental harshness. Findings showed that in men, socially prescribed perfectionism (i.e., the belief that others are expecting perfectionism) which is a dimension of perfectionism most often related to maladaptive functioning, was associated with reports of exposure to authoritarian parenting styles. Similarly, McCranie and Bass (1984) found that self-criticism was associated with perceptions of parents as emphasizing strict control and lacking in warmth, nurturance, and affection, and Rice et al. (1996) found that those with maladaptive perfectionist styles described their parents as more demanding and more critical than those with more adaptive perfectionist styles did. The literature on perfectionism point to the conclusion that parental behaviors are related to perfectionism.

Parenting styles differ from culture to culture, and therefore it seems reasonable to assume that culture may be a factor in the development of perfectionism. In accordance with the theories on the etiology of perfectionism, perfectionism may develop more readily in cultures in which the parents are perceived as being overly critical and demanding and as having high expectations of their children. For example, parents in Asian-American cultures are often perceived as having high expectations of their children and as emphasizing harsh parenting styles (Chiu, 1987; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Ho & Kang, 1984; Kelley & Tseng, 1992; Schneider & Lee, 1990; Wong, 1990).

Schneider and Lee (1990) conducted a field-based study using ethnographic interview and observation techniques with 46 East Asian and 49 Caucasian students in the sixth and seventh grades. Parent interviews revealed that East Asian parents had higher

educational expectations and standards for their children than Caucasian parents did and had higher demands on their children to obtain excellent grades. Two possible reasons for the findings are offered by the authors. For one, East Asian cultures emphasize education for self-improvement, self-esteem, and family honor. Secondly, many East Asian families may feel that occupational discrimination can be overcome with education. Most of the East Asian children were aware of their parents' expectations and equated good grades with the pride, honor, and happiness of their parents. One indication of the negative consequences of academic pressure can be seen through the interviews with the teachers; the teachers held very positive perceptions of the academic behaviors of the East Asian students but stated that these students seemed to lack social skills.

Chen and Stevenson (1995) studied the motivation and mathematics achievement of Asian-American, Caucasian-American, and East Asian students. All subjects were administered a mathematics achievement test and a questionnaire that included questions about reasons for studying hard, parental expectations, and self-reports of psychological well-being. The standards of Asian-American parents with respect to scores on a math test were perceived by the students as being significantly higher than those of Caucasian and Asian parents. Asian-American students also responded more positively than Caucasian students when asked whether their parents held expectations that were too high. In terms of psychological distress, the high levels of achievement on the mathematics test were not associated with psychological maladjustment.

There is evidence, not only for the high expectations that Asian-American parents have for their children, but of a parenting style more harsh than is found among Caucasian-Americans (Chiu, 1987; Dornbusch et al., 1987; Ho & Kang, 1984; Kelley &

Tseng, 1992). Kelley and Tseng (1992) studied cultural differences in child rearing styles between immigrant Chinese mothers and Caucasian-American mothers. They found that immigrant Chinese mothers reported themselves to be less nurturing, responsive, and consistent and more restrictive with their children than Caucasian-American mothers. They also found that immigrant Chinese mothers reported “harshly scolding” their children and physically punishing their children more than Caucasian-American mothers did.

Other studies have also shown that Asian-American parents engage more often in authoritarian parenting styles than Caucasian parents do (Chiu, 1987; Dornbusch et al., 1987; Ho & Kang, 1984). Chiu administered the Parental Attitude Research Instrument (PARI) to Chinese mothers living in Taiwan, Chinese-American mothers, and Caucasian-American mothers. The PARI was intended to measure a wide variety of child-rearing attitudes. Chiu found that Chinese mothers were more restrictive and controlling than Chinese-American mothers who in turn were more restrictive and controlling than Caucasian-American mothers. The Chinese-American mothers were also the most likely to approve of the expression of hostility or rejection towards their children.

It is important to note that Asian-Americans differ considerably with regards to their acculturation level. Acculturation has been described as a process that can occur when two or more cultures interact; the process involves giving up one’s traditional cultural values for that of the dominant social structure (Suinn, Rickard-Figueroa, Lew, & Vigil, 1987). If the development of perfectionism and its relationship to parental variables are a function of basic cultural values, it can be hypothesized that as Asian-Americans become more acculturated to Western values and ideals, the more they will embody the characteristics found in the dominant Western culture.

Broad cultural comparisons between Asian-American and Caucasian students are important in understanding the development of perfectionism and the function of perfectionism in the different cultures. However, comparisons such as this imply that the Asian-American group is homogeneous when in fact, each Asian-American cultural group is quite distinct. By combining all Asian-Americans into one group, differences between the various Asian-American cultures are neglected. Therefore, it is important to recognize that although broad cultural comparisons between Asian-American and Caucasian groups are useful, real cultural differences among Asian-Americans are being ignored.

Statement of the Problem

The goal of this study was to examine the differences between Asian-American students and Caucasian students regarding levels of perfectionism and various characteristics such as perception of parenting styles, GPA, and concern over grades. Perfectionism seems to develop more readily in those families with harsh parenting styles; for example, Frost et al. (1991) found that daughters' perfectionism was associated with both maternal and paternal harshness and Flett et al. (1995c) found that perfectionism was related to authoritarian parenting styles. This study examines differences between Asian-American students and Caucasian students with regards to perceived parental characteristics. Because the Asian-American culture is thought to emphasize harsh parenting styles, it is hypothesized that Asian-American students perceive their parents as having been more harsh and as having exhibited authoritarian parenting styles more than do Caucasian students. In addition, because parental harshness and authoritarian parenting styles have been found to be related to maladaptive perfectionism, it is further

hypothesized that Asian-American students will have higher perfectionism levels than Caucasian students will.

Furthermore, this study examines the differences between the two cultures in the relationship between perfectionism and parenting styles. Rice et al. (1996) found that maladaptive aspects of perfectionism were associated with harsh parenting styles; this study attempts to replicate these findings with the Caucasian student population. Similarly, it is hypothesized that among Caucasian students, perfectionism is also associated with authoritarian parenting styles. Next, this study examines how ethnicity affects the relationship between parental characteristics and perfectionism.

This study also examines whether perfectionism functions differently between the two cultures. To do this, the relationship between various educational variables and perfectionism is examined between the two cultures. Many studies have found higher levels of educational achievement amongst Asian-American as compared to Caucasian students (Reglin & Adams, 1990; Sue & Okazaki, 1990; Wong, 1990). Therefore, it is hypothesized that Asian-American students will have higher GPAs than Caucasian students. Previous studies have found that the Personal Standards dimension of perfectionism is associated with more positive personal characteristics (Brown et al., 1997; Frost et al., 1990; Frost & Henderson, 1991). Thus, it is hypothesized that high Personal Standards are associated with higher GPAs.

As the subjects of interest were college students, perfectionism towards educational achievement is examined. Specifically, the educational standards of parents as well as worry over meeting these parental standards is examined. Given the emphasis on education in the Asian-American culture, it is hypothesized that perceived parental

concern over grades and student concern over grades are higher for Asian-American students than for Caucasian students. This study also examines how ethnicity affects the relationship between perfectionism and both student's and parent's concern over grades. Because of the emphasis on educational achievement in the Asian-American culture, it is possible that Asian-American students may not be satisfied with attending a public university. Therefore, it is hypothesized that Asian-American students are less satisfied with their choice of university than will Caucasian students. To determine whether this affects levels of perfectionism, the relationship between perfectionism and satisfaction with choice of university is examined.

Many researchers may argue that Asian-Americans differ considerably with regards to acculturation and therefore should not be combined into one single group. Therefore, as an exploratory hypothesis, Asian-identified (least acculturated), bicultural, and Western-identified (most acculturated) Asian-Americans were compared with each other on the primary variables - parental characteristics and perfectionism. Specifically, it was hypothesized that parental characteristics and perfectionism are a function of a person's culture. Therefore, as an Asian-American becomes more acculturated to the Western culture, they will be expected to reflect patterns more similar to Caucasian subjects than will less acculturated Asian-Americans. To take into account the cultural differences in Asian-American ethnic groups, this study will also contain an exploratory analysis of whether there are significant differences between specific Asian-American ethnic groups in perceptions of parenting styles and levels of perfectionism.

CHAPTER 2

METHOD

Subjects

Subjects were selected from lists provided by the Registrar's Office at the University of Massachusetts at Amherst based on ethnicity and undergraduate status. A list of all undergraduate students living on campus who classified themselves as Asian-Americans was generated. There were 713 students on this initial list. A random list of 713 students who lived on campus and who classified themselves as Caucasians was also generated. On the Asian-American subjects list, all subjects with last names that were thought to be of Middle Eastern, Indian, or European/American descent were eliminated while any last names that were of questionable origin remained on the list. A total of 592 Asian-American subjects remained after this elimination process. The initial lists of Asian-American and Caucasian subjects were alphabetized and numbered. Therefore, the names that were eliminated from the list of Asian-American students had coinciding numbers, and the numbers were used to eliminate those names that coincided with the numbers on the Caucasian list, creating a list of Caucasian subjects that also contained 592 subjects.

Of the 592 surveys sent to Asian-American students, 25% were completed and returned (145 total, 89 women, 56 men). Of the 592 surveys sent to Caucasian students, 32% were returned (192 total, 117 women, 75 men). The mean age of the Asian-American sample was 19.97 years ($SE = 0.16$), and the mean age of the Caucasian sample was 19.74 years ($SE = 0.11$). The mean number of years in college for both samples was 2 years. Within the Asian-American sample, 53% identified themselves as Chinese, 19% as Korean, and 11% as Vietnamese, and because of the limited number of subjects who

identified themselves as belonging to other specific Asian-American ethnic groups, the remaining 17% of the Asian-American sample was categorized as "other."

Measures

Multidimensional Perfectionism Scale. (MPS; Frost et al., 1990). The MPS is a 35-item scale designed to measure overall perfectionism and the major dimensions of perfectionism. In addition to an overall perfectionism score, there are five subscales. The Concern Over Mistakes subscale (9 items) assesses negative reaction to mistakes, their interpretation of mistakes as failure, and a tendency to believe that their failure will result in the loss of respect by others. The Personal Standards subscale (7 items) assesses the setting of high standards and the importance of these standards on self evaluation. The Parental Expectations subscale (5 items) assesses the tendency to believe that parents set extremely high standards. The Parental Criticism subscale (4 items) assesses the perception that parents were overly critical. The Doubts About Actions subscale (4 items) assesses the extent to which subjects doubt their ability to accomplish tasks. Initial studies of the scale have shown that this scale is a reliable and valid measure, and specifically reliability coefficients of the MPS subscales were as follows: Concern Over Mistakes was .91, Doubts About Actions was .79, Parental Criticism was .77, Parental Expectations was .82, and Personal Standards was .81 (Frost et al., 1990).

Parental Harshness. (Frost et al., 1990). Parental harshness is assessed by asking subjects to rate the extent to which their parents possessed various traits such as being strict, demanding, or critical. There were identical measures for paternal and maternal ratings. Each measure contained 9 items ranging from 1 (not very characteristic of parent) to 7 (very characteristic of parent). An analysis of reliabilities showed the scale used to

measure paternal harshness had an alpha of .80. A similar scale designed to measure maternal harshness had an alpha of .79.

Parental Authority Questionnaire. (PAQ; Buri, 1991). The PAQ is a 30-item instrument designed to measure parental authority, or disciplinary practices, from the point of view of the child. Only those items indicative of authoritarian parenting styles will be used from the PAQ to determine the level of authoritarian parenting style that is implemented (10 questions). Therefore, the possible range of scores was from 10 to 50. Authoritarian parents are thought to control their children's behaviors through punitive disciplinary actions and to value unquestioning obedience from their children. The reliabilities for Mother's Authoritarianism was .85 and for Father's Authoritarianism was .87 (Buri, 1991). Two-week test reliabilities for Mother's Authoritarianism had an alpha of .86 and Father's Authoritarianism had an alpha of .85.

Student Concern Over Grades. (Frost, et al., 1993). This includes four questions to assess level of perfectionism with regard to grades. The 4 questions were as follows: 1) How important is it for you to do well in school? 2) How satisfied are you with your grades so far in college? 3) How happy or unhappy do you feel when your grade in a course is one-half grade lower than you were shooting for? and 4) How anxious are you right now about your grades? Items are answered on a 7-point Likert scale with items two and three reverse scored and high scores indicating high student concern over grades. The reliability alpha coefficients were .57.

Perceived Parental Concern Over Grades. (Frost et al., 1993). This measure was designed to assess whether subjects perceived their parents as perfectionistic with regard to grades. Six questions were included on the scale, 1) When you were in high school,

how unhappy or distressed was your mother when your grades were lower than they expected? (If this did not happen to you, how would your mother have felt if it had?) 2) How much importance does your mother place on education? 3) What is your mothers' expectations for your grades? 4) If you got poor grades one semester to what extent would your mother be disappointed? 5) To what extent did your mother push you to study when you were in Junior High and High school? 6) To what extent is your mother happy with your grades? The mother and father forms are identical except for appropriate references to gender. Responses to these items are made on a 7-point Likert scale with high scores indicating high parental concern over grades. An analysis of reliabilities on a similar version of this scale that combined the mother and father questions into single questions about parents showed the scale had an alpha of .76.

Satisfaction with Choice of University. Subjects were asked, "To what extent are you happy with your choice of university?" Responses were rated on a 7-point Likert scale with high scores indicating high satisfaction with university choice.

Suinn-Lew Asian Self-Identity Acculturation Scale. (SL-ASIA; Suinn et al., 1987). The SL-ASIA is a 21-item multiple choice questionnaire that assesses language preference (4 items), identity (4 items), friendship choice (4 items), behaviors (5 items), generational and geographic background (3 items), and attitudes (1 item). Each item is rated on a scale ranging from 1.00, indicative of low acculturation (or high Asian identity), to 5.00, indicative of high acculturation (or high Western identity). The 21 items are summed up giving a total score ranging from 21 to 105. A final acculturation score is obtained by dividing the sum by 21. Low, medium, and high scores on the SL-ASIA are referred to as, respectively, those who are Asian identified, bicultural, and Western identified. Suinn

et al. reported an alpha coefficient of .88 for the 21 items. The authors also used 5 additional items to assess the values (2 items), behavioral competencies (2 items), and self-identity (1 item) of the subjects. Alpha coefficients of .88 for the 21 items have been found. With respect to validity, scores on the SL-ASIA have been found to correlate with generation since immigration, length of residence in the United States, and self-ratings of cultural identity.

Hollingshead's Two Factor Index of Social Position. (Hollingshead, 1957). The Hollingshead measure was designed to assess the positions individuals occupy in the status structure. The two-factor index requires knowledge of occupation and education. The occupational scale is a seven-point scale that classifies occupations into socioeconomic groups. Social position is determined by professional ranks or by the size and value of businesses. The educational scale is also on a seven-point scale. Occupation is given a weight of 7 and education is given a weight of 4. The scaled scores are multiplied by the factor weights giving partial scores for each index, and the partial scores are added to give the Index of Social Position Score.

Procedure

All subjects were sent a questionnaire, an informed consent form, and a request for results form. For both Caucasian and Asian-American subjects, the questionnaires consisted of the MPS, Parental Harshness scale, Parental Authority Questionnaire (authoritarian portion), Student Concern Over Grades measure, and Parents Concern Over Grades measure. For Caucasian students, there was an additional set of questions regarding generational status, and for Asian-American students, the SL-ASIA was included (See Appendices A & B). Subjects were informed that if they completed and

returned the questionnaire, their names would be entered into a drawing for fifty dollars. Enclosed with the questionnaire was a stamped envelope in which to send back the questionnaire. Each time questionnaires were received, the subjects' responses were immediately separated from the return envelopes, informed consent forms, and request for results forms on which their names were printed. Questionnaires were then identified by identification numbers and not by the names of the subjects; the subjects' names were unrelated to these identification numbers.

Those subjects who did not complete and return a questionnaire were sent a reminder postcard two weeks after the initial postcards were sent out. After all the surveys were collected, the names of those who completed a survey were entered into a random drawing and the person who was picked was given a check for fifty dollars.

CHAPTER 3

RESULTS

Demographic Characteristics

Table 1 shows that approximately 95% of Asian-American subjects reported that either they or one parent was born outside of the U.S. On the other hand, approximately 92% of the Caucasian students reported that they, their parents, and at least one grandparent were born in the U.S. The generational differences between Asian-American and Caucasian subjects were significant ($F(1, 325) = 1445.37, p < .001$).

To determine the socioeconomic status (SES) of the subjects' fathers and mothers, the Hollingshead Index was used. The Hollingshead Index uses the parent's highest level of education and his/her current occupation to determine an overall SES score. Higher scores on the Hollingshead Index are indicative of lower SES status. Table 2 shows that the mean SES score for Asian-American fathers was 36.82 ($SE = 1.86$), and the mean SES score for Caucasian fathers was 30.45 ($SE = 1.16$); using a t-test not assuming equal variance, these differences were significant ($t(206) = 2.90, p < .001$). This indicates that the overall SES level of Asian-American fathers was, on average, lower than that of Caucasian fathers. Asian-American mothers had a mean SES score of 42.98 ($SE = 1.80$) and Caucasian mothers had a mean SES score of 31.96 ($SE = 1.07$); using a t-test not assuming equal variance, these differences were significant ($t(161) = 5.26, p < .001$). This indicates that, on average, Asian-American mothers had lower overall SES levels than did Caucasian mothers.

The Hollingshead Index does not account for parents who are housewives/househusbands or who are retired and therefore might not be an accurate

representation of SES level. Caucasian and Asian-American subjects differed in the number of parents who were housewives/househusbands or who were retired. Furthermore, there were differences between Caucasian and Asian-American subjects in the number of subjects who did not indicate the occupation of their parents. 10% of Caucasians and 18% of Asian-Americans did not report the occupation of their fathers or responded that their fathers were househusbands or were retired; these differences were significant ($\chi^2 (1) = 5.12, p < .05$). 18% of Caucasians and 33% of Asian-Americans did not report the occupation of their mothers or responded that their mother was a housewife or was retired; these differences were also significant ($\chi^2 (1) = 10.63, p < .005$). For these reasons, all further analyses of SES level will examine educational and occupational levels separately. As with the overall SES index, higher scores indicate lower occupational and educational levels. Table 2 displays means on measures of occupation and education for Asian-American and Caucasian fathers and mothers. Asian-American fathers had significantly higher scores on the occupation scale (lower level occupations) than did Caucasian fathers ($t (221) = 2.58, p < .05$), and likewise, Asian-American mothers had significantly higher scores on the occupation scale (lower level occupations) than did Caucasian mothers ($t (175) = 4.57, p < .001$). Regarding level of education attained, Asian-American fathers had significantly higher scores on the education scale (lower educational level) than did Caucasian fathers ($t (230) = 3.42, p < .01$), and Asian-American mothers also had significantly higher scores on the education scale (lower educational level) than did Caucasian mothers ($t (229) = 6.71, p < .001$).

Parental Characteristics

Parental characteristics were determined using two separate measures, both consisting of father and mother versions that used the same wording except for gender-appropriate changes. The Parental Harshness measure asked subjects to rate the extent to which certain traits described their parents (i.e. strict, demanding, critical) while the Parental Authoritarian Questionnaire asked subjects to rate the extent to which specific behaviors described their parents (i.e. "As I was growing up, my father often told me exactly what he wanted me to do and how he expected me to do it"). Higher scores meant that parents were rated as more harsh and as exhibiting more authoritarian behaviors respectively. The possible range of scores was from 10 to 50 for each parent.

Table 3 displays means and standard errors of Asian-American and Caucasian subjects on measures of parental harshness and authoritarianism. A single multivariate analysis of variance (MANOVA) was conducted to compare ethnic groups on the four parental measures. The overall MANOVA was significant ($F(4, 319) = 9.23, p < .001$) indicating that the two ethnic groups differed when all the parental measurements were considered. Examination of Table 3 reveals that Asian-American subjects rated both their parents as being more harsh and more authoritarian than did Caucasian subjects. Analyses of the parental measures yielded significant effects for ethnic groups on paternal harshness (HARSH-F; $F(1, 320) = 17.80, p < .001$) paternal authoritarianism (AUTH-F; $F(1, 320) = 9.44, p < .01$), maternal harshness (HARSH-M; $F(1, 320) = 9.96, p < .01$), and maternal authoritarianism (AUTH-M; $F(1, 320) = 21.28, p < .001$).

Since there were differences between ethnic groups in educational and occupational level of parents, the correlation between these two variables and parental

characteristics was examined. Because of the number of correlations that were computed, a more conservative criterion for significance of .005 was set. As seen in Table 4, occupational and educational levels of parents were not significantly related to any of the parental ratings. Therefore, although occupational and educational levels differed between ethnic groups, these variables did not seem to predict parental harshness or authoritarianism.

Correlations were computed within ethnic groups in order to examine the relationships between the various parental measures (harshness of fathers/mothers and level of authoritarian style of fathers/mothers). Because a total of 16 correlations were computed, a more conservative criterion for significance of .005 was set. As shown in Table 5, paternal harshness was highly correlated with paternal authoritarianism for both Caucasian and Asian-American subjects ($r(185) = .697, p < .001$; $r(139) = .558, p < .001$). Likewise, maternal harshness was highly correlated with maternal authoritarianism for both Caucasian and Asian-American subjects ($r(187) = .642, p < .001$; $r(139) = .569, p < .001$). Interestingly, for both Caucasian and Asian-American subjects, paternal authoritarianism and maternal authoritarianism were also correlated with each other ($r(185) = .483, p < .001$; $r(138) = .511, p < .001$). For Caucasian subjects only, paternal harshness was also related to maternal authoritarianism and maternal harshness was also related to paternal authoritarianism ($r(187) = .209, p < .005$; $r(183) = .231, p < .005$). Tests were conducted to determine whether there were significant differences in the correlations of parental ratings between ethnic groups. There were no significant differences between Asian-American and Caucasian subjects in the correlation of parental measures - the largest difference in correlations was .160 ($z = 1.42, p > .05$). This

indicates that the general correlational patterns were similar between Caucasian and Asian-American subjects; the strongest correlations were between the two paternal measures and between the two maternal measures, there were moderate correlations between paternal and maternal authoritarian behaviors, smaller correlations between an authoritarian measure of one parent and a trait measure of the other parent and between the paternal and maternal trait measures.

Table 3 displays means on each parental measure for each gender within ethnic groups. A repeated measures analysis was conducted using gender of the parent and parental measures (measure of harsh traits and measure of authoritarian behaviors) as within subjects factors and gender of the subject as the between subjects factor. Analyses revealed that when parental measures were combined, Asian-American subjects rated their fathers as being significantly more harsh and exhibiting more authoritarian behaviors than their mothers ($F(1, 137) = 8.49, p < .005$) and likewise, Caucasian subjects rated their fathers as being significantly more harsh and exhibiting more authoritarian behaviors than their mothers ($F(1, 137) = 6.90, p < .001$). In addition, the differences between father and mother ratings on the harshness and authoritarianism measures depending on the gender of the subject were examined. There were no significant interactions between gender of the subject and gender of the parent being rated for both ethnic groups.

Gender differences within ethnic groups between male and female subjects on ratings of parental harshness and level of authoritarian parenting style were examined; analyses of gender differences within ethnic groups did not reveal any significant differences between male and female subjects on ratings of parental harshness and level of authoritarian parenting style. Differences in parental ratings between ethnic groups were

also examined for each gender separately. First, differences between female subjects were examined. Asian-American female subjects, as compared to Caucasian female subjects, rated their fathers as being significantly more harsh ($F(1, 200) = 10.16, p < .01$). Although Asian-American female subjects also rated their fathers as being more authoritarian, these differences were not significant ($F(1, 200) = 2.82, p = .094$). On ratings of maternal characteristics, Asian-American female subjects, as compared to Caucasian female subjects, rated their mothers as being significantly more harsh ($F(1, 202) = 5.30, p < .05$) and significantly more authoritarian ($F(1, 204) = 13.87, p < .001$).

Secondly, differences between male subjects were examined and analyses revealed that all differences on parental measures between Asian-American and Caucasian male subjects were significant. On measures of paternal characteristics, Asian-American male subjects rated their fathers as being more harsh ($F(1, 129) = 8.99, p < .01$) and more authoritarian than did Caucasian subjects ($F(1, 125) = 7.28, p < .01$). On measures of maternal characteristics, Asian-American male subjects rated their mothers as being more harsh ($F(1, 125) = 6.22, p < .05$) and more authoritarian than did Caucasian male subjects ($F(1, 125) = 9.29, p < .01$).

Perfectionism

Levels of perfectionism were determined using the Multidimensional Perfectionism Scale. This scale measures five dimensions of perfectionism - Concern Over Mistakes, Doubts About Actions, Parental Criticism, Parental Expectations, and Personal Standards. The first two dimensions reflect maladaptive evaluation concerns, Parental Criticism and Parental Expectations captures perceived parental standards, and the Personal Standards subscale reflects more positive achievement striving combined with maladaptive

characteristics. Table 6 displays means and standard errors of Asian-American and Caucasian subjects on the perfectionism subscales. Similar to past studies conducted using undergraduate college populations, there were no differences between genders within the ethnic groups on perfectionism. Therefore, genders were combined for all further analyses of the perfectionism measure.

A MANOVA was performed to compare ethnic groups on the five subscales of the perfectionism measure. The overall MANOVA was significant ($F(5, 329) = 10.73, p < .001$) indicating that the two ethnic groups differed when all five dimensions of perfectionism were considered. The MANOVA was followed by one-way ANOVAs. Asian-American subjects scored significantly higher on the Concern Over Mistakes subscale than did Caucasian subjects ($F(1, 335) = 4.34, p < .05$), and Asian-American subjects had significantly higher Doubts About Actions scores than did Caucasian subjects ($F(1, 335) = 4.41, p < .05$). Asian-American subjects also had higher scores than Caucasian subjects on the Parental Criticism subscale; these differences were highly significant ($F(1, 335) = 43.12, p < .001$). Likewise, scores on the Parental Expectations subscale were significantly higher for Asian-American subjects than for Caucasian subjects ($F(1, 335) = 35.77, p < .001$). Although Asian-American subjects had lower scores than Caucasian subjects on the Personal Standards subscale, these differences were not significant ($F(1, 335) = 0.75, p = 0.39$).

To check whether a relationship existed between perfectionism and the occupational and educational level of the subjects' parents, correlations were calculated and are displayed in Table 7. Because of the number of correlations, a more conservative criterion of .005 was set. Occupational and educational level of parents were not

significantly related to any dimension of perfectionism. Although there were differences between ethnic groups on occupational and educational levels, no relationship was found between these two variables and perfectionism.

Correlations were obtained within ethnic groups to ascertain the extent to which the perfectionism subscales were correlated; these correlations are displayed in Table 8. For Caucasian subjects, Concern Over Mistakes, Doubts About Actions, and Parental Expectations were strongly correlated to all the other perfectionism subscales. For Asian-American subjects, Concern Over Mistakes and Parental Expectations were most strongly related to all the other subscales. Significance tests were then performed on the differences between correlations for Caucasian and Asian-American subjects. The largest difference between ethnic groups in the correlations between perfectionism subscales was not significant which indicates that the structure of the perfectionism measure was similar between the ethnic groups ($z = 1.08, p > .05$). Indeed, Table 8 shows that the correlation matrix had similar patterns for both Caucasian and Asian-American subjects.

The Relationship Between Parental Characteristics and Perfectionism

Table 9 displays the correlations between perfectionism and the parental measures for both Caucasian and Asian-American subjects. Because a total of 40 comparisons were made, a more conservative criterion for significance of .005 was set. For Caucasian subjects, all the parental measures (paternal/maternal harshness and paternal/maternal authoritarianism) were significantly related to all of the perfectionism subscales except for Personal Standards; no parental measurement was related to Personal Standards. For Asian-American subjects, all the parental measures were significantly related to Parental Criticism and Parental Expectations, but only paternal authoritarianism was significantly

related to Doubts About Actions. Also, for Asian-American subjects, all parental measures but paternal harshness were significantly related to Concern Over Mistakes. None of the parental measurements were related to Personal Standards. For both groups, Parental Criticism was the most highly correlated with all parental measures followed by Parental Expectations, Concern Over Mistakes and Doubts About Actions had more varied correlations with the parental traits, and Personal Standards was not significantly related to any parental measures.

A comparison of correlations does not take into account differences in the variability of each group; therefore a series of linear regressions was performed to examine differences in the relationship between parental traits and perfectionism. Each perfectionism dimension was regressed on ethnicity, each parental trait, and the joint effect of ethnicity and each parental trait so that a significant contribution of the joint effect would indicate that the relationship between perfectionism and parental traits differed significantly between the two ethnic groups. Table 10 displays the t-values for the joint effect of ethnicity and parental characteristic regressed on each perfectionism dimension. There were no significant differences between ethnic groups on any of the parental measures in predicting any of the subscales of perfectionism. This indicates that although there were differences between ethnic groups in the significance of the correlations between parenting styles and perfectionism, these differences were not significant - the relationship between parental traits and perfectionism was similar for both ethnic groups.

To determine the contribution of ethnicity in the prediction of perfectionism after taking into account parental traits, a series of linear regressions were performed where each perfectionism dimension served as a criterion and all the parental traits and ethnicity

as predictors. Each regression analysis was comprised of two hierarchical steps: In step 1, all the parental traits were entered, and in step 2, ethnicity was entered. Ethnicity made significant contributions in the prediction of Parental Criticisms after parental traits were entered ($t(318) = -3.93, p < .001$). In the prediction of Parental Criticisms, parental traits accounted for 41% of the variance and ethnicity explained another 3% of the variance. Ethnicity also made significant contributions in the prediction of Parental Expectations ($t(318) = -3.93, p < .001$) where parental traits accounted for 24% of the variance and ethnicity explained an additional 3% of the variance.

There were differences between genders in the relationship between parental traits and perfectionism for both Caucasian and Asian-American subjects. The correlations between the parental measures and the perfectionism dimensions for each gender within ethnic groups are displayed in Table 11a and Table 11b. Examination of the correlations reveal that for both Caucasian and Asian-American female subjects various parental characteristics were related to different aspects of perfectionism. This was also true for Caucasian males, but for Asian-American males, only paternal harshness was related to perfectionistic expectations and criticisms of parents. Because the variabilities between genders and ethnic groups differed, it was decided that a series of linear regressions would be the most appropriate way to analyze differences in the relationship between parental traits and perfectionism taking into account gender differences. First, differences between ethnic groups within genders in the relationship between parental traits and perfectionism was examined. Each perfectionism dimension was regressed on ethnicity, each parental trait, and the joint effect of ethnicity and each parental trait so that the significance of the joint effect would indicate a difference in the relationship between perfectionism and

parental trait for Caucasian and Asian-American subjects. The results displayed in Table 12 reveals that the only significant difference between ethnic groups was in the relationship between paternal harshness and Concern Over Mistakes for male subjects ($t(127) = 2.66, p < .01$). In this case, there was a significant positive relationship between paternal harshness and Concern Over Mistakes for Caucasian male subjects ($r = .353, p < .005$) and a negative relationship, though not significant, between paternal harshness and Concern Over Mistakes for Asian-American male subjects ($r = -.105, p = .439$).

Gender differences within ethnic groups in the relationship between parental traits and perfectionism were also examined. Examination of the correlation matrixes in Table 11a and 11b reveal that in both ethnic groups, the relationship between parental traits and perfectionism appears to be stronger for females than males. A series of linear regressions were performed to examine whether the relationship between parental traits and perfectionism differed between genders within each ethnic group. Each perfectionism dimension was regressed on gender, each parental trait, and the joint effect of gender and each parental trait so that significance of the joint effect would indicate that the relationship between perfectionism and parental traits differed significantly between the two genders. These analyses were performed separately for each ethnic group. Table 13 displays the t-values for the joint effect of gender and parental characteristic regressed on each perfectionism dimension.

For Caucasian subjects, there were significant differences in the relationship between maternal harshness and Parental Expectations depending on gender of the subject ($t(186) = -2.85, p < .01$); for female subjects there was a significant relationship between maternal harshness and Parental Expectations ($r = .500, p < .001$), whereas for male

subjects, this relationship was not significant ($r = .091$, $p = .44$). Furthermore, there were significant differences in the relationship between maternal authoritarian behaviors and both Parental Criticism ($t(187) = -2.67$, $p < .01$) and Parental Expectations ($t(187) = -2.95$, $p < .01$). The relationship between maternal authoritarian behaviors and Parental Criticism was significant for female subjects ($r = .463$, $p < .001$), whereas for male subjects, this relationship was not significant ($r = .134$, $p = .26$), and likewise, the relationship between maternal authoritarian behaviors and Parental Expectations was also significant for female subjects ($r = .392$, $p < .001$) but not for male subjects ($r = -.022$, $p = .85$).

For Asian-American subjects, there were significant differences between genders in the relationship between paternal harshness and Concern Over Mistakes ($t(139) = -2.49$, $p < .05$); this relationship was significant for female subjects ($r = .305$, $p < .005$) but not for male subjects ($r = -.105$, $p = .44$). There were significant differences in the relationship between paternal authoritarian behaviors and Doubts About Actions ($t(138) = -2.00$, $p < .05$); this relationship was significant for female subjects ($r = .481$, $p < .001$) but not for male subjects ($r = .134$, $p = .33$). There also existed significant differences between genders in the relationship between and maternal authoritarian behaviors and both Parental Criticism ($t(138) = -2.37$, $p < .05$) and Parental Expectations ($t(138) = -2.48$, $p < .05$). The relationship between maternal authoritarian behaviors and Parental Criticism was significant for female subjects ($r = .629$, $p < .001$) and for male subjects ($r = .287$, $p < .05$) but for female subjects, this relationship between maternal authoritarian behaviors and Parental Criticism was much stronger. The relationship between maternal authoritarian behaviors and Parental Expectations was significant for female subjects ($r = .568$, $p <$

.001) but not for male subjects ($r = .217$, $p = .22$). In all of the above cases, the relationships were significant for female subjects but not for male subjects. For Asian-American subjects, there was also a significant difference in the relationship between paternal harshness and Parental Expectations ($t(138) = 2.26$, $p < .05$), but in this case, this relationship was significant for male subjects ($r = .513$, $p < .001$) but not for female subjects ($r = .083$, $p = .45$).

To determine the contribution of ethnicity in the prediction of perfectionism after taking into account parental traits, a series of linear regressions was performed where each perfectionism dimension served as a criterion and all the parental traits and ethnicity as predictors; this was done for each gender separately. Each regression analysis was comprised of two hierarchical steps: In step 1, all the parental traits were entered, and in step 2, ethnicity was entered. Analyses revealed that similarly to when genders were combined, ethnicity made significant contributions in the prediction of Parental Criticisms for both female and male subjects ($t(194) = -2.90$, $p < .005$; $t(118) = -2.91$, $p < .005$). For females, parental traits explained 47% of the variance in the prediction of Parental Criticism while ethnicity explained another 2% of the variance. For male subjects, 35% of the variance in the prediction of Parental Criticisms was explained by parental traits while ethnicity explained an additional 4% of the variance. As was found before, this was also true for Parental Expectations for both female and male subjects ($t(194) = -2.36$, $p < .05$; $t(118)$, $p < .001$). For female subjects, 30% of the variance in the prediction of Parental Expectations was explained by parental traits while ethnicity explained an additional 2% of the variance. For male subjects, 22% of the variance was accounted for by parental traits while ethnicity explained another 7% of the variance.

Educational Variables

To determine whether perfectionism functions differently in the two cultures, grade point average, concern over grades of the student and their parents, and satisfaction with choice of university were examined separately and in relation to perfectionism. The average GPA for the Asian-American subjects was 2.94 ($SE = 0.05$), and the average GPA for the Caucasian subjects was 3.04 ($SE = 0.04$). These differences were not significant.

The relationship between perfectionism and GPAs was examined for each ethnic group separately. Because of the number of correlations, a more conservative criterion of .005 was set. For the Caucasian subjects, there was a significant negative relationship between Parental Criticism and GPA ($r = -.213, p < .005$) and a significant positive relationship between Personal Standards and GPA ($r = .299, p < .001$). For the Asian-American subjects, there was only a significant relationship between Personal Standards and GPA ($r = .400, p < .001$).

To examine differences between ethnic groups in the relationship between perfectionism and GPA taking into account differences in variabilities between genders, a series of linear regressions were performed. GPA was regressed on ethnicity, each dimension of perfectionism, and the joint effect of each dimension of perfectionism and ethnicity so that a significant contribution of the joint effect would indicate that the relationship between perfectionism and GPA differed between the two ethnic groups. There were no significant differences between ethnic groups on any of the perfectionism dimensions in predicting GPA.

Differences between ethnic groups in the relationship between perfectionism and GPA were examined for each gender separately. For Asian-American subjects, there was a significant relationship between Personal Standards and GPA for female subjects only ($r = .550, p < .001$). For Caucasian men and women, there was no longer a significant relationship between Parental Criticism and GPA, but there remained a significant relationship between Personal Standards and GPA for female subjects only ($r = .338, p < .001$).

To examine differences between genders in the relationship between perfectionism and GPA, a series of linear regressions were performed for each ethnic group. GPA was regressed on gender, each dimension of perfectionism, and the joint effect of each dimension of perfectionism and gender so that a significant contribution of the joint effect would indicate that the relationship between perfectionism and GPA differed between male and female subjects. The only significant difference between genders was in the Asian-American group. For Asian-American subjects, there was a significant difference between male and female subjects in the relationship between Personal Standards and GPA ($t(122), p < .05$); Personal Standards and GPA were significantly related for female subjects ($r = .550, p < .001$) but not for male subjects ($r = .185, p = .18$).

To determine a subject's concern over grades a 4-item measure designed to assess perfectionism with regards to grades was used (COG-S). Similar 6-item measures were used to determine perceived parental concern over grades. There are two versions of this measure, one to ascertain father's concern over the subject's grades (COG-F) and one to ascertain mother's concern over the subject's grades (COG-M). In all three versions, a higher score was indicative of increased concern over grades.

A single multivariate analysis of variance (MANOVA) was conducted to compare ethnic groups on the three concern over grades measures. The overall MANOVA was significant ($F(3, 326) = 13.16, p < .001$) indicating that the two ethnic groups differed when all three concern over grades measures were considered. Examination of the means in Table 14 reveals that for Caucasian subjects, the mean subject's concern over grades score was 19.00 ($SE = 0.27$), and for Asian-American subjects, the mean subject's concern over grades score was 20.97 ($SE = 0.23$); these differences were highly significant ($t(308) = 5.32, p < .001$). For Caucasian subjects, the father's concern over grades score was 26.39 ($SE = 0.46$), and for Asian-American subjects, the mean father's concern over grades score was 29.57 ($SE = 0.50$); these differences were also highly significant ($t(314) = 4.67, p < .001$). For Caucasian subjects, the mean mother's concern over grades score was 26.44 ($SE = 0.43$), and for Asian-American subjects, the mean mother's concern over grades score was 28.75 ($SE = 0.64$); these differences were also significant ($t(264) = 2.99, p < .005$). There were no significant gender differences within ethnic groups on any of the concern over grades measures.

The relationship between concern over grades and perfectionism was examined. Because of the number of correlations computed, a more conservative criterion for significance of .005 was set. The correlation matrixes displayed in Table 15 reveal that for both ethnic groups, concern over grades of the fathers and mothers were related to Parental Criticism and Parental Expectations, whereas concern over grades of the students was primarily related to Concern Over Mistakes and Doubts About Actions. There were a few differences between Caucasian and Asian-American subjects in the relationship between concern over grades and perfectionism. First, for Asian-American subjects,

concern over grades of the father was significantly related to Doubts About Actions, and this was not so for Caucasian subjects. Secondly, for Caucasian subjects, Parental Expectations was correlated with concern over grades of the students, but this was not so for Asian-American subjects.

A series of linear regressions were performed to determine whether the relationship between concern over grades and perfectionism did in fact differ between ethnic groups. Each measure of concern over grades was regressed on ethnicity, each dimension of perfectionism, and the joint effect of ethnicity and each dimension of perfectionism so that significance of the joint effect would indicate that the relationship between perfectionism and concern over grades differed significantly between ethnic groups. There were no significant joint effects, which suggests that the relationship between perfectionism and concern over grades of parents and the subjects themselves was similar for both Caucasian subjects and Asian-American subjects.

To further examine the nature of the relationship between perfectionism and concern over grades, the relationship between these two variables for each gender was examined separately. Each measure of concern over grades was regressed on ethnicity, each dimension of perfectionism, and the joint effect of ethnicity and each dimension of perfectionism so that significance of the joint effect would indicate that the relationship between perfectionism and concern over grades differed significantly between genders. For female subjects, there were no significant differences in the relationship between perfectionism and concern over grades between the two ethnic groups. On the other hand, for male subjects, there was a significant difference between ethnic groups in the relationship between Parental Criticism and concern over grades of the father. For

Caucasian males, there was a significant relationship between Parental Criticism and concern over grades of the father ($r = .624, p < .001$), whereas for Asian-American males, the relationship between Parental Criticism and concern over grades of the father was not significant ($r = .188, p = .110$).

To rate satisfaction with their choice of university, subjects were asked, "To what extent are you happy with your choice of university?" Answers ranged from 1 ("not at all") to 7 ("very much"). The mean score for the Asian-American subjects was 4.38 ($SE = .14$), and the mean score for the Caucasian subjects was 4.95 ($SE = .12$). Analyses revealed that Caucasian subjects were significantly more satisfied with their choice of university than Asian-American subjects ($t(303) = -3.05, p < .005$). The relationship between perfectionism and satisfaction with choice of university was examined for each ethnic group separately. Due to the number of correlations, a more conservative criterion of .005 was set. For Asian-American subjects, there was a significant negative relationship between Concern Over Mistakes and satisfaction with choice of university ($r = -.268, p < .005$). For Caucasian subjects, there was a significant negative relationship between satisfaction with university and Concern Over Mistakes ($r = -.216, p < .005$), Parental Criticism ($r = -.251, p .001$), and Parental Expectations ($r = -.230, p < .005$).

To further examine the relationship between perfectionism and satisfaction with university choice, a series of linear regressions were performed to determine whether the relationship between perfectionism and satisfaction with choice of university differed significantly between ethnic groups. Satisfaction with university choice was regressed on ethnicity, each dimension of perfectionism, and the joint effect of each dimension of perfectionism and ethnicity so that a significant contribution of the joint effect would

indicate that the relationship between perfectionism and satisfaction with university choice differed between the two ethnic groups. The only significant difference between ethnic groups was in the relationship between satisfaction with university choice and Parental Expectations ($t(202) = -2.07, p < .05$). In this case, there was a significant negative relationship between satisfaction with university choice and Parental Expectations for Caucasian subjects ($r = -.230, p < .005$) while for Asian-American subjects, this relationship was not significant ($r = .006, p = .94$).

Ethnic differences within genders in the relationship between satisfaction with university choice and perfectionism was also examined. Examination of the correlations between these two variables revealed that a significant relationship was found only for Caucasian female subjects. For Caucasian female subjects, there was a significant negative relationship between satisfaction with university choice and Parental Expectations ($r = -.268, p < .005$). To further examine the relationship between perfectionism and satisfaction with university choice, a series of linear regressions was performed to determine whether the relationship between perfectionism and satisfaction with choice of university differed between ethnic groups. Satisfaction with university choice was regressed on ethnicity, each dimension of perfectionism, and the joint effect of each dimension of perfectionism and ethnicity so that a significant contribution of the joint effect would indicate that the relationship between perfectionism and satisfaction with university choice differed between the two ethnic groups. This was done for each gender separately. There was a difference between ethnic groups in the relationship between satisfaction with university choice and Parental Expectations for female subjects only ($t(333) = -2.32, p < .05$). In this case, there was a significant negative relationship between

satisfaction with university choice and Parental Expectations for Caucasian female subjects ($r = -2.68, p < .005$), while for Asian-American female subjects this relationship was not significant ($r = .056, p = .60$).

Because of the differences between ethnic groups in educational and occupational level of parents, the correlation between GPA, concern over grades, and satisfaction with university choice and educational and occupational level of parents was examined.

Because of the number of correlations, a more conservative criterion of .005 was set. Educational and occupational level of parents were not significantly related to GPA, concern over grades, and satisfaction with university choice for both ethnic groups.

Differences Within the Asian-American Sample

An exploratory analysis was performed on differences within the Asian-American sample depending on the acculturation level of the subject. Using the SL-ASIA, a subject's acculturation level can range from 1 (Asian-American-identified) to 5 (Western identified). For this present study, the range of acculturation level was from 1 to 4, and there were only 5 subjects who scored 1 and 6 subjects who scored 4 on the SL-ASIA measure. Therefore, subjects were combined into two groups with those scoring 1 and 2 being grouped as "Asian-identified" and those scoring 3 and 4 as being grouped as "Western-identified."

Table 16 displays the differences in parental measures depending on acculturation level. Analyses revealed no significant differences between the Asian-identified group and the Western identified group on the four parental measures. The means and standard errors on the perfectionism dimensions depending on acculturation level are displayed in Table 17. Analyses revealed that there were significant differences between acculturation

levels only on the Concern Over Mistakes subscale ($t = 2.14, p < .05$); Asian-identified subjects had higher Concern Over Mistakes scores than Western identified subjects. The mean GPA for the Asian identified group was 3.03 ($SE = .09$) and the mean GPA for the Western identified group was 2.88 ($SE = .06$). These differences were not significant.

Another exploratory analysis that was included was concerning possible differences between ethnic groups. Because of the limited number of subjects in other ethnic groups, subjects were divided into four groups (Chinese, Korean, Vietnamese, and other). Analyses of the different ethnic groups revealed that there were no significant differences between cultural groups in the parental measures and in levels of perfectionism.

Table 1. Generational Level in Percents for Asian-American and Caucasian Students

	1	2	3	4	5	Don't Know
<u>Asian-American</u>	53.1	42.1	.7	.7	.7	2.8
<u>Caucasian</u>	1.0	3.1	1.0	30.2	61.5	3.1

- 1 = subject was born outside of the U.S.
- 2 = subject born in the U.S., either parent born outside the U.S.
- 3 = subject born in the U.S., both parents born in the U.S., and all grandparents born outside the U.S.
- 4 = subject born in the U.S., both parents born in the U.S., and at least one grandparent born outside the U.S. and one grandparent born in the U.S.
- 5 = subject born in the U.S., both parents born in the U.S., and all grandparents also born in the U.S.

Table 2. Demographic Characteristics

	<u>Caucasians</u>	<u>Asian-Americans</u>	<u>t-statistic, equal variances</u> <u>not assumed</u>
	<u>Mean (SE)</u>	<u>Mean (SE)</u>	
SESF	30.45 (1.16)	36.82 (1.86)	2.90**
SESM	31.96 (1.07)	42.98 (1.80)	5.26***
JobF	2.92 (.13)	3.52 (.19)	2.58*
EduF	2.53 (.12)	3.12 (.18)	3.42**
JobM	3.08 (.00)	4.06 (.15)	4.57***
EduM	2.67 (.00)	3.79 (.15)	6.71***

SESF = socioeconomic level of the father, SESM = socioeconomic level of the mother, JobF = job level of the father, JobM = job level of the mother, EduF = educational level of the father, EduM = educational level of the mother

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3. Means and Standard Errors for Asian-American and Caucasian Male and Female Subjects on Measures of Parental Harshness and Level of Authoritarian Parenting Style

	Caucasian			Asian-American		
	females	males	combined	females	males	combined
HARSH-F	31.05 (1.07)	32.15 (1.13)	31.48 (0.79)	35.87 (1.01)	37.27 (1.26)	36.42 (0.79)
HARSH-M	29.72 (0.91)	29.91 (1.05)	29.79 (0.69)	32.91 (1.06)	33.62 (0.97)	33.18 (0.75)
AUTH-F	28.99 (1.02)	29.75 (1.28)	29.29 (0.80)	31.48 (1.04)	34.81 (1.33)	32.75 (0.83)
AUTH-M	26.22 (0.81)	26.86 (1.02)	26.47 (0.63)	30.80 (0.92)	31.58 (1.15)	31.09 (0.72)

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism

Table 4. Correlations Between Parental Measures and Educational/Occupational Measures

	Paternal Harshness	Maternal Harshness	Paternal Authoritarianism	Maternal Authoritarianism
<u>Caucasians</u>				
EDUF	.061	-.014	.088	.059
EDUM	.108	.046	.161	.133
JOBF	.060	-.009	.019	-.051
JOBM	.117	.054	.171	.098
<u>Asian-Americans</u>				
EDUF	.007	.060	.011	.011
EDUM	.079	.093	.001	.056
JOBF	-.031	-.065	.093	.129
JOBM	.065	-.001	.194	.129

EDUF = educational level of fathers, EDUM = educational level of mothers, JOBF = occupational level of fathers, JOBM = occupational level of mothers

Table 5. Correlations Between Parental Measures

	HARSH-F	HARSH-M	AUTH-F	AUTH-M
<u>Caucasians</u>				
HARSH-F	-			
HARSH-M	.159	-		
AUTH-F	.697**	.231*	-	
AUTH-M	.209*	.642**	.483**	-
<u>Asian-Americans</u>				
HARSH-F	-			
HARSH-M	.137	-		
AUTH-F	.558**	.070	-	
AUTH-M	.192	.569**	.511**	-

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism

*p < .005, **p < .001

Table 6. Means and Standard Errors for Dimensions of Perfectionism as a Function of Cultural Group

	Caucasian			Asian-American		
	females	males	combined	females	males	combined
MPS Dimensions						
CM	20.49 (0.65)	21.98 (0.82)	21.08 (0.51)	22.49 (0.81)	23.05 (0.89)	22.71 (0.60)
DA	10.12 (0.33)	10.22 (0.39)	10.20 (0.25)	10.69 (0.32)	11.43 (0.45)	10.98 (0.26)
PC	8.09 (0.37)	8.19 (0.39)	8.13 (0.27)	10.85 (0.43)	11.02 (0.51)	10.92 (0.33)
PE	14.61 (0.41)	14.41 (0.48)	14.53 (0.31)	16.99 (0.46)	17.80 (0.50)	17.30 (0.34)
PS	23.40 (0.45)	24.58 (0.56)	23.86 (0.35)	23.06 (0.56)	23.88 (0.72)	23.38 (0.44)

CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

Table 7. Correlations Between Perfectionism and Educational/Occupational Measures

	CM	DA	PC	PE	PS
<u>Caucasians</u>					
EDUF	.029	.010	.038	-.112	-.005
EDUM	.012	.038	.153	.023	.014
JOBF	.030	.022	.043	-.093	-.034
JOBM	.036	.059	.086	.067	.094
<u>Asian-Americans</u>					
EDUF	-.063	.014	-.041	.012	.075
EDUM	-.082	.025	.003	.056	-.043
JOBF	.077	.133	-.034	-.042	.119
JOBM	-.003	.147	.042	.096	.012

CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards, EDUF = educational level of fathers, EDUM = educational level of mothers, JOBF = occupational level of fathers, JOBM = occupational level of mothers

Table 8. Correlations Between Perfectionism Dimensions

	CM	DA	PC	PE	PS
<u>Caucasians</u>					
CM	-				
DA	.550**	-			
PC	.468**	.413**	-		
PE	.425**	.247*	.606**	-	
PS	.444**	.262**	.127	.278**	-
<u>Asian-Americans</u>					
CM	-				
DA	.417**	-			
PC	.392**	.399**	-		
PE	.324**	.303**	.623**	-	
PS	.398**	.142	.037	.308**	-

CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p < .005, **p < .001

Table 9. Correlations Between Parental Measures and Perfectionism Measure

	CM	DA	PC	PE	PS
<u>Caucasians</u>					
HARSH-F	.320**	.278**	.463**	.318**	.057
HARSH-M	.266**	.280**	.455**	.353**	.098
AUTH-F	.342**	.278**	.470**	.339**	.166
AUTH-M	.245*	.211*	.347**	.235*	.107
<u>Asian-Americans</u>					
HARSH-F	.160	.175	.475**	.240*	.021
HARSH-M	.259*	.098	.385**	.329**	.127
AUTH-F	.312**	.357**	.421**	.354**	.122
AUTH-M	.278**	.236	.512**	.453**	.168

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p < .005, **p < .001

Table 10. t-value for Joint Effect of Ethnicity and Parental Characteristic in the Regression Equation:
perfectionism dimension = constant + b1 ethnicity + b2 parental characteristic + b3 ethnicity x parental characteristic

Source	Perfectionism Dimension				
	CM	DA	PC	PE	PS
Ethnicity x HARSH-F	1.09	0.81	-1.07	0.46	0.24
Ethnicity x HARSH-M	-0.16	1.69	0.23	0.17	-0.41
Ethnicity x AUTH-F	-0.13	-0.73	-0.24	-0.35	0.17
Ethnicity x AUTH-M	-1.40	-0.07	-1.95	-1.99	-0.68

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

Table 11. Correlations Between Parental Measures and Perfectionism Measures for Each Gender Within Ethnic Groups

<u>Caucasians</u>		CM	DA	PC	PE	PS
Females						
	HARSH-F	.298*	.259	.459**	.318*	.069
	HARSH-M	.253	.241	.480**	.500**	.193
	AUTH-F	.188	.298*	.532**	.428**	.251
	AUTH-M	.687**	.253	.463**	.392**	.201
Males						
	HARSH-F	.353*	.317	.474**	.325*	.020
	HARSH-M	.291	.348*	.406**	.091	-.067
	AUTH-F	.283	.253	.360*	.200	.024
	AUTH-M	.162	.134	.134	-.022	-.051

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p < .005, **p < .001

Continued, next page

Table 11. continued

Asian-American		CM	DA	PC	PE	PS
Females						
	HARSH-F	.305*	.269	.420**	.083	-.023
	HARSH-M	.274	.048	.492**	.318*	.095
	AUTH-F	.379**	.481**	.488**	.356*	.009
	AUTH-M	.386**	.237	.629**	.568**	.255
Males						
	HARSH-F	-.105	.029	.567**	.513**	.076
	HARSH-M	.212	.196	.120	.355	.194
	AUTH-F	.175	.134	.306	.319	.271
	AUTH-M	.359	.226	.287	.217	.010

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p < .005, **p < .001

Table 12. t-value for Joint Effect of Ethnicity and Parental Characteristic in the Regression Equation:
perfectionism dimension = constant + b1 ethnicity + b2 parental characteristic + b3 ethnicity x parental characteristic

Source	<u>Perfectionism Dimension</u>				
	CM	DA	PC	PE	PS
Females					
Ethnicity x HARSH-F	-0.69	-0.15	-0.46	1.38	0.59
Ethnicity x HARSH-M	-0.30	1.52	-0.13	1.51	0.62
Ethnicity x AUTH-F	-0.58	-1.23	-0.23	0.21	1.54
Ethnicity x AUTH-M	-0.91	0.43	-1.52	-1.35	-0.52
Males					
Ethnicity x HARSH-F	2.66*	1.60	-1.16	-0.92	-0.36
Ethnicity x HARSH-M	0.17	0.49	1.09	-1.57	-1.55
Ethnicity x AUTH-F	0.52	0.55	-0.15	-0.65	-1.54
Ethnicity x AUTH-M	-1.06	-0.55	-1.05	-1.26	-0.32

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p<.01

Table 13. t-value for Joint Effect of Gender and Parental Characteristic in the Regression Equation: perfectionism dimension = constant + b1 gender + b2 parental characteristic + b3 gender x parental characteristic

Source	Perfectionism Dimension				
	CM	DA	PC	PE	PS
Caucasians					
Gender x HARSH-F	0.77	0.58	0.09	0.30	-0.28
Gender x HARSH-M	0.40	0.81	-0.81	-2.85**	-1.70
Gender x AUTH-F	-0.65	-0.41	-1.78	-1.68	-1.53
Gender x AUTH-M	-0.90	-0.92	-2.67**	-2.95**	-1.71
Asian-Americans					
Gender x HARSH-F	-2.49*	-1.33	0.73	2.26*	0.57
Gender x HARSH-M	-0.08	1.11	-1.68	0.56	0.82
Gender x AUTH-F	-1.44	-2.00*	-1.28	-0.52	1.52
Gender x AUTH-M	-0.39	0.12	-2.37*	-2.48*	-1.36

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards
 *p<.05, **p<.01

Table 14. Means and Standard Errors for Asian-American and Caucasian Subjects on Measures of Concern Over Grades

	<u>Caucasians</u>	<u>Asian-Americans</u>	<u>t-statistic, equal variances</u> <u>not assumed</u>
COG-S	19.01 (0.23)	20.87 (0.27)	5.32**
COG-F	26.38 (0.46)	29.57 (0.50)	4.67**
COG-M	26.44 (0.43)	28.75 (0.64)	2.99*

COG-S = Concern Over Grades of the Subjects, COG-F = Concern Over Grades of the Father, COG-M = Concern Over Grades of the Mother

*p < .005, **p < .001

Table 15. Correlations Between Parental Measures and Perfectionism Measure

	CM	DA	PC	PE	PS
Caucasians					
COG-F	.083	.082	.384**	.473**	-.047
COG-M	.025	.093	.367**	.519**	-.126
COG-S	.392**	.317**	.239*	.314**	.183
Asian-Americans					
COG-F	.104	.281*	.430**	.419**	-.023
COG-M	.086	.139	.335**	.417**	-.052
COG-S	.383**	.301**	.238*	.188	.185

COG-F = Concern Over Grades of Father, COG-M = Concern Over Grades of Mother, COG-S = Concern Over Grades of Subject, CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

*p < .005, **p < .001

Table 16. Means and Standard Errors for Asian-American Subjects on Measures of Parental Harshness and Level of Authoritarian Parenting Style

	Acculturation Level	
	Asian-identified	Western-identified
HARSH-F	34.91 (1.16)	37.72 (1.06)
HARSH-M	32.82 (1.13)	33.48 (1.00)
AUTH-F	34.08 (1.13)	31.59 (1.18)
AUTH-M	32.10 (1.02)	30.21 (1.01)

HARSH-F = paternal harshness, HARSH-M = maternal harshness, AUTH-F = paternal authoritarianism, AUTH-M = maternal authoritarianism

Table 17. Means and Standard Errors for Dimensions of Perfectionism as a Function of Acculturation Level.

MPS Dimensions	Acculturation Level		t-statistic, equal variances not assumed
	Asian-identified	Western-identified	
CM	24.09 (0.91)	21.53 (0.78)	2.14*
DA	10.85 (0.34)	11.09 (0.40)	-0.48
PC	10.91 (0.44)	10.92 (0.49)	-0.02
PE	17.48 (0.41)	17.15 (0.52)	0.48
PS	23.65 (0.63)	23.15 (0.62)	0.58

CM = Concern Over Mistakes, DA = Doubts About Actions, PC = Parental Criticism, PE = Parental Expectations, PS = Personal Standards

* = p < .05

CHAPTER 4

DISCUSSION

The primary purpose of this present study was to examine the differences between Asian-American students and Caucasian students regarding parental characteristics, levels of perfectionism, and the relationship between parental characteristics and perfectionism. Most of the literature on perfectionism suggests that parental characteristics facilitate the development of perfectionism in children (Barrow & Moore, 1983; Burns, 1980; Driscoll, 1982; Flett et al., 1995c; McCranie & Bass, 1984; Missildine, 1963; Pacht, 1984; Rice et al., 1996). Indeed, harsh and authoritarian parenting styles have been associated with higher levels of perfectionism (Flett et al., 1995c; Frost et al., 1991; McCranie & Bass, 1984; Rice et al., 1996). Because the Asian-American culture is thought to emphasize harsh parenting styles, it was hypothesized that Asian-American students would also have higher levels of perfectionism than would Caucasian students. This study also examined the differences between the two cultures in the relationship between parenting styles and perfectionism. In addition, this study investigated differences in educational variables and whether there were ethnic differences in the relationship between perfectionism and GPA, concern over grades, and satisfaction with university choice. Lastly, an exploratory analysis was conducted on differences between low-acculturated and high-acculturated Asian-Americans on these various measures. The present findings for ethnic differences in demographic variables, parental characteristics, perfectionism, and educational variables will be discussed separately. Then, general conclusions will be drawn and clinical and empirical implications will be discussed.

Demographic Characteristics

Many cross-cultural studies examining differences between Caucasian and Asian-American subjects fail to take into account the fact that there may be generational and socioeconomic (SES) differences between the two ethnic groups. In this present study,

Caucasian and Asian-American subjects did in fact differ on various demographic variables. Significant differences were found between ethnic groups in generational status of the subjects; analyses indicated that the number of generations that Caucasian subjects have been in the U.S. was significantly more than for Asian-American subjects.

Generational differences between the two groups were not controlled for because this sample lacked an appropriate range of generational status for either ethnic group.

Occupational levels and educational levels of Asian-American fathers and mothers were significantly lower than for Caucasian fathers and mothers. As there was an appropriate range of occupational and educational levels for both Asian-American and Caucasian fathers and mothers, this study was able to examine whether these variables were in fact related to parental characteristics, perfectionism, or concern over grades for both ethnic groups; occupational and educational levels were not found to be related to parental characteristics, perfectionism, or educational variables.

Parental Characteristics

For the parental measures, two different types of measurements were used for both parents. One measurement type was designed to capture actual behaviors of the parents whereas the other measurement type reflected more the personality characteristics of the parents; therefore, authoritarian behaviors and harsh characteristics were examined. The findings supported the hypothesis that Asian-American students rate their parents as being

significantly more harsh and as exhibiting more authoritarian behaviors than Caucasian students. These findings were similar to past findings that Asian-American parents were judged to be more harsh, restrictive, and authoritarian and less nurturing, responsive, and consistent than Caucasian parents (Chiu, 1987; Dornbusch, et al., 1987; Kelley & Tseng, 1992). Previous studies on differences between Asian-American and Caucasian parenting styles did not take into account characteristics of both the fathers and the mothers and only examined either the characteristics of the mother or combined characteristics of the fathers and the mothers characteristics into one measurement (Chiu, 1987; Dornbusch, et al., 1987; Kelley & Tseng, 1992). Therefore, this study expanded on these previous studies by examining the differences between Asian-American and Caucasian in their evaluation of both their fathers and their mothers.

The relationship between the various parental measures was similar for Caucasian and Asian-American subjects. The two paternal measures (paternal harshness and paternal authoritarianism) and the two maternal measures (maternal harshness and maternal authoritarianism) were the most highly correlated. Furthermore, fathers' and mothers' authoritarian behaviors were judged to be similar by the subjects, while harshness of the fathers and the mothers were not. This data suggests that although parents engage in similar parenting behaviors, they are still seen as retaining different personality traits.

Unlike previous studies (Chiu, 1987; Dornbusch, et al., 1987; Kelley & Tseng, 1992), this present study not only took into account differences in perceptions of fathers and mothers but also examined differences between male and female subjects. When males and female subjects were examined separately, it was found that Asian-American male subjects consistently rated both their fathers and mothers as being significantly more

harsh and authoritarian than Caucasian male subjects. Asian-American female subjects also rated both their parents as being significantly more authoritarian and their mothers as being more harsh than did Caucasian females subjects, but there were no differences between Asian-American and Caucasian females in ratings of authoritarianism of fathers. It is possible that in the Asian-American culture, the father may be harsh, but may not necessarily engage in authoritarian behaviors towards their daughters. Indeed, Ho and Kang (1984) suggest that in traditional parenting styles of Asians, fathers are not as involved in child rearing. Furthermore, because there may be more of an emphasis on the success of male children, Asian-American fathers may become involved in child rearing only when it involves the son. As this is the first study that examines differences between Asian-American and Caucasian subjects in their perceptions of both their fathers and mothers, future studies for replication are warranted.

By studying both males and females separately, one can determine whether males and females judge each parent in a similar way or whether they judge each parent according to whether their gender is the same as or different from their parents. This is unlike other studies that did not examine each parent separately, and therefore, were unable to determine differences in how sons and daughters rated their fathers and mothers. In this present study, both male and female subjects rated their fathers as being significantly more harsh and as exhibiting more authoritarian behaviors than their mothers. Further analyses revealed that parental ratings did not differ whether the gender of the parent was the same as or different from the gender of the subject.

Perfectionism

Past studies found that harsh parenting styles were associated with higher levels of perfectionism; for example, Frost et al. (1991) found that daughters' perfectionism was positively related to paternal and maternal harshness, and Flett et al. (1995c) found that perfectionism was positively related to authoritarian parenting styles. It was hypothesized that Asian-Americans would perceive their parents as being more harsh and as exhibiting more authoritarian behaviors than would Caucasian subjects, and therefore, Asian-Americans were expected to have higher levels of perfectionism than would Caucasians. As expected, Asian-American subjects were generally more perfectionistic than Caucasian subjects. Similar to past research, Asian-American subjects had significantly higher Concern Over Mistakes, Doubts About Action, Parental Expectations, and Parental Criticism scores, and there were no significant differences in the Personal Standards score (Chang, 1998). Therefore, it seems as if Asian-American students generally scored higher on the maladaptive dimensions of perfectionism (Concern Over Mistakes and Doubts About Actions) and also that their parents held more perfectionistic standards (Parental Criticism and Parental Expectations). It is interesting to note that there were no differences between Asian-American and Caucasian students on the more positive dimension of perfectionism (Personal Standards). As has been found in past research (Parker & Stumpf, 1995), there were no significant differences between genders in level of perfectionism. This was true for both Asian-American and Caucasian subjects.

The relationship between the perfectionism subscales was similar for Asian-American and Caucasian subjects. For both Asian-American and Caucasian subjects, Concern Over Mistakes had consistently high correlations with all the other subscales.

Also, for both ethnic groups, the relationship between Parental Criticism and Personal Standards was the weakest and the relationship between Parental Criticism and Parental Expectations was the strongest. These patterns are consistent with past research on the relationship between the perfectionism subscales (Frost et al., 1990).

The Relationship Between Parental Characteristics and Perfectionism

Examination of parental traits and perfectionism revealed similar relationships between these two variables for Asian-American and Caucasian students. For both groups, Parental Criticism and Parental Expectations were the most highly correlated with all parental measures, which is to be expected because of the overlap between the items in these two MPS subscales and in the parental harshness measures. Of interest is the fact that there were significant correlations between parental characteristics and non-overlapping aspects of perfectionism. For Caucasians, all the parental measures were also related to Concern Over Mistakes and Doubts About Actions, whereas for Asian-Americans, there was a more variable relationship between the parental traits and Concern Over Mistakes and Doubts About Actions. Furthermore, it is interesting to note that for both ethnic groups, neither parental harshness nor parental authoritarian behaviors were related to Personal Standards, which is indicative of a more positive achievement striving. Further analyses revealed that the relationship between parental measures and perfectionism was similar between the two ethnic groups. The results of the present study are consistent with Barrow and Moore's (1983) and Missildine's (1963) theory that maladaptive aspects of perfectionism are developed through harsh and critical parenting styles. Furthermore, this appears to be true for both ethnic groups.

In terms of predicting perfectionism, ethnicity made significant contributions in the prediction of Parental Criticisms and Parental Expectations even after parental characteristics were accounted for. This was true even when male and female subjects were examined separately. This suggests that even though perfectionism may stem from interactions with harsh and authoritarian parents, there is an aspect of a person's ethnicity that contributes to perfectionism that goes beyond the parents' influence. It may be that the perfectionistic standards of the Asian-American culture contribute to the perception of parents as exhibiting perfectionistic standards regardless of actual parenting style. It is also important to note that although there were differences between ethnic groups in Concern Over Mistakes and Doubts About Actions, when parental characteristics were controlled for, this difference between ethnic groups was no longer significant. Therefore, for Concern Over Mistakes and Doubts About Actions, the original difference between ethnic groups was accounted for by differences in parental traits and behaviors.

The relationship between perfectionism and parental characteristics was also examined for each gender separately. The pattern of correlations revealed that for female subjects of both groups, there was a stronger relationship between parental characteristics and perfectionism than there was for male subjects. Furthermore, this difference between female and male subjects was more pronounced in the Asian-American group; for Asian-American males, there was only a significant relationship between paternal harshness and Parental Criticism and Parental Expectations. It seems that for Asian-American males, only harshness of the father facilitates the development of specific aspects of perfectionism whereas for all the other groups (Caucasian females, Asian-American females, and

Caucasian males) parental traits and parental behaviors of both parents influence the development of various aspects of perfectionism.

For both ethnic groups, significant differences between females and males existed in the relationship between maternal traits and Parental Criticisms and/or Parental Expectations. In these cases, the relationship between maternal traits and either Parental Criticisms or Parental Expectations was stronger for female subjects than for male subjects. The only instance in which there was a stronger relationship between parental traits and perfectionism for male subjects was in the relationship between harshness of the father and Parental Expectations; this relationship was stronger for Asian-American male subjects than for Asian-American female subjects. These findings suggest that same-sex modeling is a mode of transmission of perfectionism. In other words, for sons, harsh traits of the father are related to perceptions of parents as holding perfectionistic standards, whereas for daughters, harsh traits or authoritarian behaviors of the mother are associated with perceptions of parents as holding perfectionistic standards. Furthermore, it is interesting to note that for Asian-American females, harsh traits and authoritarian behaviors of the father are related to higher levels of the maladaptive aspects of perfectionism (Concern Over Mistakes and Doubts About Actions). Therefore, this suggests that for Asian-American females, the mothers' traits and behaviors are related to perceptions of parents as holding perfectionistic standards for them, but the fathers' traits and behaviors are the most influential in terms of facilitating the subjects' own maladaptive perfectionistic styles. It is possible that there is an aspect of the father-daughter relationship that is unique for Asian-Americans that influences the development of perfectionism in the daughters. There may be a stronger emphasis for females in the

Asian-American culture on filial piety towards fathers, and therefore, Asian-American females may be more responsive to the demands of their fathers.

Educational Variables

This study examined differences between ethnic groups in educational variables such as GPA, concern over grades, and satisfaction with choice of university and looked at the relationship between these variables and perfectionism. It was expected that Asian-Americans would have a higher mean GPA than would Caucasians. Contrary to the hypothesis, there were no significant differences between ethnic groups in GPA.

Previous research revealed that Personal Standards was associated with achievement motivation and success orientation toward competition (Frost & Henderson, 1991; Frost et al., 1990). In addition, Brown et al. (1997) found a positive correlation between Personal Standards and grades. Therefore, it was hypothesized that there would be a positive relationship between Personal Standards and GPA. This present study expanded on that of Brown et al. which studied the relationship between only Personal Standards and Concern Over Mistakes and perfectionism. In this study, the relationship between all the dimensions of perfectionism and grades was examined. No other study has examined the relationship between all the dimensions of perfectionism and GPA, and regarding ethnic differences, there have been no previous studies that looked at the differences between Asian-American and Caucasian students on levels of perfectionism and GPA. Therefore, an exploratory analysis was performed to study the relationship between all the dimensions of perfectionism and GPA for both Asian-American and Caucasian students.

GPA was related to perfectionism for both Asian-American and Caucasian subjects; specifically, there was a positive relationship between Personal Standards and GPA for Asian-Americans, and there was a negative relationship between Parental Criticism and GPA and a positive relationship between Personal Standards and GPA for Caucasians. Because of the correlational nature of this study, causality cannot be determined, but the data suggests that for Asian-American and Caucasian subjects high educational achievement is associated with higher levels of Personal Standards, and for Caucasians, low educational achievement is influenced by having critical parents and low personal standards. The relationship between perfectionism and GPA was similar for Asian-American and Caucasian students. Therefore, these findings are similar to past studies in that there was a positive relationship between Personal Standards and GPA (Brown et al., 1997), and it seems as if this relationship exists for Asian-American students, too.

The relationship between perfectionism and GPA was examined for each gender separately. In the Brown et al. (1997) study, only Caucasian women were recruited as subjects. This study was able to expand on Brown et al.'s study by exploring whether this same relationship existed for men. Analyses revealed that when genders were examined separately, the only significant relationship was between Personal Standards and GPA for Asian-American and Caucasian females; these findings for female subjects is consistent with Brown et al.'s findings, but it seems as if the same relationship does not exist for males. It may be that for females, high standards facilitate behaviors that will make the attainment of high grades likely, whereas for males, there may be other more influential personal factors that make the attainment of high grades likely. It is also possible that for

females, having high grades is attributed to high personal standards rather than some other variable; for example, males may attribute high grades to other variables such as level of effort or natural ability.

There were three measurements of concern over grades. One that captured the subjects' concern over their own grades and two for perceived parents' concern over grades (one for the father and one for the mother). Like the construct of perfectionism, these measurements capture the standards of parents as well as the subjects' worry over meeting these standards. Past studies have shown that Asian-American students and parents had higher expectations regarding educational achievement (Chen & Stevenson, 1995; Schneider & Lee, 1990). Therefore, it was hypothesized that Asian-American students and their parents would exhibit higher levels of concern over grades of the students. Concordant with this hypothesis, Asian-American subjects had significantly higher concern over grades scores than did Caucasian subjects on all three measures. These findings suggest that Asian-American students recognize the educational expectations of their parents and set their standards accordingly.

Regarding the relationship between perfectionism and concern over grades, analyses revealed that the relationship between these two variables was similar for both ethnic groups. In general, concern over grades of the students was related to Concern Over Mistakes and Doubts About Actions and parents' concern over grades was associated with Parental Criticism and Parental Expectations. As expected, this suggests that for the students in both ethnic groups, maladaptive perfectionistic concerns are related to perfectionistic educational concerns and general perfectionistic standards of parents are

also experienced as perfectionistic standards of parents regarding educational achievement.

When genders within ethnic groups were examined separately, the only difference was that for Caucasian males, there was a significant relationship between Parental Criticism and concern over grades of the father whereas for Asian-American males, there was no significant relationship between these two variables. It is possible that Caucasian males identify with their fathers more than do Asian-American males, and therefore, the fathers' concern over grades may be perceived as a criticism.

Satisfaction with choice of university was examined because of the possibility that the two ethnic groups may differ in whether being at this particular university was viewed as a source of pride or shame. As hypothesized, Caucasian subjects were more satisfied with their choice of university. For both Caucasian and Asian-American subjects, there was a significant negative relationship between Concern Over Mistakes and satisfaction with university choice, but this relationship existed only when genders were combined. The only significant difference between ethnic groups in the relationship between university choice and perfectionism when genders were examined separately was that for Caucasian female subjects only, satisfaction with choice of university was negatively related to Parental Expectations. This suggests that Caucasian female students are influenced by the expectations of their parents, and therefore, those who perceive their parents as having high expectations may also in turn believe that this particular university does not meet their parents' expectations. The general lack of significant relationships between satisfaction with university choice and perfectionism suggests that this variable does not account for the ethnic differences in perfectionism.

Differences Within the Asian-American Sample

An exploratory analysis of the differences between acculturation levels of Asian-Americans was conducted. Acculturation level was ascertained using the SL-ASIA that provides a range of acculturation from 1 (Asian-identified) to 5 (Western-identified). Unfortunately, in this present study, the acculturation level of Asian-American subjects only ranged from 1 to 4, and there were few subjects in the 1st and 4th levels. Therefore, two groups were formed where those subjects in levels 1 and 2 were grouped into an "Asian-identified" group and those in levels 3 and 4 were grouped into a "Western-identified" group. This grouping is less than ideal since, according to Suinn et al. (1987), those scoring a 3 are not defined as "Western identified" but as "bicultural" lying in the center of the spectrum from Asian-identified to Western identified. The Asian-American sample in this study were predominantly Asian-American identified or bicultural and very few were in the Western-identified end of the spectrum. Therefore, future studies on acculturation differences should attempt to utilize a sample of Asian-American subjects that captures a full range of acculturation levels.

The hypothesis regarding differences in acculturation levels was that as Asian-American subjects became more acculturated (Western-identified), they would reflect a pattern more similar to Caucasian subjects; in other words, Western-identified subjects were expected to have lower levels of perfectionism and lower scores on the parental measures than Asian-identified subjects. Analyses revealed no differences between the two acculturation groups in the parental measurements. Regarding levels of perfectionism, the only significant difference between the two acculturation levels was in the Concern Over Mistakes dimension of perfectionism. Past research (Chang, 1998)

found that Caucasian subjects had lower Concern Over Mistakes scores than Asian-American subjects and this present study also found that the Concern Over Mistakes scores of Caucasians was lower than those of Asian-American subjects. Therefore, one would expect, as indicated in the hypothesis, that the scores of the Western identified group would be lower than those of the Asian-American-identified groups. In fact, analyses revealed that the Concern Over Mistakes scores of the Western-identified groups were significantly lower than those of the Asian-identified group which suggests that acculturation is related to perfectionism.

Because of the heterogeneous nature of the Asian-American population, differences between ethnic groups within the Asian-American sample were examined. Asian-Americans were asked to state which ethnic group they most identified with. The three largest ethnic groups were Chinese, Korean, and Vietnamese. The other ethnic groups were grouped into a fourth category labeled "other." There were no significant differences between the four groups in parental harshness, level of authoritarianism of parents, and levels of perfectionism.

General Conclusions

The primary purpose of this study was to examine differences between Asian-American and Caucasian groups in parenting styles and perfectionism. There exists no previous study that investigates the differences between the two ethnic groups on both parenting styles and perfectionism. Past research on differences between Asian-American and Caucasian students in levels of perfectionism did not examine whether these differences could be accounted for by differences between the ethnic groups in parenting styles. The results of this study suggests that Asian-American parents are more harsh and

engage in more authoritarian behaviors than do Caucasian parents. Overall, this pattern remains when ethnic differences are examined for each gender separately. Furthermore, Asian-Americans were generally more perfectionistic than Caucasians; Asian-Americans had higher levels of Concern Over Mistakes, Doubts About Actions, Parental Criticism, and Parental Expectations. Again, this pattern remained even when males and females were examined separately. Therefore, these findings all confirmed the hypothesis that Asian-American subjects have higher scores on the parental measurements, and since harsher and more authoritarian behaviors have been found to be related to higher levels of perfectionism, then Asian-American subjects also have higher levels of perfectionism.

What is interesting to note is that there also seems to be an aspect of ethnicity that contributes to the development of perfectionism, at least the Parental Criticism and Parental Expectations dimensions of perfectionism, that goes beyond what is accounted for by the influence of parents. A possible explanation is that there may be an aspect of the Asian-American culture that facilitates the development of perfectionism, an aspect that is not completely explained by harsher parenting styles. It may be that ingrained in the Asian-American-American culture is an emphasis on education and achievement which does not necessarily entail a harsher or more authoritarian parenting style. Furthermore, it seems as if the differences between ethnic groups in the other aspects of perfectionism (Concern Over Mistakes and Doubts About Actions) are accounted for by differences in parenting styles.

Limitations of the Present Study

The present study reveals intriguing findings about the differences between ethnic groups on levels of perfectionism and the relationship between parenting styles and

perfectionism; nonetheless, there are methodological considerations which might limit the extent to which conclusions may be generalized to the other populations. Specific issues that will be addressed include sampling techniques, differences between groups in demographic variables, the use of self-report measures, and the correlational design of the study.

The study was subject to the limitations inherent in any survey study. The response rate of 25% for Asian-American students and 32% for Caucasian students was relatively low; in previous studies using mail surveys sent to an Asian-American college population, response rates ranging from 32 to 54% were obtained (Gim, Atkinson, & Whiteley, 1990; Lippincott & Mierzwa, 1995; Solberg, Ritsma, Davis, Tata, & Jolly, 1994; Tata & Leong, 1994). It is possible that the low response rate by Asian-Americans was due to the fact that these students were aware that they were being targeted as subjects because of their ethnicity, as was apparent by the inclusion of the SL-ASIA in the survey packets of the Asian-American students. It is also possible that students who take the time and effort to complete and return the surveys are more perfectionistic, and it is not clear how the relationship between perfectionism and willingness to respond differs between the two ethnic groups.

The sample for this study was composed entirely of college students living on campus, and the use of this homogeneous sample may limit the generalizability to other samples. It is possible that college students exhibit more perfectionism tendencies than the general population, and it is not clear whether Asian-Americans who do not or did not attend college also exhibit high levels of perfectionism. Although the higher levels of Parental Criticisms, Parental Expectations, and concern over grades of the Asian-

American fathers and mothers suggest that Asian-Americans outside of the college arena do have higher expectations of their children, it is unclear whether they exhibit these perfectionistic tendencies themselves.

Another sampling issue that might affect the interpretation of the findings is that the Asian-American and Caucasian subjects differed significantly in the number of generations they and their families have been in the U.S. It may be that people whose families are newer to the U.S. exhibit more perfectionistic tendencies because of pressure to succeed in a new country. Sue and Okazaki (1990) have suggested that higher levels of achievement among Asian-American Americans may be influenced by "relative functionalism," which is when the value or function of education as a means of achieving success are increased in light of perceived limitations in mobility. Thus, this phenomenon may occur for all new immigrants to the U.S. and may not be specific to the Asian-American population.

Within the Asian-American sample, the range in acculturation levels was limited in that a majority of the sample fell into the "Asian-identified" and "bicultural" groups while few were in the "Western-identified" group. It is possible that as Asian-Americans become more acculturated, they may adopt the values consistent with the dominant culture. In this case, one would expect parental evaluations and perfectionism levels, and educational concerns of acculturated Asian-Americans to be more similar to that of Caucasians.

Another sampling issue regarding the Asian-American population concerns the diverse and heterogeneous nature of the Asian-American population. The primary analyses of this present study combined all Asian-American ethnic groups into one group,

although exploratory analyses were conducted to examine possible differences within the Asian-American sample in differences in parental traits and behaviors and perfectionism. Sue, Sue, Sue, and Takeuchi (1995) state greater heterogeneity exists for Asian-American groups in the U.S. than in their respective homelands. On the other hand, Sue et al. assert that heterogeneity is necessary for definitive research in that it increases the range of the variables being studied. Therefore, aggregate research combining Asian-American groups is useful in making broad cultural comparisons in that Asian-American communities do in fact share some cultural characteristics that can be compared with the Caucasian population.

There are several issues with the measurement of the different constructs in this study. All the dimensions in this study were assessed by self-report measures which introduces possible limitations. A potential problem in using self-reports is that they are subject to the response bias of social desirability, which refers to the tendency to deny socially undesirable traits and to affirm socially desirable ones. One would expect Asian-Americans to exhibit a greater tendency to respond in a socially desirable manner because of the emphasis on shame and the unwillingness to disclose personal information in the Asian culture. On the other hand, Abe and Zane (1990) found that Asian-American college students scored lower than did Caucasian college students on social desirability levels. Therefore, there may have been differences in social desirability between the two ethnic groups. Although, past studies have found that perfectionism was not related to social desirability (Clavin, Clavin, Gayton, & Broida, 1996; Ferrari, 1995), and therefore, it is unlikely that social desirability can account for the ethnic differences in perfectionism.

Another measurement issue concerns the construct validity of the question assessing satisfaction with choice of university. This was intended to measure whether attending the University of Massachusetts was considered indicative of high achievement or low achievement. There are other reasons why a student may or may not be satisfied with their choice of university; for example, their experiences socially and academically since arriving at this university may have affected their satisfaction with their choice of university. In other words, their current assessment of the university may be unrelated to their feelings when they chose to attend this particular university. It is also possible that Asian-Americans at this public university are less satisfied because they are more socially isolated due to the limited number of Asian-Americans on this campus.

Regarding perceived parental harshness and authoritarianism, it is possible that these perceptions are not necessarily indicative of actual traits and behaviors of the parents. Although, Frost et al. (1991) found that daughters' report and parents' self-description of harshness were in fact correlated. Interestingly, though, only the mothers' self-reported harshness was related to perfectionism in the daughters. Frost et al. did not examine differences between ethnic groups, therefore, it is not clear whether a similar relationship between perception of parental harshness and parental self-report of harshness exists when Asian-American and Caucasian students are examined separately. Regarding social desirability, Asian-Americans may be less willing to disclose information regarding negative information about their parents. If this is so, one would expect lower levels of parental harshness and authoritarian behaviors to be reported, which is contrary to the findings in this present study.

A final methodological issue is related to the cross-sectional design of the study which brings to question issues of causality. First, these findings are based on characteristics that are assessed at this present time, therefore, it is unclear whether parents exhibited these traits and behaviors during the subjects' developmental years when the subject was at home. Second, the correlational nature of this study prevents the data from being used to determine causality. It may be that parents developed harsh traits and authoritarian behaviors as a result of interacting with perfectionistic children.

Directions for Future Research

Future studies should take into account the aforementioned limitations of this present study. Data from community samples should be obtained so that statements about the generalizability of these findings are possible. In terms of addressing the questions of causality, a longitudinal study would be ideal. Assessing the parents' parenting style through a child's stages of development would allow a better understanding of whether certain parenting styles do in fact lead to perfectionism, and if so, at what point the child is most susceptible to the parenting style of the parents. In addition, there is a need for other sources of measurement outside of those measuring perceptions of parental behavior. The use of objective observations would be helpful in differentiating the parents' actual behaviors from the perceptions and interpretations of the child.

Previous research has found that Concern Over Mistakes is the dimension of perfectionism most closely related with psychopathology. The higher Concern Over Mistakes levels of Asian-American students brings up the question of whether this ethnic group also has higher levels of psychopathology. Some researchers have found that there are no differences in levels of psychopathology between Asian-Americans and Caucasians

(Toupin & Son, 1991; Yee, 1992), whereas other studies have found that Asian-Americans do in fact experience greater levels of distress than do Caucasians (Kuo, 1984; Lippincott & Mierzwa, 1995; Loo, Tong, & True, 1989; Tracey, Leong, & Glidden, 1986). Unfortunately, no data on symptoms of psychopathology were obtained in this present study, and therefore, future studies on the perfectionism differences between these two groups should include measures of psychopathology.

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APPENDIX: SAMPLE SURVEYS
PERSONAL STANDARDS SCALE

Please circle the number that best corresponds to your agreement with each statement below. Use this rating system: Strongly disagree 1 2 3 4 5 Strongly agree

Strongly disagree.....Strongly agree

- | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. My parents set very high standards for me. | 1 | 2 | 3 | 4 | 5 |
| 2. As a child, I was punished for doing things less than perfectly. | 1 | 2 | 3 | 4 | 5 |
| 3. If I do not set the highest standards for myself, I am
likely to end up a second rate person. | 1 | 2 | 3 | 4 | 5 |
| 4. My parents never tried to understand my mistakes. | 1 | 2 | 3 | 4 | 5 |
| 5. It is important to me that I be thoroughly competent in everything I do. | 1 | 2 | 3 | 4 | 5 |
| 6. If I fail at work/school, I am a failure as a person. | 1 | 2 | 3 | 4 | 5 |
| 7. I should be upset if I make a mistake. | 1 | 2 | 3 | 4 | 5 |
| 8. My parents wanted me to be the best at everything. | 1 | 2 | 3 | 4 | 5 |
| 9. I set higher goals than most people. | 1 | 2 | 3 | 4 | 5 |
| 10. If someone does a task at work/school better than I,
then I feel like I failed the whole task. | 1 | 2 | 3 | 4 | 5 |
| 11. If I fail partly, it is as bad as being a complete failure. | 1 | 2 | 3 | 4 | 5 |
| 12. Only outstanding performance is good enough in my family. | 1 | 2 | 3 | 4 | 5 |
| 13. I am very good at focusing my efforts on attaining a goal. | 1 | 2 | 3 | 4 | 5 |
| 14. Even when I do something very carefully, I often feel that it is not quite right. | 1 | 2 | 3 | 4 | 5 |
| 15. I hate being less than best at things. | 1 | 2 | 3 | 4 | 5 |
| 16. I have extremely high goals. | 1 | 2 | 3 | 4 | 5 |
| 17. My parents have expected excellence from me. | 1 | 2 | 3 | 4 | 5 |
| 18. People will probably think less of me if I make a mistake. | 1 | 2 | 3 | 4 | 5 |
| 19. I never felt like I could meet my parents' expectations. | 1 | 2 | 3 | 4 | 5 |
| 20. If I do not do as well as other people, it means I am an inferior human being. | 1 | 2 | 3 | 4 | 5 |
| 21. Other people seem to accept lower standards from themselves than I do. | 1 | 2 | 3 | 4 | 5 |
| 22. If I do not do well all the time, people will not respect me. | 1 | 2 | 3 | 4 | 5 |
| 23. My parent have always had higher expectations for my future than I have. | 1 | 2 | 3 | 4 | 5 |
| 24. I usually have doubts about simple everyday things I do. | 1 | 2 | 3 | 4 | 5 |
| 25. I expect higher performance in my daily tasks than most people. | 1 | 2 | 3 | 4 | 5 |
| 26. I tend to get behind in my work because I repeat things over and over. | 1 | 2 | 3 | 4 | 5 |
| 27. It takes me a long time to do something "right". | 1 | 2 | 3 | 4 | 5 |
| 28. The fewer mistakes I make, the more people will like me. | 1 | 2 | 3 | 4 | 5 |
| 29. I never felt like I could meet my parents' standards. | 1 | 2 | 3 | 4 | 5 |

ACADEMIC GOALS AND VALUES SURVEY

1. How important is it for you to do well in school?

Not at all important			Somewhat important			Extremely important
1	2		3	4	5	6 7

2. How satisfied are you with your grades so far in college?

Not at all			Somewhat			Very Much
1	2	3	4	5	6	7

3. How happy or unhappy do you feel when your grade in a course is one-half grade lower than you were shooting for?

Very Unhappy			Neutral			Very Happy
1	2	3	4	5	6	7

4. How anxious are you right now about your grades?

Not at all Anxious			Somewhat Anxious			Very Anxious
1	2	3	4	5	6	7

5. To what extent are you happy with your choice of university?

Not at All			Somewhat			Very Much
1	2	3	4	5	6	7

6. When you were in high school, how unhappy or distressed was your mother when your grades were lower than she expected? (If this did not happen to you, how would your mother have felt if it had?)

Not at all Distressed			Somewhat Distressed			Very Distressed
1	2	3	4	5	6	7

7. How much importance does your mother place on education?

Very Little			Moderate			Very Much
1	2	3	4	5	6	7

8. What is your mother's expectations for your grades?

Very Low			Moderate			Very High
1	2	3	4	5	6	7

9. If you got poor grades one semester, to what extent would your mother be disappointed?

Not at all			Somewhat			Very Much
1	2	3	4	5	6	7

10. To what extent did your mother push you to study when you were in Junior High and High School?

Not at All			Somewhat			Very Much
1	2	3	4	5	6	7

11. To what extent is your mother happy with your grades?

Not at All			Somewhat			Very Much
1	2	3	4	5	6	7

12. When you were in high school, how unhappy or distressed was your father when your grades were lower than he expected? (If this did not happen to you, how would your father have felt if it had?)

Not at all Distressed			Somewhat Distressed			Very Distressed
1	2	3	4	5	6	7

13. How much importance does your father place on education?

Very Little			Moderate			Very Much
1	2	3	4	5	6	7

14. What is your father's expectations for your grades?

Very Low

Moderate

Very High

1

2

3

4

5

6

7

15. If you got poor grades one semester, to what extent would your father be disappointed?

Not at all

Somewhat

Very Much

1

2

3

4

5

6

7

16. To what extent did your father push you to study when you were in Junior High and High School?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

17. To what extent is your father happy with your grades?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

18. To what extent do you feel uncomfortable talking with your mother about your mistakes/failures?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

19. To what extent do you feel uncomfortable talking with your father about your mistakes/failures?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

20. What is your overall GPA? _____ 21. What year in school are you? _____

22. What is your major? _____ 23. How old are you? _____

24. What is your parents' marital status?

1. Married 2. Separated 3. Divorced 4. Other _____

25. What is the highest grade in school your mother completed? (Please circle only one):

1. graduate professional training
2. standard college or university graduation
3. partial college training
4. high school graduation
5. partial high school
6. junior high school
7. less than seven years of school

26. What is the highest grade in school your father completed? (Please circle only one):

1. graduate professional training
2. standard college or university graduation
3. partial college training
4. high school graduation
5. partial high school
6. junior high school
7. less than seven years of school

27. What is your mother's occupation? _____

28. What is your father's occupation? _____

Father's Trait Scale

Listed below are a number of personal characteristics. Please decide the extent to which each is characteristic of your **FATHER** and circle the corresponding number. Use the following rating system:

Not Very Characteristic 1 2 3 4 5 6 7 Very Characteristic

	Not Very Characteristic						Very Characteristic
1. Withdrawn	1	2	3	4	5	6	7
2. Strict	1	2	3	4	5	6	7
3. Guilt-inducing	1	2	3	4	5	6	7
4. Easy-going	1	2	3	4	5	6	7
5. Affectionate	1	2	3	4	5	6	7
6. Permissive	1	2	3	4	5	6	7
7. Demanding	1	2	3	4	5	6	7
8. Critical	1	2	3	4	5	6	7
9. Supportive	1	2	3	4	5	6	7

Mother's Trait Scale

Listed below are a number of personal characteristics. Please decide the extent to which each is characteristic of your **MOTHER** and circle the corresponding number. Use the following rating system:

Not Very Characteristic 1 2 3 4 5 6 7 Very Characteristic

	Not Very Characteristic						Very Characteristic
1. Withdrawn	1	2	3	4	5	6	7
2. Strict	1	2	3	4	5	6	7
3. Guilt-inducing	1	2	3	4	5	6	7
4. Easy-going	1	2	3	4	5	6	7
5. Affectionate	1	2	3	4	5	6	7
6. Permissive	1	2	3	4	5	6	7
7. Demanding	1	2	3	4	5	6	7
8. Critical	1	2	3	4	5	6	7
9. Supportive	1	2	3	4	5	6	7

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your **mother**. Try to read and think about each statement as it applies to you and your **mother** during your years growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

Strongly Disagree.....Strongly Agree

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right. | | | | | |
| 2. Whenever my mother told me to do something as I was growing up, she expected me to do it immediately without asking any questions. | | | | | |
| 3. As I was growing up my mother did not allow me to question any decision she had made. | | | | | |
| 4. My mother has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. | | | | | |
| 5. My mother felt that wise parents should teach their children early just who is boss in the family. | | | | | |
| 6. As I was growing up my mother would get very upset if I tried to disagree with her. | | | | | |
| 7. As I was growing up my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she punished me. | | | | | |
| 8. My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. | | | | | |
| 9. As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it. | | | | | |
| 10. As I was growing up I knew what my mother expected of me in the family and she insisted that I conform to those expectations simply out of respect for her authority. | | | | | |

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your **father**. Try to read and think about each statement as it applies to you and your **father** during your years growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

Strongly Disagree.....Strongly Agree

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. Even if his children didn't agree with him, my father felt that it was for our own good if we were forced to conform to what he thought was right. | | | | | |
| 2. Whenever my father told me to do something as I was growing up, he expected me to do it immediately without asking any questions. | | | | | |
| 3. As I was growing up my father did not allow me to question any decision he had made. | | | | | |
| 4. My father has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. | | | | | |
| 5. My father felt that wise parents should teach their children early just who is boss in the family. | | | | | |
| 6. As I was growing up my father would get very upset if I tried to disagree with him. | | | | | |
| 7. As I was growing up my father let me know what behavior he expected of me, and if I didn't meet those expectations, he punished me. | | | | | |
| 8. My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. | | | | | |
| 9. As I was growing up my father often told me exactly what he wanted me to do and how he expected me to do it. | | | | | |
| 10. As I was growing up I knew what my father expected of me in the family and he insisted that I conform to those expectations simply out of respect for his authority. | | | | | |

Demographics Questionnaire

1. What ethnicity do you most identify with (Caucasian, German, French, etc.)? _____

2. What ethnicity does your mother most identify with? _____
3. What ethnicity does your father most identify with? _____
4. Where were you born?
_____ U.S. _____ Other-Where? _____ Don't Know
5. Where was your father born?
_____ U.S. _____ Other-Where? _____ Don't Know
6. Where was your mother born?
_____ U.S. _____ Other-Where? _____ Don't Know
7. Where was your father's father born?
_____ U.S. _____ Other-Where? _____ Don't Know
8. Where was your father's mother born?
_____ U.S. _____ Other-Where? _____ Don't Know
9. Where was your mother's father born?
_____ U.S. _____ Other-Where? _____ Don't Know
10. Where was your mother's mother born?
_____ U.S. _____ Other-Where? _____ Don't Know
11. On the basis of the above answers, circle the generation that best applies to you:
 - 1 1st Generation = I was born outside the U.S.
 - 2 2nd Generation = I was born in U.S., either parent was born outside the U.S.
 - 3 3rd Generation = I was born in U.S., both parents were born in U.S, and all grandparents born outside the U.S.
 - 4 4th Generation = I was born in U.S., both parents were born in U.S, and at least one grandparent born outside the U.S. and one grandparent born in U.S.
 - 5 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.
 - 6 Don't know what generation best fits since I lack some information.

PERSONAL STANDARDS SCALE

Please circle the number that best corresponds to your agreement with each statement below. Use this rating system: Strongly disagree 1 2 3 4 5 Strongly agree

Strongly disagree.....Strongly agree

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. My parents set very high standards for me. | 1 | 2 | 3 | 4 | 5 |
| 2. As a child, I was punished for doing things less than perfectly. | 1 | 2 | 3 | 4 | 5 |
| 3. If I do not set the highest standards for myself, I am likely to end up a second rate person. | 1 | 2 | 3 | 4 | 5 |
| 4. My parents never tried to understand my mistakes. | 1 | 2 | 3 | 4 | 5 |
| 5. It is important to me that I be thoroughly competent in everything I do. | 1 | 2 | 3 | 4 | 5 |
| 6. If I fail at work/school, I am a failure as a person. | 1 | 2 | 3 | 4 | 5 |
| 7. I should be upset if I make a mistake. | 1 | 2 | 3 | 4 | 5 |
| 8. My parents wanted me to be the best at everything. | 1 | 2 | 3 | 4 | 5 |
| 9. I set higher goals than most people. | 1 | 2 | 3 | 4 | 5 |
| 10. If someone does a task at work/school better than I, then I feel like I failed the whole task. | 1 | 2 | 3 | 4 | 5 |
| 11. If I fail partly, it is as bad as being a complete failure. | 1 | 2 | 3 | 4 | 5 |
| 12. Only outstanding performance is good enough in my family. | 1 | 2 | 3 | 4 | 5 |
| 13. I am very good at focusing my efforts on attaining a goal. | 1 | 2 | 3 | 4 | 5 |
| 14. Even when I do something very carefully, I often feel that it is not quite right. | 1 | 2 | 3 | 4 | 5 |
| 15. I hate being less than best at things. | 1 | 2 | 3 | 4 | 5 |
| 16. I have extremely high goals. | 1 | 2 | 3 | 4 | 5 |
| 17. My parents have expected excellence from me. | 1 | 2 | 3 | 4 | 5 |
| 18. People will probably think less of me if I make a mistake. | 1 | 2 | 3 | 4 | 5 |
| 19. I never felt like I could meet my parents' expectations. | 1 | 2 | 3 | 4 | 5 |
| 20. If I do not do as well as other people, it means I am an inferior human being. | 1 | 2 | 3 | 4 | 5 |
| 21. Other people seem to accept lower standards from themselves than I do. | 1 | 2 | 3 | 4 | 5 |
| 22. If I do not do well all the time, people will not respect me. | 1 | 2 | 3 | 4 | 5 |
| 23. My parent have always had higher expectations for my future than I have. | 1 | 2 | 3 | 4 | 5 |
| 24. I usually have doubts about simple everyday things I do. | 1 | 2 | 3 | 4 | 5 |
| 25. I expect higher performance in my daily tasks than most people. | 1 | 2 | 3 | 4 | 5 |
| 26. I tend to get behind in my work because I repeat things over and over. | 1 | 2 | 3 | 4 | 5 |
| 27. It takes me a long time to do something "right". | 1 | 2 | 3 | 4 | 5 |
| 28. The fewer mistakes I make, the more people will like me. | 1 | 2 | 3 | 4 | 5 |
| 29. I never felt like I could meet my parents' standards. | 1 | 2 | 3 | 4 | 5 |

ACADEMIC GOALS AND VALUES SURVEY

1. How important is it for you to do well in school?

Not at all important

Somewhat important

Extremely important

1

2

3

4

5

6

7

2. How satisfied are you with your grades so far in college?

Not at all

Somewhat

Very Much

1

2

3

4

5

6

7

3. How happy or unhappy do you feel when your grade in a course is one-half grade lower than you were shooting for?

Very Unhappy

Neutral

Very Happy

1

2

3

4

5

6

7

4. How anxious are you right now about your grades?

Not at all Anxious

Somewhat Anxious

Very Anxious

1

2

3

4

5

6

7

5. To what extent are you happy with your choice of university?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

6. When you were in high school, how unhappy or distressed was your **mother** when your grades were lower than she expected? (If this did not happen to you, how would your **mother** have felt if it had?)

Not at all Distressed

Somewhat Distressed

Very Distressed

1

2

3

4

5

6

7

7. How much importance does your **mother** place on education?

Very Little

Moderate

Very Much

1

2

3

4

5

6

7

8. What is your **mother's** expectations for your grades?

Very Low

Moderate

Very High

1

2

3

4

5

6

7

9. If you got poor grades one semester, to what extent would your **mother** be disappointed?

Not at all

Somewhat

Very Much

1

2

3

4

5

6

7

10. To what extent did your **mother** push you to study when you were in Junior High and High School?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

11. To what extent is your **mother** happy with your grades?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

12. When you were in high school, how unhappy or distressed was your **father** when your grades were lower than he expected? (If this did not happen to you, how would your father have felt if it had?)

Not at all Distressed

Somewhat Distressed

Very Distressed

1

2

3

4

5

6

7

13. How much importance does your **father** place on education?

Very Little

Moderate

Very Much

1

2

3

4

5

6

7

14. What is your father's expectations for your grades?

Very Low

Moderate

Very High

1

2

3

4

5

6

7

15. If you got poor grades one semester, to what extent would your father be disappointed?

Not at all

Somewhat

Very Much

1

2

3

4

5

6

7

16. To what extent did your father push you to study when you were in Junior High and High School?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

17. To what extent is your father happy with your grades?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

18. To what extent do you feel uncomfortable talking with your mother about your mistakes/failures?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

19. To what extent do you feel uncomfortable talking with your father about your mistakes/failures?

Not at All

Somewhat

Very Much

1

2

3

4

5

6

7

20. What is your overall GPA? _____ 21. What year in school are you? _____

22. What is your major? _____ 23. How old are you? _____

24. What is your parents' marital status?

1. Married 2. Separated 3. Divorced 4. Other _____

25. What is the highest grade in school your mother completed? (Please circle only one):

1. graduate professional training
2. standard college or university graduation
3. partial college training
4. high school graduation
5. partial high school
6. junior high school
7. less than seven years of school

26. What is the highest grade in school your father completed? (Please circle only one):

1. graduate professional training
2. standard college or university graduation
3. partial college training
4. high school graduation
5. partial high school
6. junior high school
7. less than seven years of school

27. What is your mother's occupation? _____

28. What is your father's occupation? _____

Father's Trait Scale

Listed below are a number of personal characteristics. Please decide the extent to which each is characteristic of your **FATHER** and circle the corresponding number. Use the following rating system:

Not Very Characteristic 1 2 3 4 5 6 7 Very Characteristic

	Not Very Characteristic					Very Characteristic	
1. Withdrawn	1	2	3	4	5	6	7
2. Strict	1	2	3	4	5	6	7
3. Guilt-inducing	1	2	3	4	5	6	7
4. Easy-going	1	2	3	4	5	6	7
5. Affectionate	1	2	3	4	5	6	7
6. Permissive	1	2	3	4	5	6	7
7. Demanding	1	2	3	4	5	6	7
8. Critical	1	2	3	4	5	6	7
9. Supportive	1	2	3	4	5	6	7

Mother's Trait Scale

Listed below are a number of personal characteristics. Please decide the extent to which each is characteristic of your **MOTHER** and circle the corresponding number. Use the following rating system:

Not Very Characteristic 1 2 3 4 5 6 7 Very Characteristic

	Not Very Characteristic					Very Characteristic	
1. Withdrawn	1	2	3	4	5	6	7
2. Strict	1	2	3	4	5	6	7
3. Guilt-inducing	1	2	3	4	5	6	7
4. Easy-going	1	2	3	4	5	6	7
5. Affectionate	1	2	3	4	5	6	7
6. Permissive	1	2	3	4	5	6	7
7. Demanding	1	2	3	4	5	6	7
8. Critical	1	2	3	4	5	6	7
9. Supportive	1	2	3	4	5	6	7

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your **mother**. Try to read and think about each statement as it applies to you and your **mother** during your years growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

Strongly Disagree.....Strongly Agree

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right. | 1 | 2 | 3 | 4 | 5 |
| 2. Whenever my mother told me to do something as I was growing up, she expected me to do it immediately without asking any questions. | 1 | 2 | 3 | 4 | 5 |
| 3. As I was growing up my mother did not allow me to question any decision she had made. | 1 | 2 | 3 | 4 | 5 |
| 4. My mother has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. | 1 | 2 | 3 | 4 | 5 |
| 5. My mother felt that wise parents should teach their children early just who is boss in the family. | 1 | 2 | 3 | 4 | 5 |
| 6. As I was growing up my mother would get very upset if I tried to disagree with her. | 1 | 2 | 3 | 4 | 5 |
| 7. As I was growing up my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she punished me. | 1 | 2 | 3 | 4 | 5 |
| 8. My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. | 1 | 2 | 3 | 4 | 5 |
| 9. As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it. | 1 | 2 | 3 | 4 | 5 |
| 10. As I was growing up I knew what my mother expected of me in the family and she insisted that I conform to those expectations simply out of respect for her authority. | 1 | 2 | 3 | 4 | 5 |

PARENTAL AUTHORITY QUESTIONNAIRE

Instructions: For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your **father**. Try to read and think about each statement as it applies to you and your **father** during your years growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

Strongly Disagree.....Strongly Agree

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. Even if his children didn't agree with him, my father felt that it was for our own good if we were forced to conform to what he thought was right. | 1 | 2 | 3 | 4 | 5 |
| 2. Whenever my father told me to do something as I was growing up, he expected me to do it immediately without asking any questions. | 1 | 2 | 3 | 4 | 5 |
| 3. As I was growing up my father did not allow me to question any decision he had made. | 1 | 2 | 3 | 4 | 5 |
| 4. My father has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to. | 1 | 2 | 3 | 4 | 5 |
| 5. My father felt that wise parents should teach their children early just who is boss in the family. | 1 | 2 | 3 | 4 | 5 |
| 6. As I was growing up my father would get very upset if I tried to disagree with him. | 1 | 2 | 3 | 4 | 5 |
| 7. As I was growing up my father let me know what behavior he expected of me, and if I didn't meet those expectations, he punished me. | 1 | 2 | 3 | 4 | 5 |
| 8. My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up. | 1 | 2 | 3 | 4 | 5 |
| 9. As I was growing up my father often told me exactly what he wanted me to do and how he expected me to do it. | 1 | 2 | 3 | 4 | 5 |
| 10. As I was growing up I knew what my father expected of me in the family and he insisted that I conform to those expectations simply out of respect for his authority. | 1 | 2 | 3 | 4 | 5 |

SUINN-LEW ASIAN SELF-IDENTITY ACCULTURATION SCALE (SL-ASIA)

INSTRUCTIONS: The questions which follow are for the purpose of collecting information about your historical background as well as more recent behaviors which may be related to your cultural identity. Choose the one answer which best describes you.

What ethnicity do you most identify with (Chinese, Japanese, Korean, etc.)? _____

What ethnicity does your **mother** most identify with? _____

What ethnicity does your **father** most identify with? _____

1. What language can you speak?

1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
2. Mostly Asian, some English
3. Asian and English about equally well (bilingual)
4. Mostly English, some Asian
5. Only English

2. What language do you prefer?

1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
2. Mostly Asian, some English
3. Asian and English about equally well (bilingual)
4. Mostly English, some Asian
5. Only English

3. How do you identify yourself?

1. Oriental
2. Asian
3. Asian-American
4. Chinese-American, Japanese-American, Korean-American, etc.
5. American

4. Which identification does (did) your mother use?

1. Oriental
2. Asian
3. Asian-American
4. Chinese-American, Japanese-American, Korean-American, etc.
5. American

5. Which identification does (did) your father use?

1. Oriental
2. Asian
3. Asian-American
4. Chinese-American, Japanese-American, Korean-American, etc.
5. American

6. What was the ethnic origin of the friends and peers you had, as a child up to age 6?

1. Almost exclusively Asians, Asian-Americans, Orientals
2. Mostly Asians, Asian-Americans, Orientals
3. About equally Asian groups and Anglo groups
4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

7. What was the ethnic origin of the friends and peers you had, as a child from 6 to 18?

1. Almost exclusively Asians, Asian-Americans, Orientals
2. Mostly Asians, Asian-Americans, Orientals
3. About equally Asian groups and Anglo groups
4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

8. Whom do you now associate with in the community?

1. Almost exclusively Asians, Asian-Americans, Orientals
2. Mostly Asians, Asian-Americans, Orientals
3. About equally Asian groups and Anglo groups
4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

9. If you could pick, whom would you prefer to associate with in the community?

1. Almost exclusively Asians, Asian-Americans, Orientals
2. Mostly Asians, Asian-Americans, Orientals
3. About equally Asian groups and Anglo groups
4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

10. What is your music preference?

1. Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
2. Mostly Asian
3. Equally Asian and English
4. Mostly English
5. English only

11. What is your movie preference?

1. Asian-language movies only
2. Asian-language movies mostly
3. Equally Asian/English English-language movies
4. Mostly English-language movies only
5. English-language movies only

12. Where were you born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your father born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your mother born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your father's father born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your father's mother born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your mother's father born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

Where was your mother's mother born?

_____ U.S. _____ Asia-Where? _____ Other-Where? _____
_____ Don't Know

On the basis of the above answers, circle the generation that best applies to you:

- 1 1st Generation = I was born in Asia or other
- 2 2nd Generation = I was born in U.S., either parent was born in Asia or other
- 3 3rd Generation = I was born in U.S., both parents were born in U.S. and all grandparents born in Asia or other
- 4 4th Generation = I was born in U.S., both parents were born in U.S. and at least one grandparent born in Asia or other and one grandparent born in U.S.
- 5 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.
- 6 Don't know what generation best fits since I lack some information.

13. Where were you raised?

1. In Asia only
2. Mostly in Asia, some in U.S.
3. Equally in Asia and U.S.
4. Mostly in U.S., some in Asia
5. In U.S. only

14. What contact have you had with Asia?

1. Raised one year or more in Asia
2. Lived for less than one year in Asia
3. Occasional visits to Asia
4. Occasional communications (letters, phone calls, etc.) with people in Asia
5. No exposure or communications with people in Asia

15. What is your food preference at home?

1. Exclusively Asian food
2. Mostly Asian food, some American
3. About equally Asian and American
4. Mostly American food
5. Exclusively American food

16. What is your food preference in restaurants?

1. Exclusively Asian food
2. Mostly Asian food, some American
3. About equally Asian and American
4. Mostly American food
5. Exclusively American food

17. Do you

1. read only an Asian language
2. read an Asian language better than English
3. read both Asian and English equally well
4. read English better than an Asian language
5. read only English

18. Do you

1. write only an Asian language
2. write an Asian language better than English
3. write both Asian and English equally well
4. write English better than an Asian language
5. write only English

19. If you consider yourself a member of the Asian group (Oriental, Asian, Asian-American, Chinese-American, etc., whatever term you prefer), how much pride do you have in this group?

1. Extremely proud
2. Moderately proud
3. Little pride
4. No pride but do not feel negative toward group
5. No pride but do feel negative toward group

20. How would you rate yourself?

1. Very Asian
2. Mostly Asian
3. Bicultural
4. Mostly Westernized
5. Very Westernized

21. Do you participate in Asian occasions, holidays, traditions, etc.?

1. Nearly all
2. Most of them
3. Some of them
4. A few of them
5. None at all

22. Rate yourself on how much you believe in Asian values (e.g., about marriage, families, education, work):

(do not believe) 1 2 3 4 5 (strongly believe in Asian values)

23. Rate your self on how much you believe in American (Western) values:

1 2 3 4 5
(do not believe) (strongly believe in Western values)

24. Rate yourself on how well you fit when with other Asians of the same ethnicity:

1 2 3 4 5
(do not fit) (fit very well)

25. Rate yourself on how well you fit when with other Americans who are non-Asian (Westerners):

1 2 3 4 5

(do not fit) (fit very well)

26. There are many different ways in which people think of themselves. Which ONE of the following most closely describes how you view yourself?

1. I consider myself basically an Asian person (e.g., Chinese, Japanese, Korean, Vietnamese, etc.). Even though I live and work in America, I still view myself basically as an Asian person.
2. I consider myself basically as an American. Even though I have an Asian background and characteristics, I still view myself basically as an American.
3. I consider myself as an Asian-American, although deep down I always know I am an Asian.
4. I consider myself as an Asian-American, although deep down, I view myself as an American first.
5. I consider myself as an Asian-American. I have both Asian and American characteristics, and I view myself as a blend of both.

