

AN ABSTRACT OF THE DISSERTATION OF

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Title: A Cross-Cultural Comparison of Parenting Styles and Adolescent Competencies in Asian Americans and European Americans.

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Abstract approved: _____

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Guided by Ogbu's cultural-ecological model of human development, this comparative study offers a comprehensive and explicit way of conceptualizing and measuring parenting within the cultural context. Multiple hypotheses are generated for the cross-cultural comparison of parenting styles in Asian Americans and European Americans. The study uses the National Longitudinal Study of Adolescent Health survey data collected from a nationally representative sample of adolescents from grades 7 to 11. Logistic regression, ordered logit, and OLS regression models are employed to analyze ethnicity effects on parenting characteristics and adolescent competencies separately, adding adolescent gender, age, and parent education level as statistical controls.

This study explains why family-based and individual-based parenting styles are culturally appropriate for competence acquisition in Asian-American and European-American families respectively. Findings of this study suggest that Asian parenting is largely motivated by the welfare of the family rather than the individual's needs. This pattern is seen in the high emphasis on education, different parental control levels over various behavior domains, characteristics of parental warmth and school involvement, and the way parents approach their adolescents. Greatly influenced by their cultural values about competencies necessary for success, Asian-American parents apparently

inculcate the sense of filial obligation in adolescents with an emphasis on school success. European-American parents, on the other hand, develop the quality of self-expression in adolescents with an emphasis on self-esteem. Family-based parenting may be more advantageous to academic and behavioral competencies while individual-based parenting is relatively more effective for psychological adjustments. However, adolescents from both groups score reasonably well over measures of all competence variables. Thus, they may be all considered competent within their cultural contexts, with their differences echoing the fundamental diversity between the two parenting styles. This study presents some challenges to the traditional way of understanding and judging Asian parenting. A more complete scientific understanding of Asian Parenting would be useful for explaining competence acquisition in Asian-American adolescents.

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A Cross-Cultural Comparison of Parenting Styles and Adolescent Competencies
in Asian Americans and European Americans

by

Helen Yanqing Wang

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Helen Yanqing Wang, Author

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A CROSS-CULTURAL COMPARISON OF PARENTING STYLES AND ADOLESCENT COMPETENCIES IN ASIAN AMERICANS AND EUROPEAN AMERICANS

1. INTRODUCTION

The United States has been experiencing tremendous growth in the proportion of ethnic minorities (Gorman, 1998). Census data indicate that Asian Americans are the fastest growing minority group, largely due to major changes made to immigration laws. Though Asian Americans have been assimilated into the American mainstream culture to some extent, they might be a group of people who would especially like to defend their own cultural traditions and behavioral patterns. Despite acculturation, Asian-American parents, even those who are educated and westernized, tend to disagree, to a great extent, on certain things widely accepted in the American mainstream culture, such as the great deal of autonomy granted to adolescents (Gorman, 1998) and the de-emphasized importance of education (Chao, 1996b). In fact, Asian Americans have demonstrated a unique parenting style in the host county (Chao, 1994, 1995; Chiu 1987; Gorman, 1998).

One needs to bear in mind that parenting studies have mainly focused on samples of European Americans (Chao, 1994, 1995; Lin & Fu, 1990; Steinberg et al., 1995). The uniqueness of child-rearing practices adopted by this ethnic group deserves greater attention in the research community. The present study seeks to contribute to the knowledge about parenting among Asian-American families through comparison to parenting among European-American families. Adolescent competencies of the two ethnic groups were also compared to consider the outcomes of their corresponding

parenting styles. Asian Americans and European Americans, who represent an ethnic minority group and the mainstream group respectively in the American society, were chosen for this study because of the sharp contrast of their cultural ideologies and traditions.

This comparative parenting study was also inspired by the fact that a consensus has yet to be reached about an effective parenting style for different ethnic groups. This lack of consensus is mainly caused by implementation of parenting concepts derived from one cultural group to other ones. Ogbu (1981) has argued that it is our culturally biased understanding of human competence that prevents us from exploring optimal parenting styles accurately in ethnic minority groups. In particular, competencies are often equated with attributes possessed by white middle-class individuals, and thus the corresponding parenting style is assumed to be the only viable or “universal” child-rearing practice (Ogbu, 1981). Under this kind of research atmosphere, Baumrind’s parenting model (1967, 1971), which exclusively advocates the white middle-class parenting style, has been applied “universally” to different ethnic groups.

Limited by its ethnocentric nature, however, Baumrind’s parenting model has failed to interpret findings from samples of minority groups (Chao, 1994, 1995; Ogbu, 1981). In the case of Asian Americans, Baumrind’s model is unable to predict the successful adjustment of Asian-American children and adolescents since parenting in Asian-American families would be considered “authoritarian” or “deficient” by the standards of the model. Ogbu’s cultural-ecological model of human development (1981), on the other hand, encourages the construction of parenting styles in a broad cultural context. His model suggests that the nature of instrumental competencies in a culture

influence the parenting style, which operates as the mechanism to inculcate these competencies in youngsters. This has made Ogbu's theoretical framework more advantageous than Baumrind's parenting typology to cross-cultural parenting studies.

Some minority researchers (e.g., Chao, 1994, 1995, 1996a, 1996b; Gorman, 1998), with their understanding and appreciation of the Asian culture, have provided a deeper insight into the ethnic differences of parenting styles. Recognizing the methodological and conceptual limitations of their studies, this research examined ethnic differences of parenting styles with a more comprehensive and explicit way to discuss parenting and competence based on nationally representative survey data of adolescents and their parents.

In light of Ogbu's cultural-ecological model of human development, this research proposed qualitatively different parenting styles, with family-based parenting for Asian Americans vis-à-vis individual-based parenting for European Americans. Adolescents from both groups were expected to be competent when taking into account their cultural backgrounds. It was also expected that the two ethnic groups share some features of parenting and competence due to the overlap of their cultural values. Ethnicity effects on parenting characteristics and adolescent competencies were separately analyzed through logistic regression, ordered logit, and OLS regression models, including adolescent gender, adolescent age, and parent education level as statistical control.

2. LITERATURE REVIEW

There is great diversity among Asian ethnic groups due to their differences in cultural traditions, immigration experiences, and political backgrounds, which may all have influences on the parenting style of Asian Americans. However, it is hardly possible to define an Asian-American group by taking into account all these factors. Asian Americans in this study will include the following major traditional sub-groups: Chinese, Japanese, Korean, and Vietnamese, based on the commonality among their original cultures as well as on the sample availability of the data used for this study. The commonalities among these Asian ethnic groups are traditions influenced by Confucian principles which stress family wholeness and filial piety (Chao, 1995). In addition, a sample of Asian Indian Americans will be included because they share the hierarchical system with other Asian groups. Asian Indians also highly favor the “training” style on which the Asian community seems to have reached a consensus (Bhadha, 1999).

This literature review will include cross-cultural parenting studies conducted by minority researchers (e.g., Chao, 1994, 1995, 1996a, 1996b; Gorman, 1998) who have defined Asian Americans as one or more Asian sub-groups, which were selected into this study. While Asian Americans in this study are limited to certain Asian ethnic groups, the review will also include cross-cultural studies conducted by mainstream researchers (e.g., Steinberg et al., 1994; Steinberg et al., 1995) who have treated all Asian ethnic groups as a whole.

2.1 The Conventional Parenting Model

The following section briefly describes Baumrind's parenting model and then reviews the paradoxical findings from cross-cultural studies that were based on this model. In addition, this section also presents some interpretations offered by mainstream researchers about those paradoxical findings.

2.1.1 Baumrind's Parenting Model

Baumrind (1967, 1971) did excellent work in conceptualizing parental beliefs and behaviors into three prototypic patterns: authoritative, authoritarian, and permissive parenting styles, through her observation of parent-child interactions among white middle-class samples in the micro setting, the family or laboratory surrounding. This parenting style typology is aimed at capturing normal variations in parenting, which holds a balance of parental control and parental warmth in children's socialization. Maccoby and Martin (1983) generalized Baumrind's parenting styles to populations other than white middle-class families by making them a function of two dimensions: parental responsiveness and parental demandingness. Their effort has broadened the range of parenting to authoritative, authoritarian, indulgent, and neglecting, with each of them remaining as a balance of different levels of parental control and parental warmth. This literature review only focuses on authoritative and authoritarian parenting because disputation about Baumrind's model has occurred mainly around these two concepts.

The concept of authoritative parenting created by Baumrind (1967, 1971) describes a constellation of parental beliefs and behaviors that combines parental warmth

with parental maturity demands and firm behavioral control. With this authoritative prototype, Baumrind has actually set the tone for parenting valued by white middle-class families. That is, authoritative parents are able to balance their control of and demands on their children with their response to, support and respect for their children's individuality. Meanwhile, authoritarian parenting, featured by parental domination and an emphasis on obedience and conformity, has been referred to as deficient parenting that would put children at a disadvantage. There has been an effort to universalize the white middle-class parenting pattern, or the authoritative parenting. When the "universal" model is applied in comparisons of European-American group and minority populations, the minority parenting would be considered as deficient. Children raised in minority families would be expected to experience difficulties (Ogbu, 1981).

2.1.2 Paradoxical Findings on Baumrind's Parenting Typology

Mainstream researchers (e.g., Darling & Steinberg, 1993; Steinberg et al., 1994; Steinberg et al., 1995) have limited their definitions of parenting styles into Baumrind's parenting prototypes. However, when they tried to draw linkages between parenting styles and competencies assumed by the model, they encountered paradoxical findings from ethnic minority samples, especially those of Asian Americans.

Through a review, Darling & Steinberg (1993) described a picture of the effectiveness of the authoritative parenting style for successful socialization, e.g., instrumental competence, psychosocial maturity, academic success, and pro-social behaviors, as predicted by Baumrind's model. However, that picture may only tell what

could happen among European-American families. Instead of focusing on European-American samples, some mainstream researchers (Dornbusch et al., 1987; Mounts et al., 1989; Steinberg et al., 1992; Steinberg et al., 1994; Steinberg et al., 1995) have used large heterogeneous and multiethnic samples of adolescents to examine the transcontextual validity of authoritative parenting.

Steinberg, Darling, and Fletcher (1995) took the contextual variables ethnicity, socioeconomic status, and family structure into account rather than simply controlling for them. Even though their findings suggested that the benefits of authoritative parenting might not be limited to adolescents from white middle-class families, they admitted that authoritative parenting definitely worked better in some contexts (white middle-class intact families) than in others (e.g., Asian-American families). Actually, findings from the mainstream research have consistently shown that authoritative parenting is most strongly associated with academic achievement among European-American adolescents but is least effective among Asian- and African-American adolescents. It has been demonstrated that Asian-American adolescents from authoritative families do not perform better in school than those from non-authoritative families. As summarized by Chao (1994), the effectiveness of authoritative parenting is much weaker and more unclear among ethnic minority families than among European-American families.

In addition to the effectiveness of authoritative parenting, the same mainstream researchers have recognized that the prevalence of this parenting style also varies across cultural-ecological contexts, being most prevalent among white middle-class intact families and least prevalent among Asian-American families. At the same time, they have found a much higher prevalence of authoritarian parenting in Asian-American families

(Dornbusch et al., 1987; Darling & Steinberg, 1993). As with their positive assumptions about authoritative parenting, their negative claims about authoritarian parenting do not seem to hold true for Asian Americans either.

Studies with ethnic samples conducted by both mainstream and minority researchers have all drawn very mixed linkages between authoritarian parenting and competence in youngsters. For example, the negative association of authoritarian parenting and school success has been demonstrated for European-American families. However, it has not been found among Asian-American families because Asian-American adolescents who score highest on authoritarian parenting actually have the highest academic achievement among all ethnic groups (Dornbusch et al., 1987; Steinberg et al., 1992; Steinberg et al., 1994). Minority researchers have also demonstrated that Asian-American adolescents present higher scores in reading and math (Stevenson et al., 1993) and have higher GPA and more years of schooling than their mainstream counterparts as reviewed by Chao (1994), even though they are likely to come from "authoritarian" families.

Paradoxical findings about authoritarianism are not limited to school performance. With their one-year longitudinal research, Steinberg, Lamborn, Darling, Mounts, and Dornbusch (1994) found that authoritarianism was more advantageous among Asian-American adolescents, not only in terms of increasing GPA's and maintaining of high school attachment, but also in terms of decreasing school misconduct and preventing delinquency in the one year time period. As cited by Ogbu (1981), children from developing countries could perform well in school and behave appropriately even though their family backgrounds were far different from the white

middle-class. Ogbu (1981) has concluded that all children and adolescents in different child-rearing contexts seem to adjust well in acquiring culturally desired competencies, or in other words become successful.

2.1.3 Interpretations of Paradoxical Findings

Baumrind's parenting model has been shown to be inadequate for cross-cultural studies due to the paradoxical findings discussed above. A more comprehensive understanding of parenting requires explanations for why "authoritarian" parenting is more prevalent and advantageous among Asian Americans than among European Americans, especially in enhancing school performances and preventing deviant behaviors.

Facing the paradoxical findings on authoritarian parenting, mainstream researchers tend to explain the successful adjustment of Asian-American adolescents by diminishing the parental influence among Asian-American families. For instance, some researchers (Steinberg et al., 1992; Steinberg et al., 1995) have suggested that among all ethnic groups Asian-American adolescents have the highest level of peer support for academic excellence and that the negative effect of authoritarian parenting may be countervailed by this positive peer influence among Asian-American adolescents. To further minimize the parental influence, these researchers have also demonstrated that Asian-American parents are the least involved in their adolescent children's schooling among all ethnic groups. In addition, they have referred to the school dedication of

Asian-American adolescents as their strong fear of the negative consequence of educational failure.

Before accepting these interpretations, it is necessary to take a closer look at the relationship between parenting and competence among Asian-American families (Chao, 1996a; Gorman, 1998). In particular, there is a need to understand whether Asian American parenting has an influence on their children's selection of peer friends. There is also a need to check on the relevancy of the concept of parental involvement to Asian American parenting and understand in what way Asian-American parents get involved in schooling of their adolescent children. Finally, there is a need to understand the role of parenting in promoting the school success of Asian-American adolescents since it may be difficult to estimate how much adolescents are motivated by their fear of future failure at this age period. In reality, as mainstream researchers have already shown, Asian-American adolescents reported the highest parental expectation and standard for school success among all ethnic groups. Hence, instead of minimizing the parental influence, it may be more reasonable to investigate whether parenting has a more immediate influence on adolescents' performance among Asian-American families.

Mainstream researchers have made some efforts in looking for culture-related solutions to the paradoxical findings about authoritarian parenting. For example, inspired by the speculation that poor minority adolescents may be more benefited by authoritarian parenting, Steinberg, Dornbusch, and Brown (1992) investigated the interaction effects of ethnicity, socioeconomic status, and family structure with parenting style. However, the results were quite deviant from what they expected. Significant interaction effects of authoritarian parenting with the contextual variables were only found between white

middle-class intact families and all other families. Asian-American adolescents, mostly from “authoritarian” families, did well in school regardless of their socioeconomic status and family structures. Clearly, ethnic or culture itself deserves a deeper exploration in cross-cultural parenting studies. Some researchers have looked at the role of cultural values related to parenting and competence. For example, Ellis & Petersen (1992) have argued that a culture that values obedience and conformity, such as Asian culture, would prefer a restrictive and dominating parenting pattern (authoritarian parenting). However, this is an incomplete picture of Asian American parenting for two reasons: 1) The concept of authoritarianism in Baumrind’s parenting model has been found inadequate with ethnic samples including subjects of Asian Americans; 2) Obedience and conformity may not reflect the whole socialization goal for Asian Americans.

Darling & Steinberg (1993) have offered a more careful culturally-related interpretation to the paradoxical findings. They have tried to differentiate the parenting style from the parenting goal toward which socialization is directed and the parenting practice aimed at helping children reach the goal. Authoritativeness or authoritarianism, as a parenting style, is referred to as general emotional climate of parenting, working as a contextual variable to facilitate the parental socialization. The parenting style may vary along the socialization goal, which is assessed to reflect the cultural influence in relation to the developmental outcome. These researchers have insisted that authoritative parenting is equally effective in socializing children, but that the socialization goal and the parental practice vary across cultural-ecological contexts. Since authoritative parenting has been found less effective for Asian Americans (Chao, 1994), there seems to be little basis for the claim that this parenting approach is as optimal for this group of

people as for European Americans. Although Darling and Steinberg's model (1993) has considered the culture as a broad context for parenting, it has not moved beyond Baumrind's conceptualization of parenting styles. As Gorman (1998) has suggested, the role of culture in creating the parenting context deserves further attention.

2.2 The Cultural-Ecological Model of Human Development

This following section reveals the ethnocentric nature of Baumrind's parenting model, and therefore facilitates the understanding of why the model is not applicable to samples other than European-American middle-class families. The focus of this section is placed on Ogbu's cultural-ecological model of human development, especially on its advantage over Baumrind's parenting model and its implementation in cross-cultural parenting studies.

2.2.1 The Ethnocentric Nature of Baumrind's Model and the Global Value of Ogbu's Model

Mainstream researchers have had difficulty explaining the results inconsistent with the widely believed assumption that typical white middle-class parenting practice is the only door open toward school success and acquisition of other competencies. This may be because they have dwelt in the conventional parenting concepts, such as authoritativeness and authoritarianism. These concepts may be ethnocentric and irrelevant to parenting of Asian Americans (Chao, 1994, 1995), because they were derived from white middle-class child-rearing practices through observations in the micro

setting, the family environment (Ogbu, 1981). Specifically, even though the balance of different levels of parental control and parental warmth as well as their underlying motivations may constitute authoritative and authoritarian parenting styles for European-American families, they may not be an accurate synthesis of parenting for Asian-American families. In other words, Baumrind's model may only provide rationales for parenting in European-American families, and not be able to accurately capture parenting in Asian-American families (Chao, 1994, 1995). Even mainstream researchers have argued that once the background is changed, a typology would not be able to tell the real story in the new social and cultural background. Although some mainstream searchers (e.g., Steinberg et al., 1994; Steinberg et al., 1995) have included variables of ethnicity and socioeconomic status in their cross-cultural studies, they have not really treated culture as a broader context that would qualitatively distinguish parenting style from one ethnic group to the other. Particularly, they have not conceptualized parenting styles and generated research questions about parenting and competence with an appreciation of different cultural ideologies and traditions.

It is unwise to universalize white middle-class child-rearing practices because of the variety of cultural imperatives (Ogbu, 1981). Through illustrating the intrinsic relationship between cultural tasks and human competencies, Ogbu (1981) has generated a cultural-ecological model of human development that provides a theoretical framework about how cultures foster parenting styles. One may get a clear idea about this model from Ogbu's own words: "I have proposed the cultural-ecological model as a framework for studying child-rearing and developmental issues in a way that is not ethnocentric and

as a framework broad enough to encompass many important forces often excluded in the conventional research” (Ogbu, 1981, p426).

Ogbu’s cultural-ecological model (see Figure 1) starts with the concept of effective environment that reflects people’s understanding of the nature of available resources from their environment and how to use certain techniques to exploit those available resources. Largely shaped by the effective environment, cultural tasks including economic, political, and social tasks are manifested in the cultural value system, which is further represented by a constellation of competencies that are necessary for survival and success. The parenting style, including socialization goals and child-rearing techniques, is then determined by the instrumental competencies and serves as a mechanism for inculcating the culturally desired competencies in children. The developmental outcome in children provides feedback to the ecological system and further strengthening the parenting style.

As a theoretical framework, Ogbu’s cultural ecological model may be more advantageous than Baumrind’s parenting model for the cross-cultural study. It is more flexible and extensive for capturing the broad patterns of parenting in the cultural background rather than in the micro surrounding of the individual. This current comparative study of parenting is inspired by the message conveyed from Ogbu’s model that most children grow up to be adults with culturally desired competencies. The review focuses more on the Asian culture and parenting than on the mainstream culture and parenting, mainly because of the author’s Asian background and special interest.

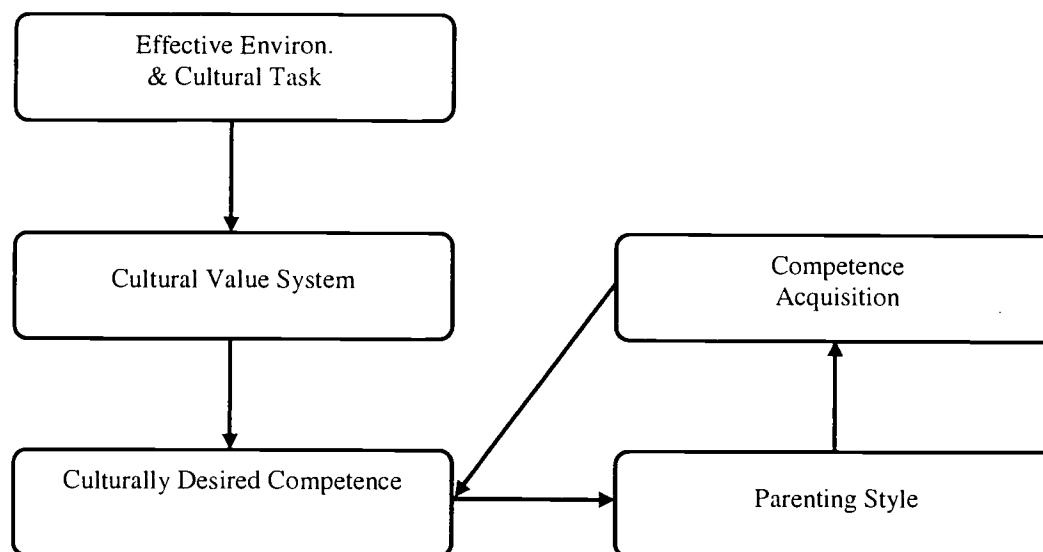


Figure 1. A Cultural-Ecological Model of Human Development

2.2.2 Implementation of Ogbu's Model in Cross Cultural Research

Cultures have been described as varying along the global dimensions of collectivism and individualism (Yao & Smetana, 1996). Thus, the ethnic discrepancies in the overall parenting orientations may be rooted in these dominant cultural ideologies. Guided by Ogbu's cultural-ecological model of human development, this review section discusses how the cultural influence provides the underlying rationale for the parenting style in each ethnic group.

2.2.2.1 Rationale for Parenting in European-American Families

The United States is a modern industrial and democratic society, which promises to provide people with various and equal opportunities as well as freedom of personal choices (see Figure 2). Its unique economic, social, and political traditions are centralized in the individual-oriented cultural tasks and consequently in the dominant Western cultural ideology of individualism represented by European Americans. The individualistic ideology, which respects self-interest and encourages self-expression, values individual-oriented attributes, such as independence, assertiveness, and uniqueness (Chao, 1994; Steinberg et al., 1992). This cultural orientation requires individual-based parenting characterized by parental democracy. For European-American families, the main issue of parenting is whether and how much parental democracy is involved, and

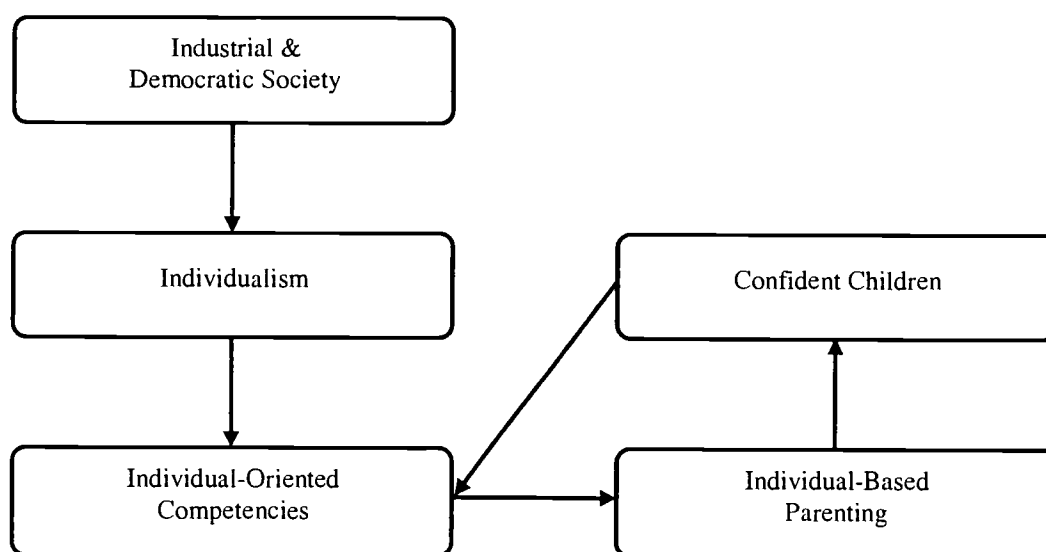


Figure 2. Parenting in Mainstream Culture

the most important measure of successful parenting is whether self-esteem is developed in children. The cultural ideology affects the perception, interpretation, and acceptance of the parenting style and consequently influences the development of competence. In general, it is the instrumental competence valued by the individualistic ideology that determines the prevalence and the effectiveness of authoritative and authoritarian parenting for European American.

More specifically, the democratic nature of authoritativeness well matches the ideology of individualism prevailing among European Americans. Put in another way, authoritativeness is a characteristically white middle-class approach to child rearing. Although authoritative control involves parental demands, supervision, and disciplinary efforts, authoritative parents not only recognize their own special rights as adults, but also their children's needs and individuality (Baumrind, 1968). Authoritative parenting is a democratic type of firm control, with the child's independence and self-expression being maintained (Baumrind, 1971). It is its democratic nature that makes authoritativeness prevalent and effective among European-American families. This parenting style may enhance youngsters' openness to parental socialization and bidirectional communication that may be beneficial to the development of optimal competencies (Darling & Steinberg, 1993).

Authoritarian parenting, on the other hand, is a violation of democracy. As stated by Baumrind (1968, p.261), "...an authoritarian parent attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct ... she values obedience as a virtue and favors punitive, forceful measures to curb self-will at points where the child's actions or beliefs conflict with what she thinks is

right conduct.” According to Chao’s review (1994), the “authoritarian” concept has originated from both Evangelical and Puritan religions that have notions of “original sin” and “breaking the child’s will”. Due to these religious influences on American culture and psychology, early American child rearing was marked by parental hostility, rejection, aggression, mistrust, unreasonableness, and dominance. Even more, the term “authoritarian” was used to refer to a personality type linked to Nazi Germany. Thus, it became a political term in contrast to the concept of democracy. There was a distinct shift from authoritarian to democratic (or authoritative) approach for child rearing in the American society after World War II. It is hardly conceivable for the authoritarian parenting style to become popular and effective among a group of people, such as modern European Americans, who endorse independence and personal choices. Researchers (Steinberg et al., 1994) have demonstrated that authoritarianism appears to be more harmful to European-American youth than to youth from other ethnic groups.

2.2.2.2 Rationale for Parenting in Asian-American Families

The ideology of collectivism prevalent in the Asian society is deeply rooted in its cultural background (see Figure 3). For a fairly long historical period of time, the Asian, especially the Chinese society, was a feudal system characterized by a rigid hierarchy. Its unique social, political, and economic environment nourished the Confucian tradition, which has profound impact on Chinese and many other Asian cultures, such as the Japanese, the Koreans, and the Vietnamese (Chao, 1995). Bond and Hwang (1986) have summarized Confucian ideology into three essential aspects: (1) a person is defined by

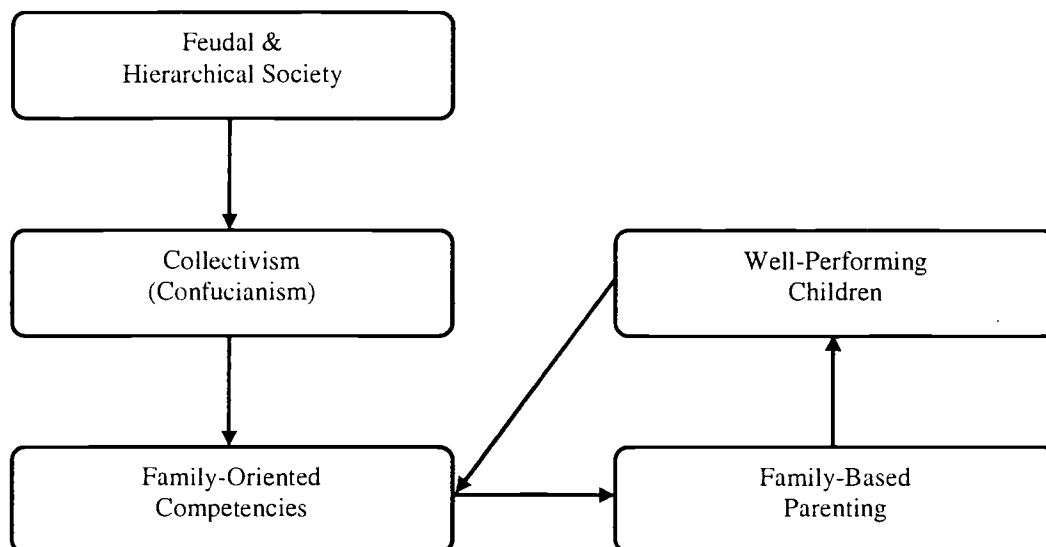


Figure 3. Parenting in Asian Culture

his or her relationships with others, (2) relationships are structured hierarchically, and (3) social (including familial) order and harmony are maintained through the fulfillment of role responsibilities and obligations. The Confucian tradition in the Asian society values group- or family-oriented competencies such as interdependence, harmonious relationships, compliance and obedience, and conscientiousness (e.g., Chao, 1995; Fong, 1968; Ho, 1989; O'reilly et al., 1986). As indicated by Chao (1994, 1995, 1996a) and others (Lau & Cheung, 1987), the cardinal Asian cultural values have been embedded in Asian parenting that is geared toward the family wholeness.

Traditional Asian family relationships are structured hierarchically with clearly defined role responsibilities and obligations (Fong, 1968). The child, as the subordinate member, is required to be filial, loyal, and respectful to the parent, the superior member,

who is required and entitled to responsibly and justly govern, teach, and discipline the child (Chao, 1994). This kind of relationship largely affects rules of behaviors such as parenting and competence acquisition among Asian Americans. In general, the family-oriented competencies call for family-based parenting that is characterized by parental authority (parental control and supervision) and dedication (family investment and parental devotion). The Asian cultural ideology of collectivism also affects the perception, interpretation, and acceptance of the parenting style and consequently influences competence development within the Asian-American community. Instead of parental democracy, the key issue of parenting among Asian Americans is whether and how much the parental responsibility is fulfilled, and the most important measure of successful parenting is whether the sense of obligation is inculcated in children. This may explain why authoritative and authoritarian concepts lack relevancy to parenting among Asian Americans.

2.3 What Has Been Done by Minority Researchers

The unexpected findings on the authoritative and authoritarian parenting styles for Asian Americans may point to the valuable insight that a theory is not constructed in a void but rather is influenced or biased by intellectual surroundings, especially the cultural context. It is understandable that Baumrind, as a mainstream scholar, has built her parenting model on the dominant Western ideology through her selection and observation of white middle-class samples. Specifically, her concepts of “authoritative” and “authoritarian” parenting are part of a larger cultural, social, and political context, which

has been characterized by two opposite ideologies, democracy and authoritarianism. Some minority researchers (e.g., Chao, 1994) have realized their responsibility to be aware of how a theoretical model, such as Baumrind's parenting typology, adheres to and is influenced by the culture. They have stated the necessity of examining the validity of Baumrind's parenting typology when applying it to the group of Asian Americans.

Unfortunately, cross-cultural studies, especially those conducted by mainstream researchers, have consistently referred to Asian-American parents as "authoritarian" because they are historically seen as more controlling than those in the mainstream society (Chao, 1994; Chiu, 1987; Dornbusch et al., 1987; Gorman, 1998; Kelley & Tseng, 1992; Lin & Fu, 1990; Steinberg et al., 1992). At the same time, these studies have also shown plenty of evidence that may indicate the irrelevancy of the authoritarian concept for Asian American parenting. As mentioned earlier, Asian Americans do not have the historical and sociocultural context to share this parenting concept since it carries many negative connotations from its origin (Chao, 1994). The parenting style of Asian Americans must be realized beyond Baumrind's parenting model and the cultural context in which the model was constructed.

Some minority researchers (e.g., Chao, 1994, 1995, 1996a, 1996b; Gorman, 1998) have made efforts to conceptualize Asian American parenting based on their knowledge and appreciation of the Asian culture. Using samples of Asian- and European-American parents of children, Chao (1994, 1995, 1996a) compared parenting concepts of the two ethnic groups on both conventional measurements and her own scales, such as the Training Scale and the Family-Based Control Scale, constructed based on the Asian culture. In her qualitative research, Chao (1996b) tried to capture between-group

differences of parental beliefs about parenting role in school success. Gorman (1998) also conducted a qualitative parenting study on immigrant Chinese parents of adolescents. Instead of assessing parenting styles with conventional measurements, the subjects were interviewed individually or in focus groups with open-ended questions on parental rules, Chinese cultural values, social, academic, and cultural adjustment, and parenting concerns. Those studies conducted by minority researchers have demonstrated that parenting concepts do differ between Asian Americans and European Americans. Through their findings, one may get a deep insight into the uniqueness of parenting and competence acquisition for Asian Americans.

The training style, which may be seen as the content of family-based parenting, has evolved from the Confucian tradition in the Asian culture (Chao, 1994, 1995, 1996a). The training concept overlaps authoritarianism with its emphasis on obedience and a set standard of conduct, which may explain why Asian-American parents have often been mistakenly classified into the "authoritarian" group. However, the meanings and motivations behind the two concepts are qualitatively different (Chao, 1996a). Authoritarian parental control is directed to dominate the child's life. But in the case of the training style, parental control is motivated by parental concern for the child's success and family honor. With the training style, Asian-American parents also show their warmth and support in a unique way, which has not been accurately captured by conventional measures (Chao, 1994, 1996b). Chao has empirically tested the training style and found it endorsed more by Asian Americans than by European Americans. The training concept, with its positive notion, integrates the kind of family-based parental

control and warmth in Asian-American families, just as authoritativeness involves individual-based parenting for European-American families.

Therefore, the difference in parenting styles of Asian-American and European-American families does not lie between authoritarianism and authoritativeness, but rather between the family-based and individual-based parenting styles. In other words, the successful adjustment of Asian-American adolescents has little to do with either authoritative or authoritarian parenting, but rather with family-based parenting. It is necessary to understand culturally desired competencies before getting into more detailed comparison of the two parenting styles.

2.4 Between-Group Comparison of Culturally Desired Competencies

Baumrind (1989, 1991) has described competencies valued by the American mainstream society, which include responsible independence, cooperation with adults and peers, psychological maturity, and academic success. These competencies have been widely measured as adolescent outcomes in parenting studies (e.g., Steinberg et al., 1994; Steinberg et al., 1995). Determined by cultural tasks and ideologies, instrumental competencies become parental socialization goals.

Due to the overlap of values between the two cultures, Asian Americans may share the socialization goals prevailing in the mainstream society to a limited or great extent. Nevertheless, the underlying meanings and motivations as well as the priorities of the socialization goals may vary between the two ethnic groups. In particular, European-American parents instill individual-oriented competencies through assisting their children

to balance rule standards with self-expression, while Asian-American parents inculcate family-oriented competencies through helping their children establish a sense of filial obligation to the family. This fundamental difference in parental socialization goals may explain why European-American parents outweigh self-esteem over school success, while Asian-American parents stress academic achievement over everything else (Chao, 1996b). The review about culturally desired competencies is mostly based on the findings from cross-cultural studies by minority researchers.

2.4.1 School Competencies

It may not be an accident for Baumrind to place school success at the end of her competence list. There is a negation of academic importance among European Americans, that is, emphasis of academic success would negatively impact the child's self-esteem. They believe that innate ability and self-motivation are the most important for learning and need to be appropriately stimulated by the environment including family and school (Chao, 1996b). However, school success, which is believed to involve great individual efforts, is regarded as the primary socialization goal along with parental respect and good behavior by Asian Americans (Chao, 1995).

According to Chao's review (1996a), studies with samples of Asian Americans have demonstrated that the great emphasis on education among Asian-American families may be influenced by the collectivistic orientation in the Asian culture. With this orientation, familial obligation and respect are considered the most important and often realized through school success. This cultural tradition has been strengthened by the

immigration experiences of Asian Americans. Because of their limited opportunities (available resources) as an Asian minority, Asian-American parents feel that their children have to work harder to obtain a better career (Chao, 1996b). They also believe that school success is the only avenue to social mobility (Chao, 1995; Chen & Uttal, 1988) and the foundation for future success that would eventually bring honor to the family (Chao, 1996b). European-American parents, on the other hand, do not emphasize education as strongly as Asian-American parents do. This is because their cultural ideology of individualism encourages personal choices while their available political, social, and economic resources may provide individuals with more alternatives and equal opportunities.

2.4.2 Behavioral Competencies

Although obedience is a virtue for a culture originated from a hierarchically ordered society (Berry, 1971; Ogbu, 1981), self-reliance is considered as a prerequisite to achievement (Lin & Fu, 1990), and to fulfillment of one's obligations to the family and society (Gorman, 1998). However, among Asian Americans, self-reliance may be associated with the development of academic skills and cognitive abilities with which children would be responsible for their own schoolwork and consequently for their own future in order to bring honor to the family (Chao, 1996b). At the same time, while qualities of self-expression and initiation are endorsed among European Americans, attributes of modesty and tolerance are encouraged among Asian Americans,

More importantly, Asian-American adolescents are expected to adhere to socially desirable and culturally approved behaviors (Gorman, 1998). Although this is also a socialization goal for European-American families, expectations about behavioral rules vary along the culture. Behavioral competence may be characterized by self-selection, self-expression, and risk-taking for European Americans and by elderly respect and obedience as well as trouble- or risk-avoidance for Asian Americans (Chao, 1995; Gorman, 1998). Logically, adolescents are expected to be more explorative and self-directed for European Americans but more conservative and conscientious for Asian Americans.

2.4.3 Psychological Competencies

It has been stated by mainstream researchers (e.g., Lamborn, et al., 1991; Steinberg et al., 1995) that adolescents from authoritarian families suffer a psychological cost, especially in regard to self-esteem, although they may perform well. The one-year longitudinal research conducted by Steinberg, Lamborn, and Darling (1994) has also shown that somatic symptoms increase most remarkably among adolescents from authoritarian families across all ethnic groups. However, one has to caution against hasty application of these conclusions to Asian-American families.

Psychological well-being, especially self-esteem, has been considered as the foundation for success, including school achievement, by European Americans (Chao, 1996b). Then why do Asian-American adolescents perform well even though they are believed to have a lower level of psychological competence due to “authoritarian”

parenting? This paradox may be due to the irrelevancy of authoritarianism to Asian parenting (Chao, 1994, 1995, 1996a). Without classifying students into family types defined by Baumrind's parenting model, Stevenson, Chen, and Lee (1993) have provided evidence that does not support the stereotype that regards Asian-American students as distressed due to high pressure for academic excellence (or authoritarian parenting). In their research, Japanese and Chinese students reported less frequent feelings of stress, depression, aggression, somatic complaints, and academic anxiety than their mainstream counterparts. Regarding self-esteem, the two ethnic groups may simply hold different interpretations of the concept. Asian-American parents want their children to be more confident about their potentials in school performance and to set high academic goals for themselves (Chao, 1996b). Thus, for Asian-American families, self-esteem may be mostly associated with academic-related self-concepts and behaviors rather than with social competencies and general self-concepts, which mainly reflect the idea of self-esteem among European Americans.

2.5 Between-Group Comparison of Parenting Styles

According to Ogbu (1981), parenting styles are culturally organized formulas for inculcating competencies in children, which evolves through generations to meet environmental needs. He has also pointed out that immigrants would "eventually learn successfully either by abandoning or modifying substantially their native competencies and rules of behavior for achievement in favor of those which facilitate school success." (Ogbu, 1981, p425). Applying this assumption to the Asian-American family, however,

one may find that the family-based parenting style has been continued and strengthened rather than modified or abandoned in the host country (Chao, 1996b; Gorman, 1998). This is due to the fact that family-based parental control and warmth, referred to as the training style by Chao (1994, 1995, 1996b), is quite compatible to the educational orientation in the mainstream culture. As mentioned earlier, this orientation has been reinforced by the immigration experiences of Asian Americans, including their special hardship as Asian immigrants, their apprehension about negative influences from the U.S. society on their children, and their disagreement on certain things prevailing in the mainstream culture (Chao, 1996b; Gorman, 1998). Asian-American parents would place an extremely high emphasis on education and try hard to keep their children on track in order to maintain the family wholeness in the host society.

Again, the family-based parenting is demanded by the parental socialization goal of inculcating family-oriented competencies in children. At the same time, the individual-based parenting style is called for by the parental socialization goal of raising individual-oriented adults. This review section describes the differences in parenting styles of Asian-American and European-American families mostly through presenting what has been demonstrated by minority researchers.

2.5.1 Parental Control

Due to different goal intentions, parental control is balanced with parental concern for individuals' rights and needs in European-American families, while adult respect and family wholeness are stressed over the freedom of expression in Asian-American families

(Chao, 1996a; Gorman, 1998). Thus Asian-American parents may be stricter than European-American parents. For example, Chinese parents may start to train their children to study hard at a fairly early age and to push their children if they feel necessary. They also tend to expose their children to rules of behavior that are expected and accepted for the family wholeness (Chao, 1994).

Also due to the various goal intentions under parental control, Asian-American adolescents have been found to differ significantly from their European-American counterparts in parental expectations for behavioral autonomy or self-reliance (Feldman & Rosenthal, 1990). European-American parents may give their adolescent children more freedom and respect in order to meet their needs for individuation. In contrast, Asian-American parents, who tend to be more indulgent in their children's early years, may become much stricter or more protective after their children reach the "age of understanding" (Ho, 1989; O'reilly et al., 1986). Even more, Chinese parents believe that the American society is granting adolescents too much autonomy (Gorman, 1998). The one-year longitudinal study by Steinberg, Lamborn, Darling, Mounts, and Dornbusch (1994) found that for all ethnic groups, authoritarian parenting was more effective than authoritative parenting in reducing delinquent behaviors. Although these parenting concepts may be irrelevant to Asian American parenting (Chao, 1994, 1995, 1996a), it seems that relatively high parental control would be somewhat effective in keeping adolescents on track.

Nevertheless, in terms of the goal intention, the family-based parental control is different not only from the authoritative (democratic) control but also from the authoritarian (dominating) control (Gorman, 1998). Compared to Baumrind's parenting

concepts, it is more predictive of school achievement for Asian Americans than for European Americans, with a positive association among Asian-American families and a negative association among European-American families (Chao, 1996a). Gorman (1998) has stressed that the parental control with strong parental concern for raising competent adults for the family and society (the family-based parental control) is the only consistent rationale provided by Chinese parents to explain the successful adjustment of their adolescent children.

In addition, the legitimacy and entitlement to parental control need to be addressed. While parental control often involves parental respect for children's individuality for European Americans, it may be realized through parental responsibility and children's sense of filial obligation for Asian Americans. Because the responsibility and obligation of each party are maintained hierarchically and driven by the family wholeness, Asian-American parents are culturally entitled and legitimately accepted as authority or superior figures over their children who are obligated to be loyal and respectful (Chao, 1994; 1995; Rohner & Pettengill, 1985). By contrast, European-American parents endorse a more equal child-parent relationship by acting like consultants to their children (Chao, 1996b). In Asian-American families, parents and other significant people feel entitled to keep their children on track through parental control (Ho 1986; Wu 1985), with the concept of parental control carrying a positive connotation to Asian Americans (Chao, 1994, 1995; Rohner & Rettenengill, 1985). It is not uncommon for Asian-American parents to make decisions for their children (Rohner & Rettenengill, 1985). Indeed, Asian-American parents use the sense of obligation, instead of simple external enforcement, as a mean to obtain compliance in children, and

may refer to children's disobedience as selfishness and inconsideration (Sue, 1981; Yao & Smetana 1996).

2.5.2 Domains of Adolescent Behaviors for Parental Control

The level of parental control on a particular domain of adolescent behaviors may vary along the ethnic group. For the family honor, Asian-American parents appear to be controlling in the areas related to their children's education, career, and marriage, while indulgent on other aspects (Lau et al., 1990). Especially, parental control in Asian-American families is apparently directed to facilitate academic success (Chao, 1996b; Gorman, 1998). Findings from Gorman's qualitative study (1998) may enable us to better understand why the kind of family-based parental control is related to the successful adjustment in Asian-American families. Her study has also demonstrated that the academic-oriented peer networks may be just the consequence of parental influences, which may shake the ground of the assumption made by some mainstream researchers that the effects of "authoritarian" parenting are offset by the positive peer influence among Asian-American families.

According to Gorman's study (1998), Asian-American parents may become controlling when they believe that their adolescent children are pulled away from their primary task of learning. In particular, they make great efforts to insure that their children are with "good" friends who are academically helpful, and are against early sexual experiences. Moreover, they are unhappy with their children's increasing desire for personal pleasures and entertainment as influenced by the American society. However,

“strict” or “controlling” is not a complete picture of parental control for Asian Americans. Parents in Asian-American families do grant their adolescent children some freedom as long as good school performance can be guaranteed (Gorman, 1998). They may be flexible or less restrictive in minor behaviors.

Instead of focusing on schoolwork, European-American parents encourage their adolescent children to have more diverse social experiences. Stevenson, Chen, and Lee (1993) have stated that while Asian-American students (Chinese and Japanese) are expected to devote themselves primarily to their schoolwork, mainstream students, in contrast, are facing more various demands, such as after-school jobs for economic independence and dates for broad social experience. This may partially explain why parenting has been seen as less controlling for European Americans than for Asian Americans. Nevertheless, parenting studies conducted by minority researchers have shown the necessity to specify domains of adolescent behaviors for parental control rather than looking at parental control in a general manner.

2.5.3 Parental Warmth

One may get a better understanding of individual-based parental warmth from Baumrind's statement (1991, p.62), which refers to authoritative warmth as “the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive, and acquiescent to children's special needs and demands”. Like parental control, parental warmth for European Americans also entails a parent's recognition of the child's individuality, which would lead to parental respect and

autonomy granting. Correspondingly, parental warmth for European Americans often involves physical and verbal demonstrations with parental loves, praises, and positive attitudes as well as emotional supports (Baumrind, 1991) for developing self-confidence in children.

When saying that parental control is motivated by parental affection and concerns for the child's successful adjustment to preserve the family integrity (Chao, 1994, 1995; Gorman, 1998), the family-based nature has been also assumed for parental warmth in Asian-American families. Like parental control, parental warmth in Asian-American families is also understood as the parental responsibility to instill the sense of obligation rather than to recognize and meet children's individual needs and interests.

Asian-American parents are clearly not treating their adolescent children as equal individuals as their European-American counterparts do (Gorman, 1998). They may be more indirect or implicit in expressing their love and concerns with less verbal and physical expression especially. In addition, Asian parenting may involve less bidirectional communication. However, high familial investment and parental dedication would more accurately characterize Asian parenting (Chao, 1995, 1996a; Gorman, 1998). Some minority researchers (Wu 1985; Young, 1972) have reported that Asian-American mothers provide a highly nurturing environment for their children through prompt responses to their children's every need, especially during their children's early years. When children reach school age, the mothers provide the support and drive for their school success through increasing family investment and parental devotion. Even though they might not be expressively loving, Asian-American parents are very child-centered and may even feel that mainstream parents are not as invested in their roles as parents

(Gorman, 1998). Unfortunately, these characteristics of parental warmth have not been accurately captured by the conventional measurement of parenting styles either, which may partially explain why Asian American parents have been thought as more authoritarian.

2.5.4 Priority of Education and Parental Involvement in Schooling

Asian-American parents tend to put their children's academic success first and care about both the process (e.g., establishment of sophisticated academic skills and hard-working attitudes) and outcome (e.g., grades and college graduation) of learning (Chao, 1996b). European-American parents, on the other hand, are afraid that stress on education would negatively affect their children's psychological well-being, especially self-esteem. Thus, they emphasize more the process, or the stimulation of innate ability and self-motivation, than the outcome of learning.

Believing in great potential in their children, Asian-American parents hold higher expectations and standards for academic achievement (Chao, 1996b; Stevenson et al., 1993). They feel that there is lower academic expectation in the mainstream society (Gorman, 1998). As reported by Stevenson, Chen, and Lee (1993), mainstream parents are much more likely than Asian-American parents to express high degrees of satisfaction with their children's academic performance, despite the reality that mainstream students greatly lag behind their Asian-American peers. These researchers have further concluded that while lower parental expectations and standards are apparently associated with lower performance and relatively higher distress among mainstream students, higher parental

expectations and standards may have resulted in higher academic achievement without increasing psychological distress among Asian-American students.

Driven by the Asian cultural values, Asian-American parents hold a stronger belief about the significant role of parenting for school success than their European-American counterparts (Chao, 1996b). Since school achievement is the most valued competence and thus the most important measure of successful parenting, parental school involvement may be highly regarded among Asian-American families (Chao, 1996b). However, as mentioned earlier, researchers (Steinberg et al., 1992; Steinberg et al., 1995) have made a contradictory statement that Asian-American parents of adolescents are the least involved in schooling across all ethnic groups. Chao (1996a) has pointed out that there is a need to clarify parental school involvement among Asian Americans. In some studies (Steinberg et al., 1992; Steinberg et al., 1995), parental involvement was measured by items of working directly with children as tutors (e.g., "I check over my child's homework") or as participants in school programs (e.g., "I attend school programs for parents"). This conceptualization of parental involvement may not be applicable to the Asian culture since Asian-American parents may feel direct parental intervention unnecessary and inappropriate for adolescents. In reality, Asian-American parents may be involved in schooling more directly at a much younger age in order to develop hard working attitude and academic independence in their children (Chao, 1995; Stevenson & Lee, 1990). They believe that children should be academically self-reliant by the time of adolescence (Chao, 1995). With samples of Asian Americans, Choi, Bempechat, and Ginsburg (1994) have also demonstrated that academic involvement (the direct kind) tends to decrease as children grow older among Asian-American families.

Through providing a stable and educationally nurturing home environment to their children, Asian-American parents may be involved in their older children's schooling with a more indirect and subtle manner than European-American parents (Chao, 1996a, 1996b). For example, they may provide unlimited financial resources to support their children's achievement (Gorman, 1998). Moreover, the excellent performance of Asian-American adolescents has made direct parental involvement unnecessary (Gorman, 1998). It should be noticed that direct involvement in their older and more advanced children's schoolwork may be partially limited by the language and cultural barriers Asian-American parents typically face (Chao, 1995).

2.5.5 Authoritative Strategies and Dynamic Socialization Process

To raise family-oriented youngsters, parenting does not have to be characterized by parental dominance and coldness associated with authoritarian parenting; rather it may be subtle, indirect, and even rational as in authoritative parenting (Gorman, 1998). The authoritative strategies adopted by Asian-American parents have been attributed to acculturation by some researchers. Bhadha (1999) has interpreted that while facing new cultural demands for parenting, immigrant parents must readjust their conventional cultural values in the host country. In addition to acculturation, Uba (1994) has indicated that the subtlety in parenting may originate in the Confucian tradition of harmonious interpersonal relationships. Gorman (1998) and Yao & Smetana (1996) have made it clearer that direct confrontation is generally avoided in all relationships among Chinese families in order to save "face" and promote family harmony.

Nevertheless, parenting in Asian-American families could not be classified as authoritative because parents are definitely not treating their adolescent children as “equal” individuals (Gorman, 1998). The “authoritative” strategies may be motivated by conflict suppression and peace-seeking among Asian-American families, as opposed to self-expression and conflict-handling among European-American families (Chao, 1996a). Despite this difference, Asian parenting may be subtle and reasonable because it still shares the common goal intention of the development of self-reliance with mainstream parenting to some extent (Gorman, 1998).

Regardless of specific parenting strategies, socialization is considered as a reciprocal process. Not only are parents determined to inculcate, but also youngsters are motivated to actively acquire culturally desired competencies (Ogbu, 1981). Baumrind (1967) has viewed socialization as a dynamic process through which the parenting style enhances the child’s ability in choosing appropriate responses to parental demands, thus increasing the effectiveness of parenting. As suggested by Lewis (1981), this dynamic process may be manifested in the reciprocal communication within authoritative families, which may enhance the child’s openness to socialization and therefore facilitate parental demands. However, this interpretation may only be rational to the socialization of European Americans. Gorman (1998) has interpreted the dynamic socialization process in Asian- American families as the interaction of parental expectation and the adolescent child’s sense of filial obligation, rather than to the combination of parental control and the child’s submission assumed by other researchers. Indeed, issues that are treated as personal by mainstream people may be judged to be moral obligation by Asian Americans (Yau & Smetana, 1996). Hopefully, family-based parenting may be effective

in enhancing adolescents' sense of obligation to the family, which in turn may facilitate parental socialization and successful adjustment (Gorman, 1998). Particularly, the academic dedication of Asian-American adolescents, which was referred to as their fear of the negative consequences of education failure by some mainstream researchers, may be traced to their sense of obligation, a more immediate consequence of parenting.

2.6 Problems Unresolved by Previous Research

Cross-cultural parenting studies have been designed to investigate or verify Baumrind's parenting model with ethnocentric measurements of parenting styles (Chao, 1994, 1995). Among the few minority researchers who are interested in the comparative study of parenting, Chao (1994, 1995, 1996a, 1996b) and Gorman (1998) have moved beyond Baumrind's typology by generating their parenting concepts and research questions based on socialization goals, which reflect ethnic differences in culturally desired competencies. Nevertheless, like all other studies, their studies have also left much room for future exploration.

First, the parenting studies conducted by the minority researchers used small and non-representative (more educated) samples which rarely included fathers. This sample bias would affect the external validity of their findings about the between-group differences in parenting styles. Specifically, their conceptualization of parenting for Asian Americans, such as the family-based control and the training style, need to be operationalized with a nationally representative sample. Besides, since the parenting

concepts were often constructed through samples of parents of young children (e.g., Chao, 1994, 1995, 1996a), there is a need to test the concepts on parents of adolescents.

Second, though ignored by most cross-cultural parenting studies, some speculations about subtle ethnic differences of parenting styles have been brought out by the minority researchers, mostly through their qualitative research. For example, parenting among Asian-American families is school-oriented (Gorman, 1998); parental socialization goals vary between the ethnic groups (Chao, 1996b); characteristics of parental warmth differ for the two types of parenting styles (Chao, 1996b); and parents from different ethnic groups get involved in schooling in different ways (Chao, 1996a). It is necessary to test these speculations with large quantitative data obtained from the nationally representative sample.

Third, the minority researchers (e.g., Chao, 1994, 1995, 1996a, 1996b) did not pay enough attention to the issue of parental democracy. Indeed, parental democracy may play an important role in differentiating family-based parenting from individual-based parenting. With her qualitative data, Gorman (1998) has indicated that Chinese parents are definitely not treating their adolescent children as equal individuals even though they have adopted some "authoritative" strategies. This assumption needs to be investigated with quantitative data from both Asian-American and European-American samples.

Fourth, cross-cultural parenting studies including those conducted by the minority researchers have discussed parental control in a general manner. There has not been much effort made to specify domains of adolescent behaviors over which parents exert their control. Gorman (1998) has implied that Chinese parents may be controlling in some domains while flexible in others, depending on whether certain behaviors would be

beneficial to academic performance. This assumption certainly needs a lot of clarification, especially with large quantitative data from both Asian-American and European-American samples.

Fifth, the minority researchers have tried to understand parenting by looking at the socialization goal or the competence valued by the culture. However, they have mostly focused on the school competence (e.g., Chao, 1994, 1995). It is necessary to see other developmental aspects in adolescents, including behavioral, social, and psychological competencies, when conducting comparative parenting research.

2.7 Research Questions and Hypotheses

To deal with the methodological weaknesses in studies conducted by minority researchers, this research was designed to conduct a comparative parenting study by offering a more comprehensive and explicit way of conceptualizing and measuring parenting. Multiple hypotheses were generated with specific purposes for cross-cultural comparison in light of the cultural-ecological model of human development. The hypotheses are tested using data from the National Longitudinal Study of Adolescent Health (referred to Add Health study or data hereinafter). The comparisons of parenting styles cover areas that have not been commonly studied, including general socialization goals, specific domains of adolescent behaviors for parental control, the role of parental democracy in differentiating parenting styles, and subtle ethnic differences in characteristics of parental warmth and school involvement. Besides, this study looked at

not only school competencies but also behavioral and psychological adjustments in adolescents.

This research proposes qualitatively different styles of family-based versus individual-based parenting adopted by the two ethnic groups respectively. Directed by different socialization goals that reflect instrumental competencies, parenting is mainly driven by family wholeness in the case of Asian Americans and by individual needs in the case of European Americans, in addition to the biological timetable. In regard to the dynamic socialization process, parenting is facilitated by fostering a sense of obligation among Asian Americans and by bi-directional communication among European Americans. Due to the overlap of their cultural values in human competencies, the two ethnic groups are also expected to share some features of parenting and competencies to some or great extent. This research then proposes that adolescents from both ethnic groups may be competent when taking into account their cultural contexts, despite their differences and similarities in competencies.

The parenting styles of the two ethnic groups were not compared using any composite scales that reflect parenting in a general manner, including those constructed by minority researchers upon the Confucian tradition for they may be ethnocentric also. As stated above, this study offered a more comprehensive and explicit way of conceptualizing and measuring parenting. Through testing multiple hypotheses generated with specific purposes, one may get a close look at the ethnic differences in parenting styles from the individual and integrated results of those hypotheses. This intention is based on some speculations developed in this current research. One such speculation suggests that Asian-American parents may not be as expressively loving or close but may

be perceived as caring and attentive as their European-American counterparts. Another proposes that Asian-American parents may be controlling in some areas but may be as flexible as their European-American counterparts in some other behavioral domains. It would be difficult to capture these subtle characteristics of parenting using a composite scale.

Overall, the generation of research questions in this study was guided by Ogbu's cultural-ecological model of human development. The hypotheses were built upon the consideration of the fundamental difference of parenting styles between Asian Americans and European Americans. They were organized into several sections (see below) for comparing ethnic differences in specific aspects of parenting styles and adolescent competencies. The Add Health database, with its wide scope of measurements, makes it possible to create more specific and targeted hypotheses upon the availability of corresponding items or scales.

2.7.1 Parental Socialization Goals and Academic Expectations

As discussed earlier, the educational orientation in parenting has been strengthened by the immigration experiences of Asian Americans. Asian-American parents drive their adolescent children toward academic success through high parental expectations and standards for education. In addition to this school orientation, Asian-American parents also pay special attention to their "at-risk" children's behavioral adjustment in order to maintain the family integrity. On the other hand, European-American parents would expect their "grow-up" children to become independent and

socially confident with greater emphasis than their Asian-American counterparts.

Regarding parental socialization goals, Chao (1996b) has speculated that Asian-American parents want well-performing children while European-American parents want well-rounded children. The current research makes the following hypotheses:

1. Asian-American parents want well-performing adolescent children more than European-American parents in general.
2. European-American parents want well-rounded adolescent children more than Asian-American parents in general.
3. Asian-American adolescents experience higher parental expectation for academic success than European-American adolescents.

2.7.2 Parental Control in Different Domains of Adolescent Behaviors

While European-American parents stress a greater variety of social experiences and grant more freedom for developing individuality, Asian-American parents are stricter with their adolescent children in certain behavioral domains. Motivated by their role responsibility and apprehension about the negative influences of the American society, Asian-American parents would pay closer attention than their European-American counterparts to children's social lives. They would also set greater restrictions on things that would be distracting to schoolwork, such as entertainment activities, paid works, and early sexual behaviors. At the same time, they would show flexibility over certain daily matters and school activities, which would be harmless or even beneficial to their children's school performance and social development. This research then makes the following hypotheses:

4. Asian-American parents monitor their adolescent children's peer network more closely than European-American parents.
5. Asian-American adolescents are less likely than European-American adolescents to get involved in entertainment activities and work outside of school hours.
6. Asian-American adolescents are as likely as European-American adolescents to participate in school activities.
7. Asian-American parents are perceived to be as likely as their European-American counterparts to grant autonomy to their adolescent children over daily matters.
8. Asian-American adolescents perceive a higher parental pressure to postpone their sexual behaviors than European-American adolescents.

2.7.3 Parental Warmth

Driven by parental responsibility and strong concern for the child's success, parenting may involve more family investment and parental devotion among Asian Americans than among European Americans. Asian-American parents would be more available to their children in order to strengthen their children's sense of family connectedness and consequently their sense of obligation to the family. Besides, given the fact that Asian-American parents care about family welfare more than individual needs, they would be perceived as caring and attentive as European-American parents, though less expressively loving or close. This research then makes the following hypotheses:

9. Asian-American parents are more available to their adolescent children than European-American parents are.
10. Asian-American parents are perceived to be less loving and close than European-American parents are.

11. Asian-American parents are perceived to be as caring and attentive as European-American parents are.

2.7.4 Parental Involvement in Schooling

With their belief in academic self-reliance by adolescence and their adolescent children's excellent performance plus their self-perceived deficiency in English, Asian-American parents would be less likely than their European-American counterparts to get involved in schooling directly. Apparently, they are involved in schooling in a more indirect manner. Besides, although parents in both ethnic groups emphasize the process of learning, Asian-American parents would care about the outcome of learning (the grades) more strongly. This research then makes the following hypotheses:

12. Asian-American parents work with their adolescent children on school projects less often than do European-American parents.
13. Asian-American parents are perceived to be more likely than European-American parents to pay attention to their adolescent children's grades or schoolwork.
14. Asian-American parents are more likely than European-American parents to pay attention to their adolescent children's school activities.

2.7.5 Parental Democracy

Even though Asian-American parents often act like educators and supervisors rather than as consultants, they do not dominate their children's lives through harsh treatment. Influenced by both the Asian cultural tradition and acculturation, Asian-American parents have even adopted some "authoritative" strategies in their child-rearing

practices. Nevertheless, they do not treat their adolescent children as equals as much as do their European-American counterparts. In fact, what may truly differentiate the parenting styles of the two ethnic groups is the amount of parental democracy involved. Due to the ethnic difference in parental expectations for adolescent behavioral autonomy and the legitimacy of parental control, Asian-American parents would be perceived less democratic (less autonomy granting and equal communication) than European-American parents by adolescents. This research then makes the following hypotheses:

15. Asian-American parents are perceived to be as reasonable as are European-American parents.
16. Asian-American adolescents are less likely than European-American adolescents to report that their parents encourage them to be independent.
17. Asian-American adolescents are less satisfied with the way their parents communicate with them than European-American adolescents.

2.7.6 Adolescent Academic and Behavioral Competencies

Just like authoritative parenting may enhance the openness of European-American adolescents toward parental socialization, the competence acquisition in Asian-American adolescents is often driven by their sense of filial obligation inculcated through family-based parenting. "Authoritative" strategies and strong parental concerns involved in Asian parenting may further facilitate parental socialization. Therefore, it is reasonable to expect that Asian-American adolescents, as minority students, adjust as well as their mainstream counterparts. More directly, since personal choices and happiness take higher priority for European-American adolescents, it is expected that Asian-American

adolescents, with their strong sense of obligation and family- or group-orientation, would be even more academically accomplished, self-disciplined, and less trouble-prone. This research then makes the following hypotheses:

18. Asian-American adolescents perform better over major subjects than European-American adolescents.
19. Asian-American adolescents have a higher academic goal than European-American adolescents.
20. Asian-American adolescents report less sexual conduct than European-American adolescents.
21. Asian-American adolescents are less likely than European-American adolescents to be absent from school without an excuse.
22. Asian-American adolescents are less likely than their European-American counterparts to be suspended by the school.
23. Asian-American adolescents are less likely than their European-American counterparts to suffer substance abuse.
24. Asian-American adolescents are less likely than their European-American counterparts to engage in delinquent behaviors.

2.7.7 Adolescent Psychological Competencies

Since the relevancy of authoritarian and authoritative concepts to Asian parenting has been challenged, psychological adjustment in Asian-American adolescents should be understood under the Asian cultural context instead. Like authoritative parenting in the case of European Americans, the kind of family-based parental control and warmth, through enhancing adolescents' sense of filial obligation, would also lead to optimal competencies including psychological maturity. The concept of self-esteem may often be

associated with academically related abilities among Asian Americans. Thus, though Asian parenting does not place a strong emphasis on the development of self-esteem for its group orientation, Asian-American adolescents would be as confident as their European-American counterparts in regard to intelligence due to their excellent school performance. They would also be as capable as European-American adolescents in terms of problem confronting and problem solving. Indeed, psychological adjustment needs to be seen more carefully and completely, especially in terms of feelings of distress/depression and somatic complaints. This is because high parental pressure has been shown to be associated with high academic success without increasing these psychological problems among Asian-American adolescents, when families are not classified into conventional parenting groups. Furthermore, the consequences of psychological adjustment on academic and social lives deserve to be examined comparatively. This research then makes the following hypotheses:

25. Asian-American adolescents have a lower level of self-esteem than European-American adolescents.
26. Asian-American adolescents are as confident as European-American adolescents in regard to their own intelligence.
27. Asian-American adolescents are as capable of problem solving as their European-American counterparts.
28. Asian-American adolescents adjust as well as European-American adolescents in regard to distress/depression and somatic symptoms as well as school and social absences caused by emotional problems.

3. METHODS

3.1 Sample and Data Collection

For purpose of this study, data from the National Longitudinal Study of Adolescent Health are used to test the hypotheses. The Add Health study is a nationally representative probability-based survey of adolescents in grades 7 through 12 conducted between 1994 (Wave I) and 1996 (Wave II). The study collected data of interest to researchers with different theoretical backgrounds in social and behavioral sciences. Topics covered in the survey include health status, peer networks, family decision-making process, family composition and dynamics, school environment and programs, academic performance, educational aspirations and expectations, employment experience, romantic relationships, psychological well-being, substance abuse, criminal activities, etc. Overall, the Add Health data provide comprehensive information about broad social settings, including family- and parenting-related environmental factors, which affect adolescent health and health-related behaviors. Only Wave I data, which contain both parents' and adolescents' information, are used for this study.

The primary sampling frame for the Add Health study was all high schools in the United States. The study used a complex cluster sampling procedure to identify a nationally representative sample of high school students. After being stratified by census region, degree of urbanization, proportion of Whites, school type (public and private), and enrollment size, all high schools in the U.S. were given unequal probability of selection proportional to the school size. A high school was defined as such if it included

an 11th grade. Among 80 eligible high schools selected, some of them functioned as their own feeder schools since they spanned from grades 7 to 12. If a high school did not contain lower grades, one of its feeder schools was then selected with unequal probability. Therefore, a total of 80 pair or 132 discrete schools were included in the core study of Add Health. A brief in-school self-administered questionnaire was administered to approximately 90,000 students, who were present on that day in these participating schools, with their parents' permission.

The main frame used to select samples of students for the in-home interview was a set of school rosters and those filling out the in-school questionnaire. Students in each participating school were cross-classified by their gender and grade into 12 strata from which roughly equal-sized samples were randomly selected. The samples contain significant number of people from ethnic minority groups, e.g., Japanese, South Korean, Vietnamese, and so forth. In addition, some ethnic or special groups, including a substantive amount of Chinese adolescents, were over-sampled. There were over 20,000 in-home interviews of adolescent students conducted in Wave I survey, with an overall response rate of 78.9 percent. As part of Wave I data collection, about 18,000 parents, usually mothers of the adolescents interviewed at home, were asked to complete an interview covering various topics that overlapped with the adolescent survey. In-home data were recorded on lab-top computers by interviewers who had completed an extensive 5-day training. For sensitive sections, respondents entered the answers directly into the lab-top.

Since Adolescent subjects were allowed to identify their race and ethnic background with more than one answer, subjects in this study are limited to those who

exclusively classified their ethnicity into non-Hispanic White or one of the following Asian groups: Chinese, Korean, Japanese, Vietnamese, and Asian Indian. Because families have great variety with respect to family structure, adolescent-parent pairs for this study were restricted to adolescents who lived with both mother and father in order to make the two groups more comparable. Parents did not have to be biologically related to adolescents but could be adoptive, step, and foster parents. The final sample for this research included 7,216 European-American adolescents and 541 Asian-American adolescents.

3.2 Measures and Data management

Variables used in the current analyses were taken from three parts of Wave I Add Health data: the in-home adolescent interview, the in-home parent interview, and the in-school adolescent questionnaire. The three parts of data were merged. If information overlapped across different parts of the databases, one part of the repeated information would be used as a supplement. Variable names and descriptions are presented in Appendix A.

Hypotheses 1 through 3 are about general socialization goals and parental expectations for academic success. Parental respondents were asked what the most important thing to learn was for a boy and for a girl respectively. Dichotomous variables that reflect the socialization goals were then created for boys and girls respectively, with 0 = "well-rounded" and 1 = "well-performing". If a parent chose the category of "to be well-behaved", "to work hard", or "to help others", the parent was considered as wanting

a well-performing adolescent child. If a parent chose a category of “to be popular” or “to think for him/herself”, the parent was considered as wanting a well-rounded adolescent child. Perceived parental disappointment for adolescent’s not graduating from college was rated on a 5-point scale from “low disappointment” (1) to “high disappointment” (5). The mean of mother’s and father’s scores was used and the categories were collapsed into “low”, “medium”, and “high” categories.

Hypotheses 4 through 8 are about parental control in different domains of adolescent behaviors. Parental monitoring over the peer network was reported by adolescents on a question regarding whether they were permitted to make their own decisions on whom to hang around with. Adolescents’ entertaining activities were measured on a 4-item scale about how many hours during the past week adolescents watched TV programs and videos, played computer games, and listened to the radio. The entertainment hours were added together. Adolescent subjects also reported whether they were allowed to make their own decisions on amount of television watched, whether they ever worked for pay, and whether they did not participate in any club or team in school. Autonomy granting over daily matters was measured from 5 questions that asked whether adolescents were permitted to make their own decisions on weekend curfew, dressing style, TV programs watched, bedtime on week nights, and eating habits. The items were summed up and treated as interval data ($\text{Alpha} = .51$). Perceived parental disapproval of early sexual behavior was responded to on a 5-point scale ranging from “strongly disapprove” (1) to “strongly approve” (5). The mean of parents’ scores for each subject was used and the last three categories were combined.

Hypotheses 9 through 11 are about parental warmth and support. Parental availability was indicated by adolescents' reports of parents' presence at key times during the day, including when leaving in the morning, when returning in the afternoon, and when going to bed at night, on a 5-point scale ranging from "always" (1) to "never" (5). The means of parents' scores were used and the last two categories were combined. Parental presence at dining time was reported as how many of the past 7 days was at least one of the parents with the adolescent at dinner. Perceived parental love was reported on a 5-point agree-to-disagree scale. The mean of parents' scores was used and the last three categories were combined. Items regarding perceived parental closeness, care, and attention were responded to on a 5-point scale from "not at all" (1) to "very much" (5). The means of parents' scores were used and the last three categories were combined.

Hypotheses 12 through 14 are about parental involvement in schooling. Direct parental involvement was measured by adolescents' reports on whether their parents worked with them on a school project in the past 4 weeks. Parental attention to schoolwork/grades and school activities were measured by adolescents' reports on whether parents talked with them about grades and other school activities in the past 4 weeks. The case was coded as 1="yes" if at least one of the answers for parents was positive.

Hypotheses 15 through 17 are about parental democracy. Parental reasoning of ethics was assessed by adolescents' perceptions of the degree to which their mothers talked with them when they did something wrong that was important. The question was responded to on a 5-point agree-disagree scale. Perceived mothers' encouragement of independence and the degree of satisfaction with adolescent-parent communication were

reported by adolescents on a 5-point agree-disagree scale. The mean of parents' scores on adolescent-parent communication was used. For all variables in this section, the last three categories were combined.

Hypotheses 18 through 24 are about academic and behavioral competencies in adolescents. The most recent grades over major courses were reported on a scale 1 = "A", 2 = "B", 3 = "C", and 4 = "D or lower". The mean score of each subject was used and the last two categories were combined. The adolescents reported how much they wanted to and how likely they would go to college on a 5-point scale ranging from "low likely" (1) to "high likely" (5). The scales were recoded into dichotomous variables with 0 = "low likely" and 1 = "highest likely". Adolescent respondents also reported whether ever having sex, the frequency skipping school for a full day without an excuse in the most current school year, and whether ever being suspended by the school. If an adolescent subject answered "yes" to the question that asked whether he/she had a drink of beer, wine, or liquor (not just a sip or a taste of), he/she was coded as alcohol use. At the same time, an adolescent was coded as drug use if he/she indicated a valid age at which he/she tried one or more of the following drugs for the first time, marijuana, cocaine, inhalant, and other types of illegal drug. A delinquency scale consisting of 15 questions asked how often adolescents were engaged in violent, weapon, drug, property, shoplifting, public order, or status offenses and misdemeanors in the past 12 months. These questions originally contained four response categories: "never," "1 or 2 times", "3 or 4 times," and "5 or more times". The scores were summed up and treated as interval data ($\text{Alpha} = .82$).

Hypotheses 25 through 28 are about psychological competencies in adolescents. A 9-item and 5-point agree-disagree scale was employed to measure self-esteem. The

scores were added together and treated as interval data with higher scores indicating lower self-esteem ($\text{Alpha} = .87$). Adolescent subjects were asked to compare their own intelligence to other people their age on a 6-point scale ranging from “moderately below average” (1) to “extremely above average” (6). The scale was collapsed into three categories: “below average”, “about average”, and “above average”. A 7-item and 5-point agree-disagree scale was used to assess adolescents’ psychological endurance to difficult problems and their ability in logical and systematic thinking. The items were recoded into the same direction before being summed for each respondent ($\text{Alpha} = .56$), with higher scores indicating less mature problem solving ability. A 19-item depression scale was used to measure psychological distress. Adolescent subjects were asked how often each of the following things was true during the past week, such as “You were bothered by things that usually do not bother you” and “you could not shake off the blues”. The items were responded to on “never or rarely” (0), “sometimes” (1), “a lot of times” (2), and “most of the time” (3). In this study, all the items were recoded into the same direction so that they could be summed up for each respondent ($\text{Alpha} = .87$), with greater numbers indicating higher degree of distress or depression. A 20-item scale was used to assess somatic symptoms. Adolescent subjects were asked how often each of the following conditions they had in the past 12 months, e.g., “waking up feeling tired” and “feeling really sick”. The responses ranged from “never” (0), “a few times” (1), “once a week” (2), “almost everyday” (3), to “everyday” (4). Scores of somatic symptoms were also summed up for each respondent ($\text{Alpha} = .85$), with greater numbers indicating higher degree of anxiety. In addition, Adolescent subjects reported how often they skipped school days and social activities due to their emotional problems during the most recent

school year, with possible responses ranging from “never” (0), “a few times” (1), “once a week” (2), “almost everyday” (3), to “everyday” (4). The variables were dichotomized into 0 = “never” and 1 = “a few times or more”.

3.3 Statistical Procedures

As mentioned earlier, the Add Health data collection was designed as a cluster sample in which the clusters (schools) were selected with unequal probabilities, larger schools having better chance to be selected than smaller schools. Thus, adolescent students from larger schools were more likely to be selected than those from smaller ones. The grand sample weight was computed to adjust for unequal probabilities of selection of individuals. The clustering sample design also introduced a complexity to analysis since observations (adolescent students) were no longer independent and identically distributed. The design effects were corrected to ensure that the statistical results are nationally representative with unbiased parameter and correct variance and standard error estimates. Sample weights were adjusted by variables of stratification and primary sampling unit (PSU). The value for the stratification variable is 4 since the sample was representative along census region (four in the United States) and other dimensions. The value of PSU is 132, which is compatible to the number of participating schools. For the present study, the design effects were overcome with STATA, a statistical software package used to handle complex survey data.

Relatively more powerful statistical procedures were performed to test different hypotheses, depending on the measurement level of the variable under analysis. The

logistic regression procedure was employed for dichotomous variables. The ordered logit model, which is able to make use of the “ordering” information and allows for interval, ordinal, and nominal predictors, was used for ordinal data. For measures consisting of multiple items in the ordinal scale, scores for individual indicators were added together and treated as interval data. The OLS regression model was then performed to test the ethnic differences for these interval variables. All of the parenting and competence variables were separately regressed on ethnicity and other covariates including adolescent gender and age as well as parent education level. Odds ratios and regression coefficients associated with ethnicity (0 = “European Americans” and 1 = “Asian Americans”) would tell ethnic differences in parenting characteristics and adolescent competencies, after controlling for adolescent gender (0=“male” and 1=“female”), adolescent age (in years), and parent education level (1=“less than high school”, 2=“high school/GED”, 3=“some college”, 4=“college graduate”, and 5=“beyond college”).

4. RESULTS

Descriptive statistics for demographic factors and parenting and competence variables are contained in Tables 1 through 8. The mean parents' scores were used in many analyses because there is a considerable convergence between two parents' ratings. Unweighted numbers of observations for two ethnic groups are presented in the descriptive tables. Variables were ordered according to their relative positions in different sections of hypotheses for an easy match. Results of statistical procedures are summarized in Table 9. To streamline the presentation, only odds ratios and regression coefficients associated with ethnicity effects are presented in the table. The outcome variables are arranged along the order of hypothesis groupings. The more complete regression results, which include odds ratios and regression coefficients associated with covariates, are presented in Appendix B.

In the outcome tables for the dichotomous outcomes, the odds ratio gives the multiplicative effect on the outcome occurring associated with a one-unit difference in the predictor variable. An odds ratio greater than 1.0 indicates that a higher score in the predictor is associated with greater odds of the outcome occurring, statistically controlling for effects of the covariates. In contrast, an odds ratio less than 1.0 indicates that a higher score in the predictor is associated with lower odds of the outcome occurring, statistically controlling for effects of the covariates. Odds ratios are also presented for the outcomes with ordered categorical outcomes. These odds ratios are interpreted in a manner similar to the above odds ratios in the logistic regressions. The difference is that instead of the predictors having an "effect" on the probability of the

outcome occurring rather than not occurring, the "effect" is on the probability of having a higher level on the ordered outcome. An odds ratio greater than 1.0 indicates that a higher score in the predictor is associated with greater odds of the outcome occurring, statistically controlling for effects of the covariates. These effects can be expressed as percentage effects: percent difference = $(\text{odds ratio} - 1) * 100$. For the ordered logit model, a uniform association for cumulative odds ratios is assumed. That is, odds ratios are the same for every two adjacent categories in the scale. Ordinary Least Squares regression was used for the interval scale outcomes. The regression coefficient indicates how much difference in the outcome was associated with a one-unit difference in the predictor variable, while statistically controlling for effects of covariates.

For all the regression models, the weighted size for the subpopulation of interest was around 10,200,000. The actual sample size for each model is presented in the outcome tables. The standard errors associated with predictor variables of ethnicity, adolescent gender, adolescent age, and parent education level for the regular regression models were, on average, 1.8, 2.1, 2.7, and 2.5 times of those respectively in the models controlling for design effects.

4.1 Findings about Ethnicity Effects

As mentioned above, odds ratios and regression coefficients associated with ethnic effects from all regression models are shown in Table 9. Models 1 through 3 present ethnic effects on parental socialization goal and academic expectation. As expected, there were very obvious ethnic differences regarding types of adolescent

Table 1. Descriptive Statistics for Background Information

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Race					
European American	0	7216	100.0%	0	0.0%
Asian American	1	0	0.0%	541	100.0%
Adolescent Age					
valid cases	11 to 21	7215	100% (15.5)	541	100% (15.7)
Missing		1	0.0%	0	0.0%
Adolescent Gender					
Male	0	3479	48.2%	295	54.5%
Female	1	3737	51.8%	246	45.5%
Missing		0	0.0%	0	0.0%
Parent Education Level					
< high school	1	282	3.9%	39	7.2%
high school/GED	2	1763	24.4%	78	14.4%
some college	3	2123	29.4%	83	15.3%
college graduate	4	1458	20.2%	112	20.7%
beyond college	5	1336	18.5%	155	28.7%
Missing		254	3.5%	74	13.7%
Parent Born in US					
no	0	276	3.8%	210	38.8%
yes	1	6201	85.9%	125	23.1%
missing		739	10.3%	206	38.1%
Adolescent Born in US					
no	0	134	1.9%	226	41.8%
yes	1	7082	98.1%	315	58.2%
missing		0	0.0%	0	0.0%

**Table 2. Descriptive Statistics for Parental Socialization Goals
& Academic Expectations**

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Type of Boy Wanted					
well-rounded	0	4308	59.7%	127	23.5%
well-performing	1	2156	29.9%	203	37.5%
missing		752	10.4%	211	39.0%
Type of Girl Wanted					
well-rounded	0	4552	63.1%	139	25.7%
well-performing	1	1913	26.5%	194	35.9%
missing		751	10.4%	208	38.4%
Disappointed If No College					
low	1	2411	33.4%	100	18.5%
medium	2	1896	26.3%	132	24.4%
highest	3	2824	39.1%	302	55.8%
missing		85	1.2%	7	1.3%

**Table 3. Descriptive Statistics for Parental Control
in Different Behavior Domains of Adolescents**

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Make Own Decision-Friend					
no	0	779	10.8%	85	15.7%
yes	1	6357	88.1%	449	83.0%
missing		80	1.1%	7	1.3%
Make Own Decision-TV					
no	0	1131	15.7%	150	27.7%
yes	1	6009	83.3%	385	71.2%
missing		76	1.0%	6	1.1%
Adol. Work for Pay					
no	0	2335	32.3%	308	56.9%
yes	1	4862	67.4%	230	42.5%
missing		19	0.3%	3	0.6%
Adol. Entertainment Hours					
valid cases	0 to 337	7173	99.4%(36.2)	540	99.8%(29.4)
missing		43	0.6%	1	0.2%
Adol. Not in School Club					
not marked	0	5037	69.8%	437	80.8%
marked	1	803	11.1%	51	9.4%
missing		1376	19.1%	53	9.8%
Autonomy in Daily Matter					
valid cases	0 to 5	7114	98.6%(3.5)	534	98.7%(3.5)
missing		102	1.4%	7	1.3%
Disapproval of Adol. Sex					
less strongly	0	2567	35.6%	132	24.4%
most strongly.	1	4384	60.7%	395	73.0%
missing		265	3.7%	14	2.6%

Table 4. Descriptive Statistics for Parental Warmth

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Available at Leaving					
always	1	2736	37.9%	229	42.3%
most time	2	1897	26.3%	123	22.8%
sometime	3	1812	25.1%	111	20.5%
almost never/never	4	689	9.6%	64	11.8%
missing		82	1.1%	14	2.6%
Available at Returning					
always	1	837	11.6%	67	12.4%
most time	2	1663	23.1%	116	21.4%
sometime	3	2513	34.8%	170	31.4%
almost never/never	4	2117	29.3%	174	32.2%
missing		86	1.2%	14	2.6%
Available at Going To Bed					
always	1	4965	68.8%	372	68.8%
most time	2	1781	24.7%	93	17.2%
sometime	3	332	4.6%	38	7.0%
almost never/never	4	63	0.9%	27	5.0%
missing		75	1.0%	11	2.0%
# Days Show at Dinner					
valid cases	0 to 7	7134	98.9%(5.0)	527	97.4%(5.1)
missing		82	1.1%	14	2.6%
Parent Love					
strongly agree	1	3979	55.2%	282	52.1%
agree	2	2584	35.8%	206	38.1%
neutral/disagree	3	578	8.0%	47	8.7%
missing		75	1.0%	6	1.1%
Parent Closeness					
none/somewhat	1	1158	16.1%	110	20.4%
quite a bit	2	2452	34.0%	183	33.8%
very much	3	3532	48.9%	242	44.7%
missing		74	1.0%	6	1.1%
Parent Care					
none/somewhat	1	293	4.0%	24	4.4%
quite a bit	2	1246	17.3%	105	19.4%
very much	3	5662	78.5%	412	76.2%
missing		15	0.2%	0	0.0%
Family Attention					
none/somewhat	1	1902	26.4%	167	30.9%
quite a bit	2	3242	44.9%	208	38.5%
very much	3	2040	28.3%	162	29.9%
missing		32	0.4%	4	0.7%

Table 5. Descriptive Statistics for Parental Involvement in Schooling

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Work Together on Project					
no	0	5834	80.9%	455	84.1%
yes	1	1307	18.1%	79	14.6%
missing		75	1.0%	7	1.3%
Talk Schoolwork/Grade					
no	0	2277	31.6%	125	23.1%
yes	1	4864	67.4%	409	75.6%
missing		75	1.0%	7	1.3%
Talk School Activity					
no	0	2980	41.3%	187	34.6%
yes	1	4161	57.7%	347	64.1%
missing		75	1.0%	7	1.3%

Table 6. Descriptive Statistics for Parental Democracy

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Mom-Discuss Ethics					
strongly agree	1	2374	32.9%	168	31.1%
agree	2	3295	45.7%	259	47.9%
neutral/disagree	3	1334	18.5%	102	18.8%
missing		213	2.9%	12	2.2%
Mom-Grant Autonomy					
strongly agree	1	2745	38.0%	186	34.4%
agree	2	3038	42.1%	223	41.2%
neutral/disagree	3	1219	16.9%	120	22.2%
missing		214	3.0%	12	2.2%
Good Communication					
strongly agree	1	2863	39.7%	176	32.5%
agree	2	2975	41.2%	237	43.8%
neutral/disagree	3	1304	18.1%	122	22.6%
missing		74	1.0%	6	1.1%

Table 7. Descriptive Statistics for Adolescents Academic & Behavioral Competencies

Characteristics	Code (or Range)	European American		Asian American	
		N	%(Mean)	N	%(Mean)
Average Grade					
a	1	2803	38.8%	290	53.6%
b	2	2791	38.7%	196	36.2%
c or lower	3	1506	20.9%	49	9.1%
missing		116	1.6%	6	1.1%
Wants to Attend College					
low likely	0	2074	28.7%	90	16.6%
highest likely	1	5117	70.9%	448	82.8%
missing		25	0.4%	3	0.6%
Likely Will Attend College					
low likely	0	2890	40.0%	127	23.5%
highest likely	1	4300	59.6%	411	76.0%
missing		26	0.4%	3	0.5%
Ever Has Sex					
no	0	4827	66.9%	470	86.9%
yes	1	2323	32.2%	65	12.0%
missing		66	0.9%	6	1.1%
# Days Skip School					
valid cases	0 to 99	7121	98.7% (1.4)	536	99.1% (1.0)
missing		95	1.3%	5	0.9%
School Suspension					
no	0	5861	81.2%	489	90.4%
yes	1	1351	18.7%	51	9.4%
missing		4	0.1%	1	0.2%
Alcohol Use					
no	0	3028	42.0%	324	59.9%
yes	1	4168	57.8%	215	39.7%
missing		20	0.3%	2	0.4%
Drug Use					
no	0	5068	70.2%	451	83.4%
yes	1	2109	29.2%	85	15.7%
missing		39	0.6%	5	0.9%
Delinquent Behaviors					
valid cases	0 to 45	7144	99% (3.9)	534	98.7% (3.5)
missing		72	1.0%	7	1.3%

Table 8. Descriptive Statistics for Adolescents Psychological Competencies

Characteristics	Code (or Range)	European American		Asian American	
		N	% (Mean)	N	% (Mean)
Self-Esteem					
valid cases	9 to 45(low)	7198	99.7%(17.0)	534	98.7%(18.5)
missing		18	0.3%	7	1.3%
Self-perceived Intelligence					
average or below	0	3000	41.6%	186	34.4%
above average	1	4202	58.2%	353	65.2%
missing		14	0.2%	2	0.4%
Problem-Solving Ability					
valid cases	7 to 35(low)	7123	98.7%(18.3)	528	97.6%(18.0)
missing		93	1.3%	13	2.4%
Depression					
valid cases	0 to 54	7194	99.7% (10.0)	530	98% (11.4)
missing		22	0.3%	11	2.0%
Somatic Symptoms					
valid cases	0 to 56	7202	99.8%(16.0)	537	99.3%(14.8)
missing		14	0.2%	4	0.7%
School Absence					
never	0	4883	67.7%	419	77.4%
a few times or more	1	2326	32.2%	122	22.6%
missing		7	0.1%	0	0.0%
Social Absence					
never	0	5403	74.9%	406	75.0%
a few times or more	1	1812	25.1%	135	25.0%
missing		1	0.0%	0	0.0%

Table 9. Ethnicity Effects¹ on Parenting Characteristics and Adolescent Competencies

Models	Odds Ratio	Reg. Coef.	N
Ethnic Effects on Parental Socialization Goal and Academic Expectation			
1: preferring well-performing boys	4.00***		6741
1: preferring well-performing girls	4.91***		6745
3: parent disappointment for not college graduate ²	1.62**		7337
Ethnic Effects on Parental Control in Different Behavior Domains			
4: making own decision over whom to hang around with	0.57*		7342
5: making own decision over TV amount	0.52***		7347
6: adolescent entertainment hours		-6.15**	7386
7: adolescent work for pay	0.31***		7408
8: adolescent not participate any school club/team	0.92		6220
9: making own decision over daily matters		0.09	7320
10: perceived parental disapproval of early sex	2.28**		7157

Probability levels: *P < .10, *P < .05, **P < .005, *** P < 0.000.

¹0=European American, 1=Asian American.

²Ordered logit model odds ratio.

Table 9. Ethnicity Effects¹ on Parenting Characteristics and Adolescent Competencies (Continued)

Models	Odds Ratio	Reg. Coef.	N
Ethnic Effects on Parental Warmth			
11: parent availability when leaving in the morning ²	0.95		7333
12: parent availability when returning in the afternoon ²	0.8		7330
13: parent availability when going to bed ²	1.33		7343
14: # days eating with parent at dinner		-0.14	7334
15: perceived parent love (higher ranks indicate less parent love) ²	1.28 ⁺		7348
16: perceived parent closeness ²	0.77 ⁺		7349
17: perceived parent care ²	0.74		7414
18: perceived family attention ²	0.93		7395
Ethnic Effects on Parental Involvement in Schooling			
19: working together on school project	0.96		7348
20: parent talking about schoolwork/grade	2.26*		7348
21: parent talking about school activity	1.61*		7348
Ethnic Effects on Parental Democracy			
22: mother discussing ethics (higher ranks indicate less discussion) ²	1.02		7204
23: mother encouraging independence (higher ranks indicate less encourage.) ²	1.34*		7204
24: adolescent-parent communication (higher ranks indicate less satisfaction) ²	1.45**		7349

Probability levels: ⁺P < .10, *P < .05, **P < .005, *** P < 0.000.

¹0=European American, 1=Asian American.

²Ordered logit model odds ratio.

Table 9. Ethnicity Effects¹ on Parenting Characteristics and Adolescent Competencies (Continued)

Models	Odds Ratio	Reg. Coef.	N
Ethnic Effects on Adolescent Academic and Behavioral Competencies			
25: average grade (higher ranks indicate lower grade) ²	0.63*		7316
26: wanting to attend college	1.64 ⁺		7403
27: likely attending college	1.62 ⁺		7402
28: adolescent ever having sex	0.27***		7361
29: # days skipping school		-0.21	7333
30: receiving school suspension	0.64 ⁺		7423
31: alcohol use	0.54***		7410
32: drug use	0.47*		7388
33: delinquent behavior		0.19	7353
Ethnic Effects on Adolescent Psychological Competencies			
34: self-esteem (higher scores indicate lower self-esteem)		1.34***	7404
35: self-perceived intelligence	1		7412
36: problem confronting/solving ability (higher scores indicate lower ability)		-0.17	7330
37: depression		1.89***	7396
38: somatic symptoms		-0.31	7413
39: school absence for emotion problem	0.78		7421
40: social absence for emotion problem	1.1		7427

Probability levels: ⁺P < .10, *P < .05, **P < .005, *** P < 0.000.

¹0=European American, 1=Asian American.

²Ordered logit model odds ratio.

children desired most by parents. Compared to their European-American counterparts, Asian-American parents had 300% ($p < .000$) and 391% ($p < .000$) greater odds of preferring “well-performing” rather than “well-rounded” for boys and girls respectively. Ethnicity was also found to be significantly associated with the degree of parent disappointment about adolescent’s not college graduate. That was, being Asian American rather than European American is associated with 62% ($p < .005$) greater odds of higher parent disappointment.

Models 4 through 10 present ethnic effects on parental control in different behavior Domains. There was an ethnic difference in parent supervision over peer network. That was, being an Asian-American adolescent was associated with 43% ($p < .05$) smaller odds of being allowed to make decisions on with whom to hang around. There were also ethnic differences found for autonomy granting over TV amount, entertainment time, and employment experience. That was, being an Asian-American adolescent is associated with 48% ($p < .000$) smaller odds of being allowed to decide how much TV to watch, 6.15 ($p < .05$) less leisure hours in a week, and 69% ($p < .000$) smaller odds of working for pay. However, the ethnic effect was found to be insignificant to participation in school clubs or teams and to autonomy granting over everyday matters. Not surprisingly, there was a very obvious ethnic difference in parental disapproval of adolescent sexual behavior. That is, being an Asian-American adolescent is associated with 128% ($p < .005$) greater odds for the highest level of parental disapproval.

Models 11 through 18 present ethnic effects on parental warmth. Unexpectedly, ethnicity was not found to be significantly related to parental availability at key times during the day, including when leaving home in the morning, when returning from school

in the afternoon, when going to bed at night, and number of days eating with parent(s) at dinner in a week. Ethnic differences in perceived parental love and closeness were only marginally significant, with a trend that being Asian-American adolescent was associated with 28% ($p < .10$) greater odds of lower parental love and 23% ($p < .10$) smaller odds of higher parental closeness. Just as anticipated, ethnic differences for perceived parental care and family attention were demonstrated insignificant.

Models 19 through 21 show ethnic effects on parental school involvement. Not as expected, the effect of ethnicity was insignificant as to whether parents work with adolescents on the school project. However, significant ethnic differences emerged for parental attention to the outcome of learning and what is going on in the school. That is, being an Asian-American adolescent had 126% ($p < .05$) and 61% ($p < .05$) greater odds of parent talking about grades and about school activities respectively.

Models 22 through 24 show ethnic effects upon parental democracy. Just as anticipated, there was no significant ethnic difference for mother ethical reasoning with the adolescent. However, ethnicity appeared to be a significant predictor for mother autonomy granting and satisfaction of parent-adolescent communication as expected. That is, being an Asian-American adolescent was associated with 34% ($p < .05$) greater odds of less mother encouragement of independence and with 45% ($p < .005$) greater odds of less satisfied communication.

Models 25 through 33 present ethnic effects on academic and behavioral competencies of adolescents. There was an ethnic difference in the average grade over major subjects. That is, being an Asian-American adolescent decreased the odds of lower grade by 37% ($p < .05$). But ethnic differences for academic goals were only marginally

significant, with a trend that being an Asian-American adolescent was associated with 64% ($p < .10$) and 62% ($p < .10$) greater odds of being willing and likely attending college respectively. As anticipated, the results showed a very significant ethnic difference in adolescent sexual experience. That is, being an Asian-American adolescent was associated with 73% ($p < .000$) smaller odds of having sex in the past. The ethnic effect on the frequency of skipping school days without an excuse was not significant, and it only received a marginal significance for school penalty that Asian-American adolescents tended to have 36% ($p < .10$) smaller odds of receiving school suspension. Ethnic differences associated with substance abuses were obvious as expected. That is, being an Asian-American adolescent was associated with 46% ($p < .000$) and 53% ($p < .05$) smaller odds of alcohol use and drug use respectively. But the results indicated an insignificant between-group difference along the delinquency scale.

Models 34 through 40 present ethnic effects on the psychological competencies of adolescents. There was an ethnic difference found for self-esteem as anticipated. That is, being an Asian American adolescent increases 1.34 ($p < .000$) points in the self-esteem scale. Because higher scores indicate lower self-esteem, Asian-American adolescents had lower self-esteem than their European-American counterparts. However, also as anticipated, there were no significant ethnic differences found for self-perceived intelligence and problem confronting and solving ability. The effect of ethnicity on depression appeared significant, with being an Asian-American adolescent increasing the score in the depression scale by 1.89 ($p < .000$) points. However, there was no significant ethnic difference indicated to somatic symptoms and to school or social absence due to emotional disturbances.

4.2 Important Findings on Covariates

Odds ratios and regression coefficients associated with covariates are presented in Appendix B. This study showed many significant effects associated with adolescent gender, adolescent age, and parent education level. This indicates that they provided important controls for the estimates of ethnicity effects. The following covariate effects were of special interest. There were some interesting gender effects found in this study. For example, parents of female adolescents had greater odds of preferring well-performing rather than well-rounded teenage boys (see Model 1). Being female was associated with smaller odds of perceiving higher parent closeness and care (See Models 16 & 17). It was also associated with smaller odds of perceiving less mother encouragement of independence but higher odds of perceiving less satisfied parent-adolescent communication (see Models 23 & 24). Regarding developmental adjustment, female adolescents had smaller odds of lower average grade and greater odds of higher academic goals (see Models 25 through 27). They also scored lower in the delinquency scale. However, being female increased the score in the self-esteem scale, which indicates lower self-esteem. It also increased the scores in the depression and somatic symptoms scales as well as the odds of more school and social absences due to emotional problems (see Models 34 & 37 through 40).

Adolescent age was a significant predictor to the parenting characteristics and adolescent competencies. Older age was associated with smaller odds of wanting well-performing adolescents and higher parent disappointment for not college graduate (see Models 1 through 3). Older adolescents increased the odds of higher autonomy granting

to decisions on whom to hang around, TV amount watched, and daily matters (see Models 4, 5, and 9). Older age was also associated with smaller odds of working together on the school project and greater odds of less mother ethical reasoning and less satisfied parent-adolescent communication (see Models 19, 22 & 24). Regarding developmental adjustment, older adolescents had higher scores in school days skipped and greater odds of receiving school suspension and suffering substance abuses (see Models 29 through 32). Meanwhile, older age increased the score in the self-esteem scale, which indicates lower self-esteem, and the score in the depression scale (see models 34 & 37).

Parent education level was also significant to many outcome variables. Higher parent education level was associated with smaller odds of wanting well-performing adolescents (see Models 1 & 2). It increased the odds and score of greater decision-making autonomy in whom to hang around and in daily matters respectively, but decreased the odds of autonomy granting to making own decision on TV amount (see Models 4, 9, & 5). Regarding developmental adjustment, higher level of parent education was associated with smaller odds of lower average grade and receiving school suspension, and with greater odds of higher academic goals (see Models 25, 30, 26 & 27). It decreased the score in the self-esteem scale, which indicates higher self-esteem, and increased the odds of self-perceived above-average intelligence also (see models 34 & 35).

Because multiple tests were made in each grouping of hypotheses, some significant results would occur just by chance and therefore could not be accepted at face value. To limit the chance of falsely rejecting the null hypothesis, the significance level may be reset from .05 to .01. Then the significant effects on parental socialization goals

and academic expectations would remain unchanged. The results for parental control across behavior domains would remain the same except for decision about with whom to hang around becoming marginally significant. The results for parental warmth would be the same. The significant results for parental school involvement would become marginal. For parental democracy, the significant finding for mother encouragement of independence would become marginal. The significant effects on grade and substance abuse would become marginal but other results for academic, behavioral, and psychological competencies remain the same.

5. DISCUSSIONS AND CONCLUSIONS

Using a diverse and explicit method of conceptualizing parenting within the cultural context, this research tested multiple hypotheses about differences in parenting styles and adolescent competencies between Asian Americans and European Americans. The statistical analyses examined the effects of ethnicity on parental socialization goals and academic expectations, parental control in different behavior domains, parental warmth, parental involvement in schooling, parental democracy, and adolescent academic, behavioral, and psychological competencies. Analysis of the Add Health national survey data provided support for most of the hypotheses that are associated with both general and more subtle ethnic differences in the areas of interest. The findings of this study demonstrated that there are theoretically predictable ethnic differences and similarities between family-based and individual-based parenting styles, after controlling for adolescent age and gender as well as parent education level. Through integrating the findings, one may draw a clearer and more complete picture of parenting among Asian-American families, in contrast to parenting among European-American families.

5.1 Ethnic effects on Socialization Goals and Academic Expectations

Hypotheses 1 and 2 were supported by findings from Models 1 and 2. A striking ethnic difference emerged with respect to the type of adolescent children preferred by parents. Asian-American parents preferred well-performing rather than well-rounded adolescents significantly more than their European-Americans counterparts. This reflects the fundamental difference between family-based and individual-based parenting styles.

Stressing the family honor over the self-expression, Asian-American parents are more likely to expect adolescent boys and girls to behave appropriately, work hard in school, and maintain a harmonious relationship with others. Giving self-expression high priority, European-American parents are more likely to expect adolescent boys and girls to be socially successful and think independently. Caution must be paid when interpreting the results about parental socialization goals, given the relatively large amount of missing values in Models 1 and 2. Nevertheless, the results provided evidence that sustained the hypotheses, and were consistent with Chao's speculation about ethnic differences for parental socialization goals in her qualitative study (1996b).

Hypothesis 3 was supported since the significant effect of ethnicity on parental expectations for academic success was very much in evidence in Model 3. As commonly acknowledged, education is emphasized by the American mainstream culture. However, education sits more at the heart of Asian parenting because the child's academic success means a great conformity to the parents and contribution to the family honor. Thus, it is not surprising to see that Asian-American parents would be more disappointed if their children would not graduate from college.

5.2 Ethnic effects on Parental Control in Different Behavior Domains

Parental control has been rarely examined with specifications in terms of different domains of adolescent behaviors. This present study demonstrated that Asian parenting could be either controlling or flexible, depending on the situation. Hypothesis 4 was supported by the result in Model 4, which indicates that Asian-American adolescents

were granted less decision-making autonomy in choosing friends. Hypothesis 5 was supported by Models 5 through 7 with strong evidence that Asian-American adolescents had lower decision-making autonomy in deciding the amount of TV time, have fewer entertainment hours in a week, and whether or not they work for pay. Hypotheses 6 and 7 were supported since there were no significant ethnic differences found for participation in school clubs/teams and for autonomous decision-making over daily matters in Models 8 and 9. Hypothesis 8 was supported by a substantively significant ethnic difference indicated to perceived parental disapproval of adolescent sexual behaviors as shown in Model 10. That is, Asian-American parents objected to early sex much more strongly than their European-American counterparts.

All the hypotheses in this section were confirmed. The results could be easily explained by the stronger school orientation involved in the family-based parenting style. Consistent with previous research (Stevenson et al., 1993), Asian-American parents wanted their adolescent children to concentrate on schoolwork, while European-American parents would like their adolescent children to have broader social experiences. Asian-American parents are afraid of negative influences of "bad" peer relationships, which may be distracting to the schoolwork (Gorman, 1998). They believe that a relationship would just be wasting time if it is not academically helpful. This may be an important reason why Asian-American parents object to early sex much more strongly than their European-American counterparts. In this case, individual needs of adolescents, determined by the biological timetable, are greatly outweighed by their obligation to the family honor. However, Asian-American parents may be as likely as European-American parents to encourage participation in school activities and to leave space for freedom in

daily decisions, which may be seen as harmless and even beneficial to their children's school performance.

5.3 Ethnic effects on Parental Warmth

This study examined ethnic differences in parental warmth in a detailed way by comparing the two groups in terms of parental availability, parental love, closeness, as well as parental care and attention, all separately. The insignificant ethnic effects shown in Models 11 through 14 failed to support Hypothesis 9 that Asian-American parents are more available to their adolescent children than European-American parents. One possible explanation is that parental availability at key times during the day may be more related to other factors such as parent work hours and work distances. Besides, the measures might have not been relevant enough for capturing ethnic differences with respect to parental devotion and family investment. Asian-American parents might invest more on their children through some other ways, such as providing more financial resources (Gorman, 1998).

Interestingly, there was no appreciable ethnic difference found for perceived parental love and closeness as expected in Hypothesis 10. The results shown in Models 15 and 16 only approached significance. It seems that Asian-American adolescents were as likely as their European-American counterparts to feel loved by and close to their parents. This may be because questions about parental love and closeness were asked in a general manner. Adolescents from the two groups could respond based on their own interpretations of parental love and closeness.

As expected, Hypothesis 11 was sustained since there was no significant ethnic effect found for perceived parental care and family attention in Models 17 and 18. Even though Asian-American parents would be still considered as less loving and close with the marginally significant results in Models 15 and 16, findings from Models 17 and 18 have clearly demonstrated that they are perceived as caring and attentive as their European-American counterparts. These results may challenge findings from previous research, which tended to assume a lower level of parental warmth, including parental care and attention, among Asian-American families after classifying Asian parenting into the “authoritarian” group (Steinberg et al., 1994, 1995). This study detected the ethnic difference in parental warmth by generating more specific hypotheses in light of the cultural context and thus obtaining results different from previous research. It would not be difficult to accept these results if one had a good understanding of the strong parental concern for the child’s success involved in the family-based parenting style.

5.4 Ethnic effects on Parental School Involvement

Few studies looked at parental involvement in their adolescent children’s schooling through differentiating direct and indirect involvements. This study showed that Asian-American parents may get involved in schooling in a more indirect manner than their European-American counterparts. Though the finding from Model 19 did not support Hypothesis 12, it at least implied that Asian-American parents were not more likely to be involved in their adolescent children’s schooling directly, given the stronger academic orientation in Asian parenting. It seems that parents from both groups were

unlikely to work with their adolescent children on school projects (see the descriptive statistics shown in Table 5). A possible explanation is that when Asian-American parents expect their adolescent children to be academically self-reliant, European-American parents would expect their adolescent children to be self-motivated in learning.

However, both Hypotheses 13 and 14 were supported by findings from Models 20 and 21 respectively. Asian-American parents were more likely than their European-American counterparts to pay attention to their adolescent children's grades (or schoolwork) and school activities. Among Asian-American families, this kind of indirect parental involvement increased with the child's age, while more direct involvement decreased when the child got older because Asian-American parents believe that adolescents should be self-reliant with their own schoolwork (Chao, 1995). Given the high priority of education, it is not surprising to see a relatively high level of parental attention to supervision over adolescents' school performance and school activities among Asian-American families. The higher parental attention to the schoolwork may also be attributed to the fact that Asian-American parents are more concerned of the outcome of learning, which is largely motivated by family honor.

The findings for this hypothesis section may actually challenge the assumption made by Steinberg, Darling, and Fletcher (1995) that Asian-American parents are the least involved in schooling due to the "authoritarian" nature of Asian parenting. This study demonstrates that parents of Asian-American adolescents are not only more involved in schooling indirectly but also are not less involved directly than their European-American counterparts.

5.5 Ethnic effects on Parental Democracy

This study tested for ethnic differences regarding the issue of parental democracy more carefully than previous research by looking at parental reasonableness and parental democracy (or autonomy granting) separately. The findings of this study indicate that parenting in Asian-American families may reflect a lack of real democracy, but it may be as reasonable as parenting in European-American families.

Hypothesis 15 was supported by the insignificant ethnicity effect shown in Model 22. A between-group commonality remains in mother ethical reasoning with the adolescents for wrongdoing. This result is contrary to the stereotypical image of Asian-American parents who are believed to be “authoritarian” or “dominating”. Indeed, there is no basis for connecting Asian family-based parenting to parental domination. With positive parental motivation and conflict-avoidance tendency, Asian-American parents may be as reasonable as European-American parents.

Hypotheses 16 and 17 received support from the significant results shown in Models 23 and 24. It was found that Asian-American adolescents were more likely than their European-American counterparts to report a lower level of maternal encouragement of independence and less satisfied adolescent-parent communication. These results are consistent with the literature that Asian-American parents are less likely to grant real autonomy to adolescents (Gorman, 1998). It is understandable that, though Asian-American parents could be reasonable, they would never treat their children as equals, given their cultural tradition with which the family wholeness takes higher priority over personal will, or the need for individuation experienced by adolescents.

5.6 Ethnic Effects on Academic and Behavioral Competencies

Hypothesis 18 was supported by Model 25. Asian-American adolescents performed relatively better than their European-American counterparts with respect to average grades over major courses including mathematics, English, sciences, and history. This significant finding may be traced to the fundamental difference between family-based and individual-based parenting styles. Asian-American adolescents, inculcated with the sense of obligation to the family, would be expected to work harder than European-American adolescents, whose parents believe in the importance of innate ability and self-motivation in learning. The higher grades of Asian-American adolescents might also be attributed to higher parental expectation for academic success and greater parental attention to the outcome of learning among Asian-American families.

Hypothesis 19 was not fully supported by this research since the effect of ethnicity on adolescents' willingness and likelihood of attending college only approaches significance as shown in Models 26 and 27. The less significant results may be explained by the fact that the mainstream culture also favors academic success. Nevertheless, there is at least a tendency for Asian-American adolescents to hold higher educational aspirations than their European-American counterparts, which may be attributed to the stronger academic orientation associated with Asian parenting.

Hypothesis 20 was strongly supported by the significant finding from Model 28. Asian-American adolescents reported notably less sexual conduct than their European-American parents. This result is quite understandable, given the fact that Asian-American adolescents perceive much higher parental pressure for postponing their sexual lives.

Adolescent sexual relationships would be considered as very distracting to the schoolwork by Asian-American parents. And negative consequences of early sex would be especially shameful to Asian-American families.

The results from Models 29 and 30 did not provide strong support to Hypotheses 21 and 22. The effect of ethnicity on the frequency of skipping school days with no excuse was not significant at all. At the same time, the ethnic effect on the likelihood of receiving school suspension is only marginally significant. Although the hypotheses were not fully supported by the statistics, the results were within the understandable range since European-American adolescents are also unlikely to be seriously deviant with respect to school misconduct. Nevertheless, Asian-American adolescents appeared to receive less school penalties than their European-American counterparts. The marginally significant result may be sufficient enough to indicate some ethnic difference in this case.

Hypothesis 23 received strong support from findings in Models 31 and 32. Asian-American adolescents were less likely than European-American counterparts to involve in substance abuse, including alcohol use and drug use. This ethnic difference may be credited to the relatively high parental control over deviant behaviors involved in Asian parenting, as suggested by previous research (Gorman, 1998; Steinberg et al., 1994). Besides, given their sense of obligation to the family, it is not surprising to see that Asian-American adolescents were more self-controlled with respect to substance abuse. However, Hypothesis 24 was not sustained because Asian-American adolescents were not found to be less likely to be involved in delinquent acts than European-American adolescents were, as shown by the finding in Model 33.

Although some hypotheses for ethnic differences in this section were not or were only partially supported, the findings have provided some evidence that Asian-American adolescents adjust somewhat better than their European-American counterparts both academically and behaviorally. These results are generally consistent with findings in previous research (Chao, 1994; Dornbusch et al., 1987; Steinberg et al., 1994; Stevenson et al., 1993). It should be pointed out that the family-based parenting style may be more effective than the individual-based parenting style in inspiring high academic achievement and preventing troublesome or deviant behaviors. At the same time, it is not surprising to see a relatively high level of between-group commonality in some aspects of academic and behavioral adjustment. There are important shared cultural values in human competencies in both two groups.

5.7 Ethnic effects on Psychological Competencies

Findings for this hypothesis section suggest that it may be hasty to assume a lower level of psychological well-being among Asian-American adolescents based on the scores on self-esteem and depression scales. More cautions are needed when comparing the two ethnic groups with regard to psychological competencies. Indeed, the fundamental difference in parenting styles between the two ethnic groups should be kept in mind in order to get a more accurate picture of psychological adjustment in Asian-American adolescents.

Hypothesis 25 was supported by the significant results associated with self-esteem in adolescents as shown in Model 34. Asian-American adolescents showed a lower level

of self-esteem, which is consistent with previous research (Steinberg et al., 1995). However, the mean ethnic difference on the self-esteem scale is 1.34 out of a 9-to-45 range. That difference may be explained by the group or family orientation in the Asian culture. Asian-American adolescents are determined to develop a sense of obligation to the family more than good feelings about themselves. It is necessary to note the reason for hypothesizing a lower level of self-esteem among Asian-American adolescents in this study. That is, the self-esteem scale mainly reflects the ideas of feeling good about self and being socially confident, which are more compatible with the individual-based parenting style. For Asian-American adolescents, self-esteem could not be really understood without considering academically related abilities, which are emphasized more strongly by family-based parenting.

In fact, findings of this research have demonstrated that Asian-American adolescents may feel as good as European-American adolescents with respect to their intelligence and problem confronting/solving abilities. Both Hypotheses 26 and 27 were supported by the insignificant results shown in Models 35 and 36. Given the fact that the development of academic competencies is the central task of Asian parenting, it is not difficult to understand why Asian-American adolescents, a group of students with lower self-esteem, appear to have positive self-perceptions in intelligence and problem confronting/solving abilities. For Asian-American adolescents, self-esteem may be inspired by high parental expectations for their learning potential and strengthened by their excellent school performance. For European-American adolescents, on the other hand, self-esteem may be developed through parental autonomy granting and strengthened by their successful social adjustment.

Hypothesis 28 was supported with an exception of the ethnic difference in the depression scale, as shown in Models 37 through 40. Asian-American adolescents had higher levels of depression than their European-American counterparts. The mean ethnic difference along the depression scale was 1.89 out of a 0-to-54 range. However, there were no ethnic differences found for somatic symptoms and school or social absences due to emotional disturbances. These findings imply that even though Asian-American adolescents may be somewhat more depressed, they function in some ways as well as European-American adolescents since they do not complain of somatic symptoms or show disruptive emotion problems more often. In contrast to the concerns about the psychological disadvantages among Asian-American adolescents, this study demonstrated positive aspects of psychological adjustment in this group of adolescents. Those positive aspects may be explained by the strong parental concern and considerable parental reasonableness involved in the family-based parenting style. In fact, Asian-American parents were perceived as caring and attentive as their European-American counterparts in this study.

5.8 Conclusions and Applications

This research suggested that Asian parenting may be motivated by family welfare rather than the individual need, especially with regard to an emphasis on education, different parental control levels, characteristics of parental warmth and school involvement, and the way parents approach their adolescent children. The overall pattern of the findings suggested that Asian-American parents preferred well-performing to well-

rounded adolescents and had higher expectation for academic achievement. They supervised peer network and distracting relationships or activities more strictly while encouraging school related activities and granting decision-making autonomy over daily matters as much as European-American parents. Though they may be somehow considered as less loving and close, they are perceived as caring and attentive as European-American parents are. They appeared to get involved in schooling in a more indirect manner and pay more attention to the outcome of learning (the grades) and school activities. In addition, they were as reasonable as European-American parents, while lacking parental democracy.

Findings of this study suggested that it may be advantageous to be raised in Asian-American families, with regard to more optimal academic and behavioral competencies. Consistent with previous research (Steinberg et al., 1995), this study also showed somewhat lower self-esteem and higher depression levels among Asian-American adolescents than among European-American adolescents. These ethnic differences may largely explain why Asian-American adolescents are sometimes considered disadvantaged relative to European-American adolescents. However, the ethnic differences associated with self-esteem and depression levels do not appear to be substantive though they are statistically significant in this study. Moreover, a high degree of between-group commonality remained in many aspects of psychological adjustment, including self-perceived intelligence and problem confronting/solving capabilities, somatic symptoms, and school or social absences caused by emotional problems. It is also important to point out that Asian-American adolescents are less likely to suffer

substance abuse or engage in sexual conduct, which are commonly considered as escapes of psychological distresses.

These results suggest that Asian-American parents would not care much about the relatively lower self-esteem and higher depression levels as long as their adolescent children could perform well. Meanwhile, European-American parents would not mind much about the relatively lower course grades and more problems in some behavioral aspects as long as self-esteem is well developed in their adolescent children. This research demonstrated that Asian-American adolescents are more likely to perform well both academically and behaviorally, while European-American adolescents are more socially confident with regard to self-esteem, just as expected by their parents. In addition it should be noted that adolescents from both ethnic groups in this study scored reasonably well on measures of all competence variables. Therefore, adolescents in both groups may be considered as competent in their cultural contexts, with their differences echoing the fundamental discrepancy between family-based and individual-based parenting styles.

The findings of this study contribute to the understanding of parenting in the Asian-American society. There has been some tendency to attribute developmental disadvantages in Asian-American adolescents to "authoritarian" or "deficient" Asian parenting (Chao, 1994, 1995). However, the irrelevancy of the authoritarian concept to Asian parenting has been indicated by previous research (Chao, 1994, 1995). This study has demonstrated that the parenting style in Asian-American families is culturally unique with regard to its family orientation. The family-based parenting style has its rationale deeply rooted in the Asian cultural value system that defines what competencies are

necessary for success. This study has also demonstrated that Asian-American adolescents developmentally adjust well within the sense of their cultural context.

The misclassification of Asian parenting could be very misleading to policy making, to family or parent program design, and even to parenting practices among Asian-American families. An important implication of this research is that one should first recognize the rationale of a parenting style in the cultural context before judging it as optimal or deficient and before trying to make it more like white middle-class parenting. Otherwise, the parenting practices that have positively contributed to the competence acquisition of Asian minority adolescents would be seriously damaged.

In general, this research may provide guidance for parents and professionals who work with families and adolescents in understanding optimal parenting styles within the ethnic context. Particularly, it may challenge the traditional way people view Asian parenting. It may also help Asian-American parents feel confident in their child-rearing practices, which would facilitate the Asian family socialization process. Most importantly, this research may be meaningful in preserving the rational foundation under the parenting style prevalent in the Asian-American society.

5.9 Limitations and Further Research Directions

The findings of this study have relatively high generalizability to the American society since the analyses were conducted using the nationally representative survey data collected from a broad range of adolescents from grades 7 to 11. However, since the sample for this study is restricted to adolescents who lived with both mother and father,

the results cannot be generalized to adolescents in other family arrangements. It would be worthwhile to do further cross-cultural comparisons with various types of family structure. The subjects of this study include adolescents from adoptive two-parent families. There may be a problem with ethnicity identification if the adolescent had a different ethnic background from his/her adoptive parents. Further research should pay special attention to this group of people and clarify their ethnicity for the particular research interest. It should also be noted that the measures used by this survey to test the hypotheses were still limited. This study points to the need for further research with better constructed measures for the cross-cultural comparison in various aspects of parenting and adolescent competencies.

The findings about adolescent-reported self-esteem, intelligence, and problem confronting/solving ability from this study have implications for understanding the development of self-esteem in the cultural context. Results of cross-cultural comparisons in self-esteem would vary depending on the nature of the scale used to measure the concept. Further research may detect whether higher level of self-esteem could emerge among Asian-American adolescents, if the self-esteem scale were more academically than socially oriented. It would be possible to obtain this result, given the very small between-group difference along the self-esteem scale with a clear social tendency in this study. Further research may also examine whether the relatively disadvantaged situation faced by a minority group (Chao, 1996b) may be related to lower self-esteem among Asian-American adolescents.

This study has examined ethnic effects in parenting characteristics and adolescent outcomes separately. A question then naturally emerges: are there associations between

the parenting characteristics and the adolescent outcomes. And, if so, are such associations the same in both ethnic groups? Answering these questions may add some depth to the analysis in further research on ethnic differences in parenting.

This study has not examined any interaction effects involving ethnicity and other covariates. Further research could clarify the ethnic effects on parenting and competence variables by looking at possible interaction effects. For example, some researchers (e.g., Ho, 1989; Gorman, 1998) have indicated differential treatment of boys and girls. The interaction effect of ethnicity and adolescent gender would reveal whether the ethnic differences or similarities are the same between males and females. Adolescent age groups and parent education levels may also interact with ethnic groups in influencing parenting styles and adolescent competencies. These interactions should be detected in future studies in order to see whether the ethnic effects remain the same across different age groups and parent education levels.

An important factor that was not included in the analyses is the acculturation of Asian-American families to the U.S. mainstream society. Although it is beyond the scope of this research, the effect of acculturation level should be recognized in future research. For example, the sense of obligation to the family might no longer command the same degree of absolute conformity it previously did among Asian families. Living in the United States might encourage individuals to put initiative and self-interest first, though it would not fundamentally change the traditional parenting style among Asian Americans. It would be interesting to see further research include acculturation level as a predictor in the analysis.

BIBLIOGRAPHY

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 75, 43-88.

Baumrind, D. (1968). Authoritarian versus authoritative parental control. Adolescence, 3, 255-272.

Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monographs, 4(1, part 2).

Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.), Child development today and tomorrow (pp. 349 – 378). San Francisco: Jossey-Bass.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 11(1), 56-95).

Bhadha, B. (1999). Relations among ethnic identity, parenting style, and adolescent psychological outcomes in European American and East Indian immigrants. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Albuquerque, NM.

Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. Child Development, 65, 1111 – 1119.

Chao, R. K. (1995). Beyond authoritarianism: A cultural perspective on Asian American Parenting Practices. Paper presented at the Annual Meeting of the American Psychological Association, New York.

Chao, R. K. (1996a). Reconceptualization of the authoritarian parenting style and parental control: Some initial items. Paper presented at the Biennial Meeting of the International Society for the Study of Behavioral Development, Quebec City, Canada.

Chao, R. K. (1996b). Chinese and European American mothers' beliefs about the role of parenting in children's school success. Journal of Cross-Cultural Psychology, 27(4), 403 – 423.

Chen, C., & Uttal, D. H. (1988). Cultural values, parents' beliefs, and children's achievement in the United States and Canada. Human Development, 31, 351-358.

Chiu, L. H. (1987). Child-rearing attitudes of Chinese, Chinese-American, and Anglo-American mothers. International Journal of Psychology, 22, 409 – 419.

Choi, E., Bempechat, J., & Ginsburg, H. (1994). Educational socialization in Korean American children: A longitudinal study. Journal of Applied Developmental Psychology, 15, 313-318.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. Psychological Bulletin, 113(3), 487 – 496.

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. Child Development, 58, 1244 – 1257.

Ellis, G. J., & Petersen, L. R. (1992). Socialization values and parental control techniques: A cross-cultural analysis of child-rearing. Journal of Comparative Family Studies, XVIII(1), 39-54..

Feldman, S. S., & Rosenthal, D. A. (1990). The acculturation of autonomy expectations in Chinese high schoolers residing in two Western nations. International Journal of Psychology, 25, 259-281.

Fong, S. L. M. (1968). Identity conflicts of Chinese adolescents in San Francisco. In E. Brody (Ed.), Minority group adolescents in the United States (pp. 111-132. Baltimore: Williams & Wilkins.

Gorman, J. C. (1998). Parenting attitudes and practices of immigrant Chinese mothers of adolescents. Family Relations, 47(1), 73 – 80.

Ho, D. Y. F. (1986). Chinese patterns of socialization: A critical review. In M.H. Bond (Ed.), The psychology of Chinese people (pp. 1-37). Hong Kong: Oxford University Press.

Ho, D. Y. F. (1989). Continuity and variation in Chinese patterns of socialization. Journal of Marriage and the Family, 51, 149 – 163.

Kelley, M. L., & Tseng, H. (1992). Cultural differences in child rearing: A comparison of immigrant Chinese and Caucasian American Mothers. Journal of Cross-Cultural Psychology, 23(4), 444 – 455.

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 62, 1049 – 1065.

Lau, S., & Cheung, P. C. (1987). Relations between Chinese adolescents' perception of parental control and organization and their perception of parental warmth. Developmental Psychology, 23(5), 726 – 729.

Lau, S., Lew, W. J. F., Hau, K., Cheung, P. C., & Berndt, T. J. (1990). Relations among perceived parental control, warmth, indulgence, and family harmony of Chinese in Mainland China. Developmental Psychology, 26(4), 674-677.

Lewis, C. C. (1981). The effects of parental firm control: A reinterpretation of findings. Psychological Bulletin, 90(3), 547-563.

Lin, C. C., & Fu, V. R. (1990). A comparison of child-rearing practices among Chinese, immigrant Chinese, and Caucasian-American parents. Child Development, 61, 429-433.

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parental-child interaction. In E. M. Hetherington (Ed.; P. H. Mussen, General Ed.), Handbook of child psychology: Vol. 4: Socialization, personality, and social development (4th ed.). NY: Wiley.

Ogbu, J. U. (1981). Origins of human competence: A cultural-ecological perspective. Child Development, 53, 413-429.

O'reilly, J. P., Tokuno, K. A., & Ebata, A. T. (1986). Cultural differences between Americans of Japanese and European ancestry in parental valuing of social competence. Journal of Comparative Family Studies, XVII(1), 87-97.

Rohner, R. P., & Pettengill, S. M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. Child Development, 56, 524-528.

Steinberg, L., Darling, N., & Fletcher, A. C. (1995). Authoritative parenting and adolescent adjustment: An ecological journey. In P. Moen, G. H. Elder, Jr., & K. Luscher (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp. 423 – 466). Washington, DC: American Psychological Association.

Steinberg, L., Dornbusch, S. M., & Brown, B. B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. American Psychologist, 47(6), 723 – 729.

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 65, 754-770.

Stevenson, H. W., Chen, C., & Lee, S. Y. (1993). Mathematics achievement of Chinese, Japanese, and American Children: Ten years later. Science, 259(1), 53 – 58).

Stevenson, H. W., & Lee, S. (1990). Contexts of achievement. Monographs of the Society for Research in Child Development, 55(1-2).

Sue, D. W. (1981). Counseling the culturally different. New York: Wiley.

Wu, D. (1985). Child training in Chinese culture. In W.S. Tseng & D. Wu (Eds.), Chinese culture and mental health (pp. 113-134). Orlando, FL: Academic Press.

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

Young, N. F. (1972). Independence training from a cross-cultural perspective. American Anthropologist, 74(3), 629-638.

APPENDICES

Appendix A Measures from Add Health Dataset

Hypotheses	Add Health Variable Names and Questions	
1-2	PA36 PA37	What is the most important thing for a boy to learn (parent question)? What is the most important thing for a girl to learn (parent question)?
3	H1WP11 H1WP15	On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would your mother be if you did not graduate from college? On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would your father be if you did not graduate from college?
4	H1WP2	Do your parents let you decide with whom to hang around?
5	H1WP4 H1EE3 H1DA8 H1DA9 H1DA10 H1DA11	Do your parents let you decide how much television to watch? In the last 4 weeks, did you work—for pay—for anyone outside your home? How many hours a week do you watch television? How many hours a week do you watch videos? How many hours a week do you play video or computer games? How many hours a week do you listen to the radio?
6	S44	Does not participate in any clubs, organizations, or teams in school
7	H1WP1 H1WP3 H1WP5 H1WP6 H1WP7	Do your parents let you decide what time you must be home on weekend nights? Do your parents let you decide what you wear? Do your parents let you decide which television programs to watch? Do your parents let you decide what time you go to bed on week nights? Do your parents let you decide what you eat?
8	H1PA1 H1PA4	How would your mother feel about your having sex at this time in your life? How would your father feel about your having sex at this time in your life?
9	H1RM11 H1RM12 H1RM13 H1RF11 H1RF12 H1RF13 H1WP8	How often is your mother at home when you leave for school? How often is your mother at home when you return from school? How often is your mother at home when you go to bed? How often is your father at home when you leave for school? How often is your father at home when you return from school? How often is your father at home when you go to bed? On how many of the past 7 days was at least one of your parents in the room with you while you ate your evening meal?
10	H1PF1 H1PF23 H1WP9 H1WP13	Most of the time, your mother is warm and loving toward you. Most of the time, your father is warm and loving toward you. How close do you feel to your mother? How close do you feel to your father?

Hypotheses

Add Health Variable Names and Questions

11	H1WP10 H1WP14 H1PR8	How much do you think your mother cares about you? How much do you think your father cares about you? How much do you feel that your family pays attention to you?
12	H1WP17I H1WP18I	Have your mother worked with you on a project for school in the past 4 weeks? Have your father worked with you on a project for school in the past 4 weeks?
13	H1WP17H H1WP18H	Have your mother talked about your schoolwork or grades in the past 4 weeks? Have your father talked about your schoolwork or grades in the past 4 weeks?
14	H1WP17H H1WP18H	Have your mother talked about other things you're doing in school? Have your father talked about other things you're doing in school?
15	H1PF3	When you do something wrong that is important, your mother talks about it with you and helps you understand why it is wrong.
16	H1PF2	Your mother encourages you to be independent.
17	H1PF4 H1PF24	You are satisfied with how your mother and you communicate with each other. You are satisfied with how your father and you communicate with each other.
18	H1ED11 H1ED12 H1ED13 H1ED14	What was your most recent grade in English or language arts? What was your most recent grade in mathematics? What was your most recent grade in history or social studies? What was your most recent grade in science?
19	H1EE1 H1EE2	On a scale of 1 (low) to 5 (high), how much do you want to go to college? On a scale of 1 (low) to 5 (high), how likely is it that you will go to college?
20	H1CO1	Have you ever had sexual intercourse?
21	H1ED2	During the most recent school year how many times did you skip school for a full day without an excuse?
22	H1ED7	Have you ever received an out-of-school suspension from school?
23	H1TO12 H1TO30 H1TO34 H1TO37 H1TO40	Have you had a drink of beer, wine, or liquor—not just a sip or a taste of? How old were you when you tried marijuana for the first time? How old were you when you tried any kind of cocaine— including powder, freebase, or crack cocaine—for the first time? How old were you when you tried inhalants, such as glue or solvents, for the first time? How old were you when you first tried any other type of illegal drug such as LSD, PCP, ecstasy, mushrooms, speed, ice, heroin, or pills, without a doctor's prescription?

Hypotheses

Add Health Variable Names and Questions

24 Delinquency Scale:

	In the past 12 months, how often did you
H1DS1	paint graffiti or signs on someone else's property or in a public place?
H1DS2	deliberately damage property that didn't belong to you?
H1DS3	lie to your parents about where you had been or whom you were with?
H1DS4	take something from a store without paying for it?
H1DS5	get into a serious physical fight?
H1DS6	hurt someone badly enough to need bandages or care from a doctor or nurse?
H1DS7	run away from home?
H1DS8	drive a car without its owner's permission?
H1DS9	steal something worth more than \$50?
H1DS10	go into a house or building to steal something?
H1DS11	use or threaten to use a weapon to get something from someone?
H1DS12	sell marijuana or other drugs?
H1DS13	steal something worth less than \$50?
H1DS14	take part in a fight where a group of your friends was against another group?
H1DS15	act loud, rowdy, or unruly in a public place?

25 Self-Esteem Scale:

H1PF26	You have a lot of energy.
H1PF29	You are well coordinated.
H1PF30	You have a lot of good qualities.
H1PF31	You are physically fit.
H1PF32	You have a lot to be proud of.
H1PF33	You like yourself just the way you are.
H1PF34	You feel like you are doing everything just about right.
H1PF35	You feel socially accepted.
H1PF36	You feel loved and wanted.

26 H1SE4 Compared with other people your age, how intelligent are you?

27 Problem Solving Scale:

H1PF14	You usually try to avoid having to deal with problems in your life.
H1PF15	Difficult problems make you very upset.
H1PF16	When making decisions, you usually go with your "gut feeling" without thinking too much about the consequences of each alternative.
H1PF18	When you have a problem to solve, one of the first things you do is get as many facts about the problem as possible.
H1PF19	When you are attempting to find a solution to a problem, you usually try to think of as many different ways to approach the problem as possible.
H1PF20	When making decisions, you generally use a systematic method for judging and comparing alternatives.
H1PF21	After carrying out a solution to a problem, you usually try to analyze what went right and what went wrong.

28 Depression Scale:

	How often was each of the following true during the last week
H1FS1	You were bothered by things that usually don't bother you.
H1FS2	You didn't feel like eating, your appetite was poor.
H1FS3	You felt that you could not shake off the blues, even with help from your family/friends.
H1FS4	You felt that you were just as good as other people.
H1FS5	You had trouble keeping your mind on what you were doing.
H1FS6	You felt depressed.
H1FS7	You felt that you were too tired to do things.
H1FS8	You felt hopeful about the future.
H1FS9	You thought your life had been a failure.
H1FS10	You felt fearful.
H1FS11	You were happy.
H1FS12	You talked less than usual.
H1FS13	You felt lonely.
H1FS14	People were unfriendly to you.
H1FS15	You enjoyed life.
H1FS16	You felt sad.
H1FS17	You felt that people disliked you.
H1FS18	It was hard to get started doing things.
H1FS19	You felt life was not worth living.

Somatic Symptoms Scale:

	How often you have had each of the following conditions in the past 12 months
H1GH2	a headache;
H1GH3	feeling hot all over suddenly for no reason;
H1GH4	a stomachache or an upset stomach;
H1GH5	cold sweats;
H1GH6	feeling physically weak for no reason;
H1GH7	a sore throat or a cough;
H1GH8	feeling very tired for no reason;
H1GH9	painful or very frequent urination (or peeing);
H1GH10	feeling really sick;
H1GH11	waking up feeling tired;
H1GH12	skin problems, such as itching or pimples;
H1GH13	dizziness;
H1GH14	chest pains;
H1GH15	aches, pains, or soreness in your muscles or joints;
H1GH17	poor appetite;
H1GH18	trouble falling asleep or staying asleep;
H1GH19	trouble relaxing;
H1GH20	moodiness;
H1GH21	frequent crying;
H1GH22	fearfulness.
H1GH48	In the last month, how often did you miss school day for emotional problem?
H1GH49	In the last month, how often did you miss social activity for emotional problem?

Appendix B Results of Regression Analyses
Effects on Parenting Characteristics & Adolescent Competencies

Models	Statistics	Asian Amer. ¹	Female ²	Age	Parent Edu.	N
Effects on Parental Socialization Goal and Academic Expectation						
1: preferring well-performing boys	odds ratio	4.00***	1.24**	0.96*	0.71***	6741
1: preferring well-performing girls	odds ratio	4.90***	1.1	0.95*	0.71***	6745
3: parent disappointment for not college graduate ³	odds ratio	1.62**	0.1	0.93***	1.38***	7337
Effects on Parental Control in Different Behavior Domains						
4: making own decision over with whom to hang around	odds ratio	0.57*	1.12	1.22***	1.43***	7342
5: making own decision over TV amount	odds ratio	0.52***	1.16	1.34***	0.89**	7347
6: adolescent entertainment hours	reg. coef.	-6.15*	-1.46	-0.05	-3.44***	7386
7: adolescent work for pay	odds ratio	0.31***	0.97	1.32***	1.02	7408
8: adolescent not participate any school club/team	odds ratio	0.92	1.05	1.12**	0.69***	6220
9: making own decision over daily matters	reg. coef.	0.09	0.05	0.28***	0.05**	7320
10: perceived parental disapproval of early sex	odds ratio	2.28**	2.44***	0.62***	1.17***	7157

Probability levels: *P < .10, *P < .05, **P < .005, *** P < 0.000.

¹Reference group: European American.

²Reference group: Male.

³Ordered logit model odds ratio.

Appendix B Results of Regression Analyses
Effects on Parenting Characteristics & Adolescent Competencies (Continued)

Models	Statistics	Asian Amer. ¹	Female ²	Age	Parent Edu.	N
Effects on Parental Warmth						
11: parent availability when leaving in the morning ³	odds ratio	0.95	0.97	1.04	0.90**	7333
12: parent availability when returning in the afternoon ³	odds ratio	0.8	1.14*	1.09***	1.28***	7330
13: parent availability when going to bed ³	odds ratio	1.33	1.1	0.99	0.99	7343
14: # days eating with parent at dinner	reg. coef.	-0.14	-0.24***	-0.41***	-0.01	7334
15: perceived parent love (higher ranks indicate less parent love) ³	odds ratio	1.28 ⁺	1.02	1.15***	0.87***	7348
16: perceived parent closeness ³	odds ratio	0.77 ⁺	0.58***	0.81***	0.98	7349
17: perceived parent care ³	odds ratio	0.74	0.83*	0.88***	1.17***	7414
18: perceived family attention ³	odds ratio	0.93	0.91	0.90***	1.10**	7395
Effects on Parental Involvement in Schooling						
19: working together on school project	odds ratio	0.96	0.97	0.82***	1.14**	7348
20: parent talking about schoolwork/grade	odds ratio	2.26*	1.08	1.04	1.13**	7348
21: parent talking about school activity	odds ratio	1.61*	1.17*	1	1.16***	7348
Effects on Parental Democracy						
22: mother discussing ethics (higher ranks indicate less discussion) ³	odds ratio	1.02	1.07	1.18***	0.97	7204
23: mother encouraging independence (higher ranks indicate less encourage) ³	odds ratio	1.34*	0.86*	1.01	0.97	7204
24: adol-parent communication (higher ranks indicate less satisfaction) ³	odds ratio	1.45**	1.41***	1.22***	0.99	7349

Probability levels: *P < .10, **P < .05, ***P < .005, **** P < 0.000.

¹Reference group: European American.

²Reference group: Male.

³Ordered logit model odds ratio.

Appendix B Results of Regression Analyses
Effects on Parenting Characteristics & Adolescent Competencies (Continued)

Models	Statistics	Asian Amer. ¹	Female ²	Age	Parent Edu.	N
Effects on Adolescent Academic and Behavioral Competencies						
25: average grade (higher ranks indicate lower grade) ³	odds ratio	0.63*	0.67***	1.22***	0.63***	7316
26: wanting to attend college	odds ratio	1.64 ⁺	1.43***	0.91***	1.61***	7403
27: likely attending college	odds ratio	1.62 ⁺	1.79***	1.09***	1.86***	7402
28: adolescent ever having sex	odds ratio	0.27***	1.13	1.90***	0.73***	7361
29: # days skipping school	reg. coef.	-0.21	-1.33	0.46***	-0.37***	7333
30: receiving school suspension	odds ratio	0.64 [†]	0.34***	1.21***	0.64***	7423
31: alcohol use	odds ratio	0.54***	0.98	1.44***	0.94	7410
32: drug use	odds ratio	0.47*	0.99	1.35***	0.99	7388
33: delinquent behavior	reg. coef.	0.19	-1.37***	0.05	-0.06	7353
Effects on Adolescent Psychological Competencies						
34: self-esteem (higher scores indicate lower self-esteem)	reg. coef.	1.34***	2.09***	0.30***	-0.33***	7404
35: self-perceived intelligence	odds ratio	1	0.9	1.02	1.61***	7412
36: problem confronting & solving (higher scores indicate lower ability)	reg. coef.	-0.17	-0.12	-0.23***	-0.24***	7330
37: depression	reg. coef.	1.89***	1.77***	0.42***	-0.75***	7396
38: somatic symptoms	reg. coef.	-0.38	2.84***	0.08	0.06	7413
39: school absence for emotion problem	odds ratio	0.78	1.60***	1.01	0.88***	7421
40: social absence for emotion problem	odds ratio	1.1	1.54***	1.04*	1.04	7427

Probability levels: [†]P < .10, *P < .05, **P < .005, *** P < 0.000.

¹Reference group: European American.

²Reference group: Male.

³Ordered logit model odds ratio.