

THE ACCULTURATION OF CHINESE-AMERICAN ADOLESCENTS IN
NEGOTIATING AUTONOMY AND CONNECTEDNESS: COMPARISON
BETWEEN CHINESE- AND EUROPEAN-AMERICANS

A Thesis

by

TZU-FEN CHANG

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

August 2009

Major Subject: Educational Psychology

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ABSTRACT

The Acculturation of Chinese-American Adolescents in Negotiating Autonomy and
Connectedness: Comparison between Chinese- and European-Americans.

(August 2009)

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Chinese-American adolescents were compared with the major group in the United States (European-American adolescents) in negotiating self-concepts related with autonomy and connectedness. Senses of autonomy and connectedness were evaluated by examining adolescents' cultural value orientations (individualism and collectivism), parent-adolescent relationships (decision-making styles and power perception), and relations between the two constructs. Participants included 56 first- or second-generation Chinese-American adolescents (18.5% of first-generation and 81.5% of second-generation) and 45 European-American adolescents, accompanied with their mothers (47 Chinese-American mothers and 42 European-American mothers).

In terms of cultural value orientations, Chinese- and European-Americans' self-concepts were consistently oriented towards collectivism more than individualism in adolescents and mothers. With regard to parent-adolescent relationships, Chinese-American adolescents have identified with the dominant culture to show similar desires of being autonomous as European-American adolescents. However, Chinese-American

mothers adopted more authoritarian, conservative, and inflexible parenting styles than European-American mothers. With regard to the relations between variables of cultural value orientations and variables of parent-adolescent relationships, the pattern of findings was consistent with the notion that Chinese-American adolescents who internalize highly collectivistic cultural values displayed more collectivistic communication styles in parent-adolescent relationships than European-American adolescents.

DEDICATION

To my beloved father, whose life as a grain of wheat that fell to the ground and died, will never cease to nourish my life.

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Looking back the process of writing the thesis, I deeply feel that the assistance of many individuals made this project possible. First and foremost, I need to acknowledge the contributions of my committee members, Dr. Liew, Dr. Castillo, and Dr. Yalvac. I especially thank Dr. Liew, whose guidance, support, and patient instruction rendered me an environment to learn how to conduct research and think about ways to solve problems.

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1. INTRODUCTION

Although one aspect of adolescent development is to become independent from parents (Collins & Repinski, 1994; Ryan & Solky, 1996), adolescents continue to need parental support for healthy psychological growth during the transition from childhood to adulthood (Deci & Ryan, 1985, 1991; Ryan, 1993). Thereby, one essential aspect of adolescents' self-concept development is to achieve an optimal status in autonomy as well as connectedness in relationships with parents. Although many scholars indicated that problems in negotiating a balance between autonomy and connectedness may put adolescents at risk for parent-adolescent conflicts, and problems with self-identity formation or low self-esteem (e.g., Allen, Hauser, Bell, & O'Connor, 1994; Collins & Repinski; Deci & Ryan, 1995; Grotevant & Cooper, 1986, 1998; Harter, 1999; Neff & Harter, 2002a; Ryan & Solky, 1996), families' ethnic backgrounds and cultural values play a role in defining the optimal proportions in the senses of autonomy and connectedness for parent-adolescent relationships (Cooper, 1999; Cooper, Baker, Polochar, & Welsh 1993; Lam, 1997). Adolescents living in the United State but raised by parents with cultural values that differ significantly from those of the United States may experience difficulties with parent-adolescent relationships. Chinese-Americans are just of this case.

Chinese-Americans refer to individuals living in the U.S. with familial and cultural origins from three major Chinese communities, including mainland China, Taiwan, and Hong Kong (Yang, 1986). Traditionally, Chinese culture is orientated toward collectivism that emphasizes interdependence and group harmony (Triandis, 1989, 2001). In family relationships, Chinese parents tend to hold collectivistic values emphasizing connectedness with their children, and therefore adolescents establish self-meaning and maturation upon interdependence with family members (Hsu, 1972; Lam, 1997). Although Chinese-Americans belong in the broad ethnic group of Asian-Americans, Chinese-Americans have unique characteristics different from other Asian-American subgroups in terms of the countries of origin, social or historical backgrounds of immigration, English language fluency, and socioeconomic status (SES) before migrating to the U.S. (Takanishi, 1994). Relative to other Asian countries (e.g., Japan or Korea), Chinese communities are often considered to be more representative of collectivistic values (Oyserman, Coon, & Markus, 2002).

In contrast, the United States has often been characterized as an individualism-centered society wherein individuals tend to emphasize independence and self-reliance (Oyserman et al., 2002; Triandis, 1989, 2001). European-Americans are the majority among all ethnic groups and represent the dominant culture in the U.S.. The term “European-Americans” is generally used interchangeably with the term “whites”, referring to those whose ancestors immigrated from Europe to the U.S. (Bhopal & Donaldson, 1998). European-American parents generally esteem autonomy and independence with their children (Triandis, 1989, 2001), and their adolescents regard autonomy as a means to search for self-worth and self-identity.

Because U.S. society and Chinese culture adopt distinctive viewpoints on autonomy and connectedness in adolescent development, Chinese-American adolescents likely need to adapt to living with dual or multiple cultural values. At home, Chinese-American adolescents are socialized to be interdependent on family members by parents, whereas outside the home, they are encouraged to be autonomous by U.S. mainstream values (Cooper, 1999; Nidorf, 1985). Therefore, the purpose of this study was to compare Chinese-American adolescents with the major group in the U.S. (i.e., European-American adolescents) in negotiating self-concepts related with autonomy and connectedness. By doing this, I hope to elaborate our understandings on the role of cultural adjustment on Chinese-American adolescents' self-concepts, and appreciate the similarities or differences between Chinese- and European-American adolescents' self-concepts.

The present study examined three main research questions. First, this study examined the cultural values and beliefs related to self-identity (specifically individualism and collectivism) of Chinese-American and European-American adolescents. Individualism and collectivism represent the main belief systems of U.S. society and Chinese society respectively (Oyserman et al., 2002). Moreover, individuals' orientation toward individualism or collectivism is linked with their inner senses of autonomy and connectedness (Triandis, 1989, 2001). Individualism emphasizes autonomy as the source of individuals' self-worth, whereas collectivism emphasizes connectedness as the source of individuals' well-being. By comparing Chinese- and European-American adolescents' individualism and collectivism, my research would address whether the two ethnic groups have similar or different senses of autonomy and

connectedness. Such results would be beneficial to acknowledge how Chinese-American adolescents' self-concepts are impacted by the heritage and the dominant cultures.

Adolescents' relationship with parents reflects the senses of autonomy and connectedness (Grotevant & Cooper, 1986). For Chinese-American adolescents, their negotiating autonomy and connectedness associated with family relationships mirrors the dynamics of acculturation in shaping self-concepts (Cooper et al., 1993; Greenfield, 1994; Juang, Lerner, McKinney, & von Eye, 1999). The orientation towards autonomy and the orientation towards connectedness in parent-adolescent relationships could be partly represented through the decision-making styles and power perception of the parent and the adolescent (Grotevant & Cooper, 1986; Neff & Harter, 2002b, 2003). Moreover, the parent's and the adolescent's decision-making styles may influence their power perception and vice versa (Neff & Harter, 2003; Turiel & Wainryb, 1994). However, relatively little is known about whether the decision-making styles and power perception between the parent and the adolescent are different in European- and Chinese-American families because of their cultural origins, how acculturation affects these variables in Chinese-American families, and the association of these variables with cultural values and orientations such as individualism and collectivism. Therefore, the second research question of this study was to compare whether Chinese-American adolescents differed from their European-American counterparts in their decision-making styles and power perceptions within parent-adolescent relationships. The third research question was to explore whether decision-making styles and power perception were associated with individualism and collectivism in adolescents for Chinese- and European-Americans.

The present study collected information from both the parent and the adolescent that allowed for exploration of the interplay between parental and adolescent influences on the adolescent's self-concepts (e.g., Kim & Choi, 1994; Lam, 1997; Triandis, 2001). In this study, parental information was collected primarily from the mother as mothers typically serve as the primary caregiver in families at present time (Pleck, 1997).

2. LITERATURE REVIEW

2.1 Cultural values and acculturation

2.1.1 The definition of culture, individualism and collectivism

Culture could be defined as a collective memory for people wherein individuals share common ideas, symbols, values, and concrete objects. Past experiences of ancestors inform and mold individuals' ways to deal with social circumstances, ways to define the self, and ways to behave properly (Geertz, 1973; Markus, Kitayama, & Heiman, 1996; Valsiner, 2000). A person can ascribe to a given culture's traditions and customs to save time and energy from thinking about the reason for specific social behaviors, norms, or lifestyles (Triandis, 1989). Individualism and collectivism are two core cultural belief systems. In North America and other "individualistic" societies (e.g., the society of European-Americans or other European countries), individuals tend to emphasize self-reliance, independence, self-determination, and self-realization from their in-group (e.g., family, tribe, and nation) that reflect on *private* or *personal self* (Triandis, 1989, 1995, 2001). Conversely, in Asia and other "collectivistic" societies (e.g., China, Japan, and Korea), individuals tend to emphasize conformity, obedience, security and interdependence within their in-group that reveal the importance of *collective self* (Triandis, 1989, 1995, 2001) or *relational self* (Ho, Chen, & Chiu, 1991; Hwang, 2000). Table 1 classified the comparison between individualism and collectivism in several domains including personal goals, self-identity, independence of emotion, and decision-making (Franzoi, 2006; Gaenslen, 1986; Triandis, 1989).

Table 1
Comparison of individualism and collectivism

	Individualism	Collectivism
1. Personal goals	Individuals put personal goal in priority. When group goals are contradictory to personal goals, individuals choose insistence on their own.	Individuals tend to make no differentiation between personal and group goals or confirm to group goals. When group goals are inconsistent with personal goals, individuals choose subordinating their own.
2. Self-identity	<p>a. Individuals shape identity based on their own preference and achieve it in their own ways.</p> <p>b. Individuals prefer showing uniqueness from others in public settings (such as wearing, possessions and speech styles).</p> <p>c. Identity is defined by the possessions one owns (such as, what do I have, what have I experienced, and what are my fulfillments).</p> <p>d. Individuals take risk making conflicts with people in their in-group.</p>	<p>a. Individuals form identity based on the social norms, and the definition is given by ones' group.</p> <p>b. Individuals are used to following social conventions as well as respecting others' views.</p> <p>c. Identity is defined more by what relationships one is involved in.</p> <p>d. Individuals maintain politeness and harmony with people in there in-group.</p>
3. Independence of emotion	Individuals esteem emotional independence from group members.	Individuals seek emotional interdependence on group members.
4. Decision-making	<p>a. The advantage of superiors over subordinates is not significant.</p> <p>b. Decision participants are not attentive to superiors.</p> <p>c. Superiors tend to render subordinates more autonomy.</p>	<p>a. The advantage of superiors over subordinates is significant.</p> <p>b. Decision participants are attentive to superiors.</p> <p>c. Superiors tend to exert power over subordinates.</p>

2.1.2 The self-concepts of adolescents in individualistic and collectivistic belief systems

Referring to Table 1, theorists have proposed that cultural belief systems such as individualism and collectivism could serve as endpoints for the development of adolescents' self-concept (Kim & Choi, 1994; Lam, 1997). In the individualistic belief system, adolescents' primary task is anchored on the formation of an autonomous identity (Kim & Choi, 1994; Lam, 1997). Highly individualistic adolescents value personal goals more than in-groups' needs (e.g., family's needs), and less likely define themselves by others or groups (Waterman, 1984). Further, adolescents socialized with individualistic values assert freedom to make personal choices or decisions (Henriques, Hollway, Urwin, Venn, & Walkerdine, 1984). For example, when holding a different view from parents in choosing a field of study or a future career, adolescents strive for insisting on their own choices and realizing such desires. Along this line, adolescents in this cultural belief system construct the autonomous sense that embraces self-fulfillment, self-reliance, and self-esteem (Lam, 1997).

The collectivistic belief system emphasizes that one's self-worth is situated within a relational context (Bond, 1986). Accordingly, adolescents who have internalized collectivistic values tend to develop relation-based self-concepts (Liang, 1974). They pay greater attention to keeping a harmonious relationship with in-group members and pay less attention to accomplishing personal goals or ideals. Because of the emphasis on the sense of interdependence, adolescents establish self-identity through attachment to the needs or desires of major figures in their lives (e.g., parents) (Bond, 1986). As a result, highly collectivistic adolescents feel obliged to satisfy parents or society's expectation above their own freedom of choice or individual rights (Hwang, 2000; Lam, 1997;

Triandis, 1989; Yeh, 1997; Yeh & Bedford, 2004). Gradually, the strong sense of connectedness forms the core of adolescents' self-concepts that reflect values of familial ties, conformity, and self-inhibition (Hsu, 1972; Triandis, 2001; Yang, 1986).

Research on individualism and collectivism suggested that individualism and collectivism belief systems were likely inversely related to one another, but were still distinct constructs rather than opposites of a single construct (e.g., Killen, 1997; Sinha & Tripathi, 1994; Wainryb, 1997). Even though one society may emphasize a given belief system (e.g., individualism or collectivism), it may also exhibit some values of another belief system depending on the situation (Killen & Wainryb, 2000). Thus, individualistic and collectivistic belief systems can coexist in societies, but the forms of coexistence or relative priority of the two cultural values might vary by different societies (Greenfield, Keller, Fuligni, & Maynard, 2003; Killen & Wainryb, 2000). Raeff, Greenfield, and Quiroz (2000) found that although sharing with siblings was valued by both European-American and Mexican-American parents, the two ethnic groups had different considerations underlying such behavior. Whereas European-American parents perceived sharing as a matter of personal choice, Mexican-American parents put much weight on sharing and regard this behavior as children's obligation. The two belief systems can also be compatible at individual level (Nucci & Turiel, 2000; Turiel & Wainryb, 2000; Wainryb, 1997). In one cross-country study (Green, Deschamps, & Pàez, 2005), variability of individuals was found in each nation. Some were influenced by both belief systems equally, while others were oriented towards one of them more than the other. At the level of country of origin, nevertheless, members of collectivism-centered belief system or individualism-centered belief system tended to exhibit (on average) self-

concepts consistent with their respective cultural system. As the two belief systems can coexist in individuals, the present study examined both individualism and collectivism in Chinese- and European-American adolescents.

In addition to country of origin, past scholars suggested that socioeconomic status (SES) is one factor to predict people's orientation towards individualism or collectivism within or across ethnicities and cultures (Freeman, 1997; Hofstede, 1980; Oyserman et al., 2002; Triandis, McCusker, & Hui, 1990). Relative to people in lower SES, people in higher SES tend to be more individualistic and less collectivistic. Thus, potential SES effect was examined for adolescents' cultural value orientations (i.e., individualism and collectivism) in Chinese- and European-Americans.

2.1.3 Parenting styles in individualistic and collectivistic belief systems

Because individualistic and collectivistic belief systems adopt distinctive world-views regarding the goals of adolescent development, parents are likely to implement parenting styles that correspond to their dominant cultural value system (Lam, 1997; Triandis, 2001). In individualism-centered cultures, parents put high priority in fostering children with an autonomous self (Blos, 1979; Erikson, 1968; Freud, 1961). Consequently, their rearing strategies are targeted at building children's independence, self-initiation, self-exploration, and self-realization (Triandis, 2001). In contrast, parents in collectivism-centered cultures tend to believe that an individual's well-being must be actualized in the maintenance of a stable relationship (Hwang, 2000; Yang, 1986). To attain this ideal, they cultivate their children with a *relational self* that stresses familial connectedness, obedience, and endurance (Ho et al., 1991). Consistent with the notion of coexistence of the two belief systems in individuals, individualistic and collectivistic

values can be compatible in parents' child-rearing philosophy (Smetana, 2002). Smetana's review pointed that parents in different cultures might have respected children's autonomy while acknowledging the importance to require children's conformity. Because parenting styles impact children's family atmosphere, the levels of individualism and collectivism in Chinese-American and European-American mothers were assessed to explore how adolescents' autonomy and connectedness were shaped by the two belief systems of parents. Recall that SES has been associated with people's orientations towards individualism and collectivism (e.g., Hofstede, 1980; Oyserman et al., 2002), and this study examined whether there were SES related differences on the two belief systems for Chinese- and European-American mothers.

2.1.4 Acculturation in immigrant families

Because the U.S. is a typical individualism-centered society where one's self-worth is embedded in the establishment of the autonomous sense (Oyserman et al., 2002), some immigrants may experience managing and negotiating dual cultural value systems if the core belief system valued by the mainstream society differs from that of their heritage society (Benet-Martinez, Leu, Lee, & Morris, 2002). The cultural accommodation process is generally referred to as acculturation. Acculturation is defined as the phenomena by which groups of individuals with different cultures come into continuously first-hand contact, with subsequent changes in the original culture patterns of either or both groups (Redfield, Linton, & Herskovits, 1936). Numerous theorists supported the idea that acculturation was a bidirectional process wherein both heritage and mainstream cultural identities changed or adjusted themselves independently (e.g.,

Berry, 1980; Celano & Tyler, 1990; Laroche, Kim, Hui, & Joy, 1996; Ryder, Alden, & Paulhus, 2000). Along this line, heritage and mainstream cultural identities can be taken as two independent continuums by which individuals perceive or identify themselves as high or low on each dimension. Built on the bidimensional view, Berry proposed an *acculturation framework* that conceptualized four *acculturation strategies* (Berry, 1980). *Integration* means that one embraces both heritage and dominant cultural values; *assimilation* means that one adopts dominant cultural values and relinquish heritage traditions; *separation* means that one maintains heritage cultural values but fail to identify dominant values; and *marginalization* means that one lacks adherence to both heritage or dominant cultural values. Many scholars contended that immigrant family members could achieve better acculturation when they adopted the integration strategy (Greenfield, 1994; Joe, 1994; Kim & Choi, 1994; Suina & Smolkin, 1994).

Theoretical and empirical works on acculturation suggested that acculturation involved changes in three levels of functioning: behavioral, affective, and cognitive (Kim & Abreu, 2001; Ward, 2001). The behavioral level involves cultural-specific skills or knowledge (e.g., language fluency), and norms or customs (e.g., food choices). The affective level emphasizes emotions or attitudes related with cultural connections (e.g., cultural identity). The cognitive level refers to cultural values or beliefs underlying self-concepts (e.g., interdependence and independence). This study focused on Chinese-American adolescents' cognitive acculturation (, accompanied with their mothers'). At this level of acculturation, information on individualism and collectivism was gathered to allow for measuring their cultural value orientations.

Because the focus of the present study was on the cognitive aspects or cultural values or beliefs of acculturation, Chinese Americans who were first or second-generation were expected to be relatively similar in their level of acculturation in the cognitive aspects of acculturation. Past studies indicated that acculturation in the cognitive level (i.e., value or belief) was relatively slower than that in behavioral level (e.g., skills or knowledge) for both children and parents of immigrant families (Kim, Atkinson, & Yang, 1999; LaFromboise, Coleman, & Gerton, 1993; Szapocznik, Scopetta, Kurtines, & Arandale, 1978). Regarding adolescents, generational differences (first-versus second-generation) were not found for Chinese-Americans' cultural value orientations (individualism and collectivism) (Rosenthal & Feldman, 1990). Regarding parents, some studies suggested that the longer Asian parents resided in Western countries, the more they would accept the dominant culture as well as de-emphasize their heritage culture (Kwak & Berry, 2001; Rosenthal, Ranieri, & Klimidis, 1996). Nevertheless, such change in acculturation across generations is often difficult to detect and may also depend on the sensitivity of particular measures of acculturation to detect subtle changes. Nonetheless, the present study examined potential differences in cultural value orientations (i.e., individualism and collectivism) depending on adolescents' generational status or the mothers' length of residence for Chinese-Americans.

2.1.5 Acculturation in Chinese-Americans and comparison of cultural value orientations between Chinese- and European-Americans

Consistent with the view that acculturation is critical for negotiations between heritage and mainstream cultural identities, Chinese-American family members are faced with the choice of maintaining Chinese tradition or U.S. cultural values, or embracing

both at the same time (which may be sometimes difficult as Chinese society esteem collectivism, whereas U.S. dominant society esteem individualism). Empirical studies indicated that Chinese-American parents generally continued to insist on collectivistic values in their parenting styles (Chao, 1994, 2001) and family communication process (e.g., Cooper, 1999; Cooper et al., 1993). Chao (1994) indicated that Chinese-American parents exerted collectivistic parenting style rather than individualistic parenting style. In family communication, they suppressed children's voices as well as require children's obedience (Cooper et al., 1993). As a result, the family cultural atmosphere is likely to be impacted by parents' attitudes or behaviors toward the collectivism-centered context. In turn, Chinese-American adolescents internalize collectivistic values that shape their self-concepts. Although Chinese-American adolescents are socialized with individualistic values through the settings outside the home (e.g., in schools), they appear to be more impacted by collectivism and less by individualism in regards to their development of self-concept (Greenfield, 1994; Oyserman et al., 2002). Specifically, Chinese-American adolescents expect behavioral autonomy at a late age, inhibit their own needs or desires, and respect parents' opinions (Feldman & Rosenthal, 1990; Greenfield, 1994; Juang et al., 1999). For example, when Chinese-American adolescents make decisions regarding educational or career directions, they often feel afraid or guilty of being selfish if their decision is based on personal interests or expectations over those of their parents (Greenfield, 1994).

In contrast, European-American parents tend to endorse individualistic values including respecting one's integrity and independence, and opening to their own and one's emotion-expression (Oyserman et al., 2002; Waterman, 1984). In addition, U.S.

mainstream culture views an autonomous self as important for mature identity formation (Blos, 1979; Erikson, 1968; Freud, 1961). Surrounded by such beliefs, European-American adolescents' self-concepts tend to be more consistent with individualistic values and less with collectivistic beliefs than Chinese-American counterparts (Oyserman et al., 2002). European-American adolescents often desire the freedom to pursue individual's interests and make personal decisions, which is highly esteemed as a means of realizing their autonomy and identity (Greenfield, 1994). Compared with many ethnic groups (including Chinese-Americans), European-Americans emphasized personal traits instead of social roles in terms of contents of self-concepts (Dhawan, Roseman, Naidu, Thapa, & Rettek, 1995; Ma & Schoeneman, 1997; Rhee, Uleman, Lee, & Roman, 1995; Trafimow, Triandis, & Goto, 1991). Because Chinese society and U.S. society focus on collectivism and individualism, respectively, information on the two value orientations would enhance understandings of how Chinese-American adolescents and parents' self-concepts are impacted by the heritage and dominant cultural systems individually.

When there are imbalances or conflicts in the negotiation of autonomy and connectedness or when the heritage and dominant culture values are perceived as distinct or separate, Chinese American adolescents are likely at risk for cultural adjustment problems in terms of self-esteem or self-concept development (Juang et al., 1999). Theories and empirical studies (Benet-Martinez et al., 2002; Haritatos & Benet-Martinez, 2002) suggested that Chinese-American adolescents' strategies of bicultural identity integration (BII) determined whether they struggled with coping Chinese and U.S. cultures. For the adolescents identifying with both cultural identities (high BII), they regard these two cultural value systems as compatible and therefore face few cultural

value conflicts. However, for those failing to integrate the two cultural identities (low BII), they regard these two cultural value systems as discrepant and therefore easily feel internal conflict. For example, in face of issues of autonomy/connectedness, Chinese-American adolescents with higher BII can switch levels of autonomy or connectedness depending on demands of the situation (e.g., subordinating their own needs at home, yet asserting opinions at school) (Benet-Martinez et al., 2002). However, those with lower BII think being autonomous or being connected as two exclusive options, so they have to choose one of them but not both (Copeland, Hwang, & Brody, 1996; Nguyen, 1992; Nidorf, 1985). Moreover, these adolescents may experience greater turmoil when selecting the assimilation strategy of acculturation and pursue dominant values (e.g., independence or self-realization) that are disparate to parents' heritage beliefs (e.g., interdependence or self-suppression) (Copeland et al., 1996). Consistent with research on Chinese-American adolescents' bicultural identity integration, the present study would explore Chinese-American adolescents' acculturation (the relation between individualism and collectivism) and the consistency of cultural values between adolescents and parents in the Chinese-American heritage.

European-American adolescents typically are not confronted with the same cultural adjustment barriers as Chinese-American adolescents, inasmuch as their family environments and U.S. dominant society are congruent (Copeland et al., 1996). For European-Americans, establishing an autonomous self is desired by their parents (Greenfield, 1994; Nidorf, 1985). Because European-Americans' self-concepts are representative of U.S. mainstream values (e.g., Oyserman et al., 2002), information on

European-Americans was helpful for understanding Chinese-American adolescents' acculturation.

2.1.6 The effect of adolescent age in cultural value orientations

Adolescence is a broad age range, and there may be age-related differences in adolescents' orientation toward individualism and collectivism. With age, adolescents may increasingly rely on themselves to make decisions (Steinberg & Silverberg, 1986) and gradually decrease in reliance and connectedness with parents (Berk, 2006). Adolescents in both collectivistic and individualistic cultures have similar orientation toward being more behaviorally autonomous and less interdependent with parents. Yet, adolescents raised with collectivistic values tend to form autonomous concepts later than those raised with individualistic values partly due to differences in parenting (Feldman & Rosenthal, 1990). Moreover, some scholars indicated that younger children held collectivistic values in judging social accountability than the older children in both collectivistic oriented and individualistic oriented cultures (Bersoff & Miller, 1993). For example, younger children tended to attribute ones' social responsibility more to role or context factors, yet less to agent intentionality (e.g., Bersoff & Miller, 1993; Fincham & Jaspars, 1979). Thereby, older adolescents' self-concepts appeared to be more connected with individualism and less with collectivism than younger ones. Because age may be associated with autonomy and connectedness (e.g., Bersoff & Miller, 1993; Feldman & Rosenthal, 1990), the present study explored whether age was associated with individualism and collectivism for Chinese-American and European-American adolescents.

2.1.7 The effect of adolescent gender in cultural value orientations

Gender differences have been found in individuals' self-concept in Western culture (Josephs, Markus, & Tafarodi, 1992; Watkins et al., 1996; Watkins et al., 1998). In highly individualistic societies, girls tend to be socialized more than boys to esteem others' needs and focus on emotional interdependence (Cross & Madson, 1997). In contrast, boys are raised to show independence and de-emphasize emotional connectedness in relationships (Cross & Gore, 2002). The different socialization experiences are associated with divergent self-concept between women (socialized for a *relational self*) and men (socialized for a *personal self*). Thus, females are likely to develop collectivistic values, whereas males are oriented toward individualistic values (Cross & Gore, 2002; Cross & Madson, 1997). In highly collectivistic societies, findings have been mixed with scholars concluding that either no differences between males and females in their self-concepts existed (Watkins et al., 1998; Watkins, Yau, Dahlin, & Wondimu, 1997) or females were more independent than males (Watkins et al., 1996). However, some researchers have found that females report being more interdependent than males in highly individualistic and highly collectivistic societies (Kashima et al., 1995). Given such mixed and sometimes contradictory findings, it remains uncertain whether females' self-concepts are linked with collectivism more than with individualism, and whether males' self-concepts are connected with individualism more than collectivism across ethnicities and cultures. Although it was difficult to propose specific hypotheses for gender, potential relations between gender and cultural value orientations (individualism and collectivism) were explored in Chinese-American and European-American adolescents.

2.2 Parent-adolescent relationships

2.2.1 Autonomy and connectedness as characteristics of parent-adolescent relationships

The patterns of parent-adolescent relationships are often determined by whether a mother or father and the child are engaged in the relational dyad (e.g., father-adolescent or mother-adolescent). Grotevant and Cooper (1982, 1985) proposed that a relationship per se was a dynamic and interactive process in which members in the dyad influenced the features and the qualities of the relationship. Grotevant and Cooper developed a model that illustrated the patterns and the qualities in parent-adolescent relationships. This model proposed that the features of adolescent-parent relationships were determined by how individuals adjusted the portions of the two components, that is, individuality and connectedness. Individuality is the degree to which one is aware of and makes distinctions between stances of oneself and others. Connectedness is the degree to which individuals are sensitive to, respectful of, and open to the values, feelings and opinions of others. For adolescents, individuality is critical for developing autonomy, whereas connectedness is essential for maintaining or garnering familial support. Past studies found that parenting styles could influence children's levels of autonomy and connectedness (Barber & Olsen, 1997; Baumrind, 1971, 1991; Berk, 2006). Authoritative parents offer their children autonomy but also require them to maintain emotional or physical connectedness. Authoritarian parents require their children to depend on them via emotional or physical connectedness while neglecting or denying their children autonomy. Permissive parents overemphasize allowing children's autonomy but lack a consideration of their readiness for such autonomy nor offer emotional support or connectedness and guidance. Uninvolved parents are indifferent to children's levels of

autonomy and connectedness. Importantly, researchers found that the equilibrium between individuality and connectedness, that is, a mutuality-oriented interactive pattern between parent and child, predicted a high quality of parent-child communication (Barber & Olsen, 1997; Beavers, 1976; Bell & Bell, 1983). As indicated earlier, however, families from different ethnic and cultural backgrounds define their own optimal proportions of individuality and connectedness in parent-adolescent relationships (Cooper et al., 1993). The process of negotiating and adjusting the ratio between individuality and connectedness between parents and adolescents may be reflected in how adolescents make decisions and perceive the power dynamics with their parents (Grotevant & Cooper, 1986).

2.2.2 Decision-making styles and power perception as the means to explore parent-adolescent relationships

Consistent with the view that individuality (or autonomy) and connectedness are core features of parent-child relationships (Grotevant & Cooper, 1985), individuality (or autonomy) and connectedness between parent and child are often reflected in decision-making between parent and child. Following this view, Grotevant and Cooper (1986) conducted the Family Process Project to examine decision-making styles between parents and adolescents. This project consisted of 121 European-American middle-class, two-parent families as they were assigned a task for planning a hypothetical two-week vacation without concerns of financial resource. Using a dyad-centered approach (Cooper, Grotevant, & Condon, 1983), researchers recorded and analyzed each family's discussion about the vacation involving both parents and the target adolescent. Discussion about positive family activities allowed the researchers to elicit adolescents'

active participation and then record how adolescents contribute to family decisions. Verbatim transcripts were made in service of analyzing participants' communication behaviors. The results supported that the themes of individuality and connectedness emerged from the decision-making of parent-adolescent dyads (Grotevant & Cooper, 1982, 1985). Building on these findings, Neff and Harter's (2003) decision-making styles survey used individuality and connectedness as two core elements that assessed three relationship styles across dyads with both parents, best friends, and romantic partner in multi-ethnic samples: self-focused autonomy (strong individuality), mutuality (a balance between individuality and connectedness), and other-focused connection (strong connectedness). Measuring decision-making styles has been proposed as an appropriate vehicle to examine parent-adolescent relationships not only in a population with strong individualism-orientation, but also in a population with high collectivism (Gaenslen, 1986; Hwang, 2000; Yang, 1986).

In addition to decision-making, power perception serves as another important indicator of the quality of parent-adolescent relationships especially in regard to negotiating autonomy and connectedness (Neff & Harter, 2002b, 2003). Power perception between family members has been defined as the levels of impact each member has in making decisions on daily issues or in conflict settings within relational dyads (Hosley & Montemayor, 1997). Based on this definition, power perception changes depending on the members of the relational dyad, including each member's level of autonomy and connectedness, and may be associated with the decision-making process between familial members. Thus, it may be important to consider mothers and fathers separately when examining decision-making for parents and adolescents. Previous studies

supported the view that individuals' decision-making styles and their power perception were related to one another across diverse dyadic relationships, different age groups, and multiple ethnic population (e.g., Juang et al., 1999; Neff & Harter, 2003; Piaget, 1932; Turiel & Wainryb, 1994). That is, a higher degree of power perception was correlated with a self-focused autonomous style, whereas a lower degree of power perception was associated with an other-focused connected style. Furthermore, those who were symmetrical or balanced in degree of power perception tended to adopt a mutual style. In light of such positive relationship between the two constructs, power perception is a useful supplement for the decision-making construct to elaborate on the features of parent-adolescent relationships.

2.2.3 Empirical studies of decision-making styles and power perception in Chinese- and European-Americans

Although Chinese-American parents live in the U.S., their parenting styles have been significantly influenced by Chinese child-rearing philosophy. Chinese cultural values are based on Confucian philosophy in which individuals are taught to show deference and reticence with people in superior social positions with the goal of maintaining social order and harmonious relationships (Hwang, 1995, 2000; Lam, 1997). This notion is extended into Chinese familial relationships, and is revealed in so-called *familism* or *familistic values* (Cooper, 1999; Lam, 1997). Familism is often found in collectivistic cultures, and is characterized by Chinese parent-adolescent relationships that are built on a hierarchical principle where children are expected to show respect and obedience to parents (Hwang, 2000; Lam, 1997). As elders and authority figures, traditional Chinese parents possess greater power to make decisions for adolescents for

fear that adolescents' wrong choices may blemish the family's reputation, or make the family *lose face* or lose dignity (Cooper, 1999; Cooper et al., 1993; Haines, 1988; Hwang, 1997; Lam, 1997; Triandis, 2001). Rooted in such tradition, Chinese-American parents often require their children to focus more on parents' needs (Chao, 1994; Cooper et al., 1993) and are likely to restrict their children's self-expression (Rosenthal & Feldman, 1990).

Many studies supported that Chinese-American parents' communication behaviors impacted children's negotiation and decision-making with parents. Lin and Fu (1990) found that Chinese-American children tended to hide their emotions in parent-child interactions relative to European-American children. In fact, Chinese-American adolescents lagged behind their European-American counterparts in their expectations of being able to exert autonomy in making decisions on personal issues (Copeland et al., 1996; Feldman & Rosenthal, 1990; Nguyen, 1992). In facing of conflicts with parents, Chinese-American adolescents often suppressed emotions and perceived lower power in changing parents' points of view (Cooper et al., 1993; Lin & Fu, 1990; Rosenthal & Feldman, 1990).

In contrast, European-American families have a divergent communication atmosphere from Chinese-American families in parent-adolescent dyads. European-American parents cherish the Western child-rearing perspective that parents should build an environment to cultivate children's independent minds (Nidorf, 1985; Waterman, 1984). European American children are encouraged to express emotions and assert needs or desires in interpersonal relationships (Henriques et al., 1984). Growing up in such surroundings, European-American adolescents tend to assert themselves and freely

express their feelings and needs in communicating with parents (Feldman & Rosenthal, 1990; Oyserman et al., 2002). That is, European-American adolescents perceive themselves as autonomous in their decision-making as well as having power in conflict settings with their parents (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Kim, 1994; Shweder & Bourne, 1982).

Given the differences in parenting styles and cultural values, the present study assessed decision-making styles and power perceptions to examine similarities or differences in parent-adolescent relationships for Chinese-American and European-American adolescents. Information on decision-making and power perception was also gathered from mothers to examine adolescents' family environments. Moreover, in light of the association between SES and parenting (Hoff, Laursen, & Tardiff, 2002), potential SES effect on parent-adolescent relationship was examined for adolescents and mothers within each ethnic group. Hoff et al.'s (2002) review on parenting indicated that parents from lower SES esteemed children's conformity, whereas parents from higher SES esteemed children's initiative and autonomy in different cultures or ethnicities (e.g., Kohn, 1979, 1987; Luster, Rhoades, & Haas, 1989; Tudge, Hogan, Snezhkova, Kulakova, & Etz, 2000). In turn, children easily developed corresponding relationship styles with parents.

Previous studies found that the acculturative process for parent-adolescent relationship patterns could take a long period and would be difficult to observe in many Chinese-American families in Western countries (Feldman & Rosenthal, 1990; Rosenthal & Feldman, 1990). Based on past studies (Feldman & Rosenthal, 1990; Rosenthal & Feldman, 1990), compared to those of first-generation, second-generation Chinese-

American adolescents tended to assert greater levels of autonomy, but they still stressed sense of connectedness with family members. Furthermore, the same studies suggested that just as acculturation had generational effects, it also affected parenting styles according to the length of residence. The longer Chinese-American parents resided in the U.S., the more they esteemed children's needs of independence, yet they still maintained traditional parenting styles (e.g., require children's conformity). Because previous studies have found that parent-child relationships might have depended on generational and length of residence in Chinese-American families, the present study explored whether adolescents' generational status and maternal length of residence were associated with parent-child relationship styles.

2.2.4 Parental gender as a context in decision-making and power perception

The decision-making process and power perception between parents and adolescents may differ across mother-adolescent versus father-adolescent dyads (Bengtson & Grotevant, 1999; Grotevant & Cooper, 1985). For example, studies have found that adolescents view their mothers as more open and sensitive to their feelings and problems than fathers (LeCroy, 1988; Noller & Bagi, 1985; Youniss & Smollar, 1985). In turn, adolescents may be more likely to focus on their needs in the decision-making process with mothers if they view their mothers as supportive and encouraging. When fathers maintain or exert power by means of being autocratic or assertive with adolescents (Baranowski, 1978), adolescents may view their fathers as controlling in decision-making during conflict situations. (LeCroy, 1988; Noller & Bagi, 1985; Pipp, Jennings, Shaver, Lamborn, & Fischer, 1985; Youniss & Smollar, 1985). Furthermore, Neff and Harter (2003) found that late adolescents and young adults perceived

themselves as having lower power in father-dyads than in other dyads (i.e., with mothers, with best friends, and with romantic partners). Although previous studies were often conducted in individualism-centered cultures where fathers traditionally are viewed as authority figures and mothers as nurturer, such gender roles for parents also appear in collectivism-centered cultures (Kim & Choi, 1994) or in U.S. immigrant families from multi-ethnic groups (Julian, McKenry, & McKelvey, 1994). In one empirical study, Cooper et al. (1993) validated that both Asian-American (including Chinese-American) and European-American adolescents feel less power with fathers than with mothers. Because adolescents feel less powerful with fathers, they tend to focus on their fathers' needs rather than their own in decision-making processes within father-adolescent dyads. Also, they exert less influence or power in conflict setting with fathers than mothers. Thus, in the present study, adolescent's perceptions of decision-making and power perception with parents were examined separately for mother-adolescent and father-adolescent dyads.

2.2.5 Adolescent age as a context in decision-making and power perception

Adolescence is a period when children increasingly establish and assert their independence and autonomy including challenging authority figures such as their parents (Baltes & Silverberg, 1994; Smetana, 1988; Steinberg & Silverberg, 1986). That is, the age of the adolescent is important to consider when examining the decision-making process and power perception within the adolescent-parent dyad (Smetana, 1988). Parents typically impose guidelines for young adolescents but allow older adolescents more autonomy in making choices or decisions regarding personal issues such as appearance, peer relationships, or academic and school activities (Baltes & Silverberg, 1994;

Smetana, 2002). Although older adolescents are more autonomous relative to younger adolescents, older adolescents continue to need affective support and advice or guidance from their parents and other important adults (Kenny, 1987; Lewis, 1981). It is important to note that there may be differences across cultures in regard to adolescents' age at which parents begin allowing adolescents autonomy in their decision-making (Cooper et al., 1993; Juang et al., 1999; Smetana, 2002). For instance, Chinese-American adolescents often expect behavioral autonomy at a later age as well as in a larger age range than European-Americans, because their mothers do not permit them to assert more autonomy at a too early age (Cooper et al., 1993; Feldman & Rosenthal, 1990; Rosenthal & Feldman, 1990). Given previous findings for adolescents' age and parent-adolescent decision-making, the present study examined the impact of adolescents' age on Chinese-American and European-American adolescents' decision-making styles and power perception with parents.

2.2.6 Adolescent gender as a context in decision-making and power perception

Adolescent gender is another important factor to consider in the decision-making process and power perception of parent-adolescent dyads. In general, female adolescents are often socialized to be more interdependent and attached in relationships than males, with males often socialized to be more independent and autonomous than females (Gilligan, 1982, 1988). Accordingly, parents often train sons to focus on or consider their feelings, thoughts, or actions in their decision-making (e.g., "When would you like to do your homework?"). In contrast, parents are disposed to assert their control over decision-making with daughters (e.g., "Do your writing tonight.") (Pomerantz & Ruble, 1998). Although particular cultural traditions bear distinctive interpretations of the gender role,

researchers indicated that adolescent males are socialized to focus on or consider their own needs while adolescent females are educated to focus on or consider the needs of others (including interdependence) in their decision-making. Such gender findings were true in Western countries (Basow & Rubin, 1999; Berk, 2006), cross-countries studies (Whiting & Edward, 1998), and studies of U.S. immigrant families from diverse ethnic groups (Dion & Dion, 2001). Contradictorily, some scholars proposed that under great female-role socialization pressures, feelings of strong self-awareness in endorsing autonomy may be easily awakened in female children of immigrant families in the U.S. or other Western countries given their heritage cultures are discrepant from the Western values of freedom, independence, and self-realization (Dasgupta, 1998; Tang & Dion, 1999). This opposite effect does not seem so clear for European-American females or females living in other Western societies perhaps because they do not experience conflicting or opposing values. Therefore, findings are mixed on whether there are gender differences in adolescents' autonomy in parent-adolescent relationships across ethnicities or cultures.

The interaction between parental gender and adolescent gender may also influence decision-making and power perception within parent-adolescent dyads. In Western culture system, female adolescents often feel emotionally closer with mothers than fathers (LeCroy, 1988; Noller & Bagi, 1985; Youniss & Smollar, 1985). Relative to their mothers, daughters may view their fathers as indifferent or judgmental to their problems or decision-making (Youniss & Ketterlinus, 1987). Further, girls may perceive their fathers as less permissive or more autocratic than their mothers in their decision-making (Youniss & Ketterlinus, 1987). That is, female adolescents might especially have

difficulty asserting their own needs with fathers. In contrast, male adolescents are able to freely disclose their thoughts and opinions with fathers or mothers (Hosley & Montemayor, 1997). Fathers' opposing parenting attitudes on girls and boys are also documented in multiple ethnic groups from U.S. immigrant families. Fathers feel uncomfortable with their daughters' assertion relative to their sons' (Pettys & Balgopal, 1998). Some scholars focusing on Asian immigrant families in Western countries also found that girls perceive fathers as being less supportive to their autonomy development than boys (Rosenthal et al., 1996). Therefore, male adolescents tend to easily assert their needs and power with fathers compared to female adolescents across ethnicities and cultures (Hosley & Montemayor, 1997).

In sum, adolescents' gender may be associated with decision-making processes in parent-adolescent relationships, and such associations may differ across ethnic groups or contexts (e.g., the immigrant families). In addition, adolescent males and females perceive discrepant power to be autonomous in father-dyad relationship. To explore such complexities in parent-adolescent relationships for Chinese- and European American families, this study compared adolescent males' and females' relationships with fathers and with mothers, and separately for Chinese- and European-Americans.

2.3 The relation between cultural value orientations and parent-adolescent relationship

Parents and adolescents who are oriented toward individualism or collectivism may exhibit differing levels of autonomy or connectedness in their adolescent-parent relationships. Past studies suggested that Chinese-American adolescents interact with parents in ways that are consistent with collectivistic values more so than European-American adolescents (e.g., more focus on parents' needs in decision-making or perceive

lower power with parents; Cooper et al., 1993; Juang et al., 1999; Rosenthal & Feldman, 1990), or that Chinese-American parents socialize their children with collectivistic values more so than European-American parents (e.g., require children's conformity and deference) (e.g., Chao, 1994, 2001). Nevertheless, though few studies found the link of individuals' collectivism with their sense of interdependence or connectedness with family members (Gaertner, Sedikides, & Graetz, 1999; Lay et al., 1998), most studies did not directly measure adolescents' or parents' cultural belief tendency (i.e., individualism and collectivism) for confirmation of the connection between one's cultural value orientations and their perceived parent-adolescent relationships.

Theorists (Lam, 1997; Triandis, 1989, 2001) suggested that parents' self-concepts related with cultural value orientations may shape her parenting behaviors toward children, which predicts corresponding children's relationship styles with them. Specifically, parents' orientation towards collectivism is expected to predict adolescents' connectedness style with them, and parents' orientation towards individualism is expected to predict adolescents' autonomy style with them. In empirical studies, Chinese parents' traditional values dictated their parenting philosophy and predicted children's sense of connectedness or conformity (Peterson, Cobas, Bush, Supple, & Wilson, 2005). For European-American families, some scholars found that parents' individualism-related parenting styles predicted children's sense of autonomy and independence (Peterson, Bush, & Supple, 1999). In the same vein, the present study examined the link between cultural heritage and parents' cultural value orientations and children's relationship style.

Influences between parents and adolescents are likely bidirectional, and some scholars believe that Asian-American parents' behaviors are likely influenced by

children's self-concepts related with cultural value orientations (Pettys & Balgopal, 1998; Takanishi, 1994). For example, Asian-American parents would like to give in or listen to children's wish when children insistently assert autonomy that is embedded in the individualism of U.S. mainstream culture. Similarly, adolescents' active attempt at asserting autonomy gradually transforms parents' attitudes from being conservative to respectful of children's needs in Western society (Smetana, 1995, 2002; von der Lippe, 1998). Along this line, it is also worth exploring whether adolescents' given cultural value orientations can predict corresponding parents' communication with them in Chinese-Americans and European-Americans (i.e., Adolescents' orientation towards collectivism predicts parents' higher power perception, and adolescents' orientation towards individualism predicts parents' openness to children's desires.). However, these notions have not yet been clarified. Given the correlational nature of many studies, it is difficult to determine the directionality of influences between parents and adolescents unless longitudinal research is conducted.

In a review by Oyserman et al. (2002), some studies verified that individuals' cultural values influence their daily communication styles. Highly individualistic people tend to prefer directly addressing personal needs or desires in their communication (e.g., goal-oriented communication or concern with message clarity), whereas highly collectivistic people tend to prefer indirect communication of their needs or intentions (e.g., concern for others' feelings, desires, and self-representation, or avoid harm to others' dignity; Gudykunst et al., 1996; Kim, Hunter, Miyahara, & Horvath, 1996; Kim, Sharkey, & Singelis, 1994). Based on these findings, one's cultural value orientations may be associated with communication styles. Applying such concepts to the parent-

adolescent relationship, the present study explored the association between one's cultural value orientations and his/her perceived communication patterns in parent-adolescent relationships for both Chinese- and European-Americans.

3. THE PRESENT STUDY

Because Chinese-Americans have distinctive familial and cultural origins, the present study examined similarities or differences in cultural value orientations as well as parent-adolescent relationships in Chinese-American and European-American adolescents and mothers (who are typically the primary caregiver of the family). Previous research on cross-cultural differences in adolescents' self-concepts proposed that autonomy and connectedness reflect underlying acculturation (e.g., Bond, 1986; Henriques et al., 1984; Lam, 1997; Waterman, 1984) that may also influence the patterns of relationships with parents (e.g., Cooper et al., 1993; Rosenthal & Feldman, 1990). Although a body of research suggested that adolescents' or parents' cultural values or beliefs are somewhat associated with parent-adolescent relationship styles (e.g., Chao, 1994; Feldman & Rosenthal, 1990; Smetana, 2002; Takanishi, 1994), relatively limited research was conducted to understand how individualistic and collectivistic values or acculturation influence parent-adolescent relationships. Thus, this issue was addressed in this study.

The present study addressed three classes of research questions related to (a) variables of cultural value orientations (i.e., individualism and collectivism), (b) variables of parent-adolescent relationships (i.e., decision-making styles and power perception), and (c) the relationship between the variables of cultural value orientations and the variables of parent-adolescent relationships. In each class, except for analyses that involved ethnic comparison, analyses were conducted on the whole sample and two

ethnic groups so that similarities or differences in patterns of findings could be explored for the whole sample and within ethnic groups.

3.1 Class one: Cultural value orientations

Class one examined the ethnic differences (Chinese-Americans versus European-Americans) of cultural value orientations (i.e., individualism and collectivism), Chinese-Americans' acculturation, and the correspondence of cultural values in Chinese-American adolescent-mother dyads. In respect to the ethnic differences in cultural values, one hypothesis was Chinese-American adolescents and mothers would be more collectivistic and less individualistic than European-American counterparts. To test this, Chinese- and European-Americans (adolescents and mothers) were compared in major variables of cultural value orientations. To further understand cultural value orientations in each ethnic group, the major variables in cultural value orientations were compared within individuals (adolescents and mothers) for both ethnic groups. Chinese-Americans' acculturation was explored through correlation of individualism and collectivism for adolescents and mothers. As for consistency of cultural values in Chinese-American mother-adolescent dyads, the correspondence between adolescents and mothers was explored in each variable. These two analyses were also conducted for European-Americans to examine the similarities or differences between the two ethnic groups. Because there may be effects of adolescents' age and gender on their cultural value orientations, the current study would assess the age and gender differences on the major variables within each ethnic group. Potential SES related differences (yearly household income less than 50,000 versus that more than 50,000) in the major variables were examined for both adolescents and mothers in each ethnic group. For Chinese-Americans

only, potential differences in major variables were examined for adolescents' generational status (first/1.5 generation versus second generation) and maternal length of residence in the U.S.

3.2 Class two: parent-adolescent relationships

Class two focused on the ethnic differences on decision-making styles and power perceptions in parent-adolescent relationships. Two main hypotheses were tested. First was to examine whether Chinese-American adolescents focused more on parents' needs and perceived lower power with both parents than European-American adolescents. For parental influence, the purpose was to examine whether Chinese-American mothers more focused on their own needs in decision-making and perceived higher power with adolescents than European-American counterparts. To answer these two questions, the mean ethnic differences (Chinese-Americans versus European-Americans) were conducted in major variables for adolescents and mothers. In light of the positive relationship between one's decision-making styles and power perception, this study assessed the correspondence of the two variables for adolescents and mothers from both ethnic groups. Because of parental gender effect, adolescents' reports on major variables of this part were evaluated in the father-dyad and the mother-dyad separately. In light of effects of adolescent age, adolescent gender, and SES on parent-adolescent relationships, the age, gender, and SES differences within each ethnicity were assessed for both adolescents' and mothers' reports on the major variables. For Chinese-Americans only, this study examined generational differences in the major variables in adolescents, and the relationships between mothers' length of residence in the U.S. and their major variables.

3.3 Class three: the relation between cultural value orientations and parent-adolescent relationships

The goal of class three was to explore whether the cultural value orientations (i.e., individualism and collectivism) were associated with parent-adolescent relationships in similar or different ways between Chinese- and European-Americans. This comparison was conducted through correlation and regression analyses. Correlation analyses focused on the participants' (adolescents' or mothers') individualism and collectivism as related to each major variable of parent-adolescent relationships within individual participant responses. Regression analyses focused on the participants' individualism and collectivism as related to each major variable of parent-adolescent relationships across individual participant responses. Four regression models were conducted in this part including (a) the model predicting adolescent decision-making styles, (b) the model predicting adolescent power perception, (c) the model predicting maternal decision-making styles, and (d) the model predicting maternal power perception. Each model utilized adolescents' and mothers' major variables of cultural value orientations as predictors. To let models be comparable adolescent age, adolescent gender, or SES was the predictor in each model if age, gender, or SES related differences were evident in any variable of mother-adolescent relationships by adolescents' or mothers' evaluation. Recall that the acculturation for Chinese-Americans' parent-child relationships may be associated with adolescents' generational status or mothers' length of residence in the U.S.. It is not surprising that length of residence or generational status is positively associated with acculturation as these factors partly define the acculturative process. Because this study focused on Chinese-Americans' acculturation, potential acculturative

effect may be lost given that adolescents' generational status or mothers' length of residence is controlled in regression analyses. Accordingly, the two factors would not be included as predictors in Chinese-Americans' model.

4. METHODS

4.1 Participants

One hundred one adolescents and their parents (primarily mothers) participated in this study. Adolescent participants consisted of 56 self-identified Chinese-American adolescents (26 boys and 30 girls, mean age = 15.04 years, $SD = 1.80$, range = 12-18) and 45 self-identified European-American counterparts (14 boys and 25 girls, mean age = 16.00 years, $SD = 1.57$, range = 12-18). The Chinese-American adolescents were drawn from four Chinese churches and three weekend Chinese schools in Southeast Texas, and their European-American counterparts were drawn from four churches, one private high school, and one public high school in the same region. For Chinese-American adolescents 47 mothers and 9 fathers and for European-American adolescents 42 mothers and 3 fathers participated in the study. Because parenting styles (including decision-making and power perceptions) are likely to differ for mothers and fathers, only mothers' reports ($n = 89$) were included in analyses. The majority of Chinese-American adolescents (81.5%) were second generation (e.g., their parents immigrated to the U.S., and the adolescents were born in the U.S.). The remaining (18.5%) were of first or 1.5 generation given that those adolescents were born in China, Hong Kong, or Taiwan and then immigrated to the U.S. with their parents at least five or more years prior to the study. On average, sampled Chinese-American adolescents and their mothers resided in the U.S. for 13.80 years ($SD = 3.40$, range = 5-17) and 20.07 ($SD = 7.35$, range = 5-35) years, respectively. Ethnic subgroups had comparable percentages of participants from middle or upper

socioeconomic status (SES) families. Among adolescents, the percentage of participants from higher SES families (yearly household income more than 50,000) was 90.10% ($n = 91$) for the whole sample, 89.19% ($n = 50$) for Chinese-Americans, and 91.11% ($n = 41$) for European-Americans. The remaining participants were of lower SES families with yearly household income less than 50,000. Among mothers, the percentage of participants from higher SES families was 87.33% ($n = 79$) for the whole sample, 87.23% ($n = 41$) for Chinese-Americans, and 90.48% ($n = 38$) for European-Americans. In addition, the majority of adolescents were reared in two-parent families (87.50% of Chinese-American adolescents and 95.56% of European-American adolescents).

4.2 Procedure

At the first stage, I utilized the internet to find potential Chinese churches, weekend Chinese schools, and schools or churches with predominantly European-American populations in Southeast Texas. My selection principle was that potential participants in organizations or schools had to have similar SES backgrounds. Next, the coordinators of the potential schools and churches were contacted via e-mail or telephone to gain permission for participation into the study. If coordinators agreed to participate, they were responsible for arranging a meeting with possible participants. At these informational meetings (with adolescents only, parents only, or both), potential participants who met the inclusion criteria for this study¹ were

¹ Adolescent participants were excluded from the study if they were not either Chinese Americans or European Americans, or were not of the range of 12-18 years old, or had just resided in the U.S. within five years.

given informed consent forms to read and sign. Participants were also given debriefing forms for this study. Fathers were not excluded from participation, but their data were not included in analyses because the focus of the present study was on mother-child relationships. When adolescents and their parents were together at the informational meeting, they both completed the surveys at the meeting. Otherwise, adolescents and/or parents were allowed to complete the surveys at home and then return them (without identifiers) to their coordinators who assisted in collecting and returning the surveys to the researcher. Participation was voluntary, and participants did not receive any monetary compensation, but they received a pen as a token of appreciation of their time.

4.3 Measures

The surveys, which were completed by adolescents and parents, assessed three constructs: (a) the adolescent's and the mother's orientations on collectivism and individualism, (b) the parent-adolescent decision making styles, and (c) the parent-adolescent power perception.

4.3.1 Demographic information

Adolescent participants provided information on their age, gender, country and state of birth, self-identified ethnicity, and length of residence in the U.S.. This information was utilized to determine generational status of Chinese-American adolescents. Furthermore, the mothers provided information on marriage status, country of birth, self-identified ethnicity, the length of residence in the U.S., and yearly household income.

4.3.2 Individualism and Collectivism Scale

To measure cognitive acculturation, the Individualism and Collectivism Scale (Singelis, Triandis, Bhawuk, & Gelfand, 1995) was used. Derived from two previous studies (Singelis et al., 1995; Triandis & Gelfand, 1998), the six-point likert scale was used, in the range from strongly disagree to strongly agree, in order to detect the levels of individualism and collectivism as well as its subtypes of vertical and horizontal for adolescents and their mothers of both Chinese and European American. This scale was composed of four subscales, vertical collectivism (VC) horizontal collectivism (HC), horizontal individualism (HI), and vertical individualism (VI). Except for VC with five items, other three subscales only had four items. Because the vertical and horizontal subtypes were not analyzed in this study, four VI items and four HI items were summed and averaged as the participant's mean individualism score. In the same vein, five VC items and four HC items were summed and averaged as the participant's mean collectivism score. Table 2 displayed the alpha reliabilities for the Individualism Scale and the Collectivism Scale of adolescents and mothers for the total sample, Chinese-Americans, and European-Americans.

Table 2
The Cronbach's alpha reliabilities for the Individualism Scale and the Collectivism Scale

	Total	Chinese-Americans	European-Americans
Adolescents			
Individualism	.63	.68	.62
Collectivism	.73	.75	.66
Mothers			
Individualism	.69	.62	.72
Collectivism	.70	.55	.70

4.3.3 Decision-making Styles Scale

A scale was created to measure decision-making styles because established instruments covered too few personal issues of adolescents (Dornbusch et al., 1985; Dornbusch, Ritter, Mont-Reynaud, & Chen, 1990) or used too abstract descriptions of items (Harter, Waters, Pettitt, Whitesell, & Jordan, 1997; Neff & Harter, 2002b). Items were borrowed from the scales or the concepts of three studies, including family decision-making (Dornbusch et al., 1990), conflict topics between parents and children (Smetana, 1989; Yau & Smetana, 1996, 2003), and relationship styles (Harter et al., 1997; Neff & Harter, 2002b). The family decision-making questions included four categories of adolescent issues: (a) appearance, (b) finances, (c) friendship, and (d) regulation of adolescents' activities (Dornbusch et al., 1985; Dornbusch et al., 1990). Smetana then explored nine categories of conflict based on a long-term study (Smetana, 1989; Yau & Smetana, 1996, 2003), which consisted of (1) regulation of adolescents' activities, (2) doing chores, (3) homework and academic achievement, (4) interpersonal relationships, (5) parents' own problems, (6) health and appearance, (7) finances, (8) personality/behavioral style, and (9) other. Based on Smetana's nine categories above, except for the fifth (i.e., parents' own problems) and the ninth (other) categories, remaining seven categories were slightly modified and developed into 10 items. Adolescent participants had to complete two subscales: adolescent decision-making styles with mothers and adolescent decision-making styles with fathers. But mother participants just evaluated their decision-making styles with the adolescents. The original method of scoring depends on the proportion of decisions made by Youth Alone, Parent Alone, and Joint (Dornbusch et al., 1985; Dornbusch et al., 1990). This study borrowed

the conception of Relationship Styles (Harter et al.; Neff & Harter, 2002b, 2003) wherein three styles of relationships, namely self-focused autonomy, mutuality and other-focused connection, were taken as the basis of scoring. For each of these three types of relationships, participants' responses were divided into the following five main categories: you are the one (1) focus your own needs strongly, (2) focus your own needs moderately, (3) focus mutual needs, (4) focus mother or father's needs moderately, and (5) focus mother or father's needs strongly (For mother participants, the fourth and the fifth categories were "focus child's needs moderately" and "focus child's needs strongly, respectively). These five categories were coded on a five-point scale (2, 1, 0, -1, and -2), respectively for further analyses. The total score was summed and averaged into the participant's mean of decision-making styles in terms of the dyad types. The higher the score the participants got in the certain dyad type, the more tendencies they focused on their own needs when making decisions. Table 3 showed the alpha reliabilities for the Decision-making Styles Scale of adolescents and mothers for the total sample, Chinese-Americans, and European-Americans.

Table 3
The Cronbach's alpha reliabilities for the Decision-Making Styles Scale

	Total	Chinese-Americans	European-Americans
Adolescents			
Decision-making styles with mothers	.77	.80	.73
Decision-making styles with fathers	.86	.88	.84
Mothers			
Decision-making styles with adolescents	.85	.84	.85

4.3.4 Power Perception Scale

Power perception for adolescents and mothers were assessed with one item in which verbal descriptions paired with the corresponding visual representations. This scale was modified from Neff and Harter's (2002b) measure. The original version displayed a visual perception of power in terms of circle sizes for subjects and arrows to indicate power. To facilitate participants' conceptualization of the power dynamics in their parent-child relationships, the study utilized five seesaws to represent the different balances of power between parent and child. The verbal descriptions were almost identical to the original version, but stressed the decision-making patterns of conflict settings more (e.g., an item in the current survey was "In general, when you have a conflict and *need to make a decision* with *your mother*, who usually gets their way?"). Adolescents responded to the verbal descriptions first as they evaluated their mothers and then their fathers. Mothers responded to the verbal descriptions as they evaluated their power perceptions with the adolescents. This scoring method followed Neff and Harter's design in terms of the five-point scale: (2) strong domination, (1) moderate domination, (0) equality, (-1) moderate subordination, and (-2) strong subordination.

5. RESULTS

5.1 Descriptive statistics

Table 4 displayed means and standard deviations (for the overall sample and by ethnicity) for the major variables. All scores were unstandardized. Because of missing data, these major variables possessed different sample sizes in the overall sample and in the two ethnic subgroups (12 of 101 adolescents did not provide mothers' answers in parental version questionnaires; five of them did not fill in decision-making styles and power perception with fathers). Among these variables, except for the missing data in the variable of adolescent decision-making with fathers was correlated to the adolescents' family composition (e.g., parents were divorced or fathers were deceased), other missing data were of *missing at random* (MAR).

5.2 Links among adolescent cultural value orientations, maternal cultural value orientations, adolescents' perceived relationships with parents, and mothers' perceived relationships with adolescents

Because age and ethnicity were associated with some of the major variables, partial correlations were conducted controlling for age and ethnicity for the entire sample (see Table 5). In addition, partial correlations controlling for age were conducted for Chinese-Americans and European-Americans (see Tables 6 and 7).

SES effect was significant for mothers' orientation towards collectivism in the whole sample and in European-Americans. Therefore, partial correlations controlling for SES were conducted for any covariate analyses related to collectivism variable in the

whole sample (see Table 5), Chinese-Americans (see Table 6), and European-Americans (see Table 7).

Table 4
Means and standard deviations for major variables

	Total			Chinese-Americans			European-Americans		
	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>	<i>N</i>
Individualism									
Adolescent	3.81	.62	101	3.83	.62	56	3.79	.62	45
Mother	3.67	.69	89	3.84	.63	47	3.48	.71	42
Collectivism									
Adolescent	4.38	.57	101	4.41	.58	56	4.34	.57	45
Mother	4.57	.56	89	4.58	.47	47	4.56	.65	42
Decision-making styles									
Adolescents with mothers	.30	.60	101	.32	.64	56	.27	.56	45
Adolescents with fathers	.17	.75	96	.18	.77	52	.16	.73	44
Mothers with adolescents	-.51	.61	89	-.36	.59	47	-.68	.60	42
Power perception									
Adolescents with mothers	-.36	.91	101	-.36	.86	56	-.36	.98	45
Adolescents with fathers	-.44	1.19	97	-.37	1.16	52	-.53	1.24	45
Mothers with adolescents	.28	.68	87	.22	.55	46	.34	.79	41

Table 5
Correlations among composite variables for the whole samples

Measure	1	2	3	4	5	6	7	8	9	10
1. Adolescent Individualism	-	.27*	-.29**	.11	.12	.01	.24*	.08	.09	-.10
2. Mother Individualism		-	-.09	-.05	-.19 ⁺	-.15	.28**	.09	.14	-.15
3. Adolescent Collectivism			-	.06	-.33***	-.18 ⁺	-.22*	-.10	-.13	.14
4. Mother Collectivism				-	-.16	-.12	.06	.04	-.05	.00
5. Adolescent Decision-making styles with mothers					-	.76***	-.03	.07	.27**	-.10
6. Adolescent Decision-making styles with fathers							-	-.17	.00	.31**
7. Mother Decision-making styles with adolescents								-	-.06	-.08
8. Adolescent power perception with mothers									-	.27*
9. Adolescent power perception with fathers										-
10. Mother power perception with adolescents										

Note. Age and ethnicity were associated with some of the major variables. Thus, the numbers are total adolescents' partial correlations controlling for the effects of their age and ethnicity. SES effect was significant on mothers' collectivism for the whole sample and European-Americans. Therefore, partial correlations controlling for the effects of SES were conducted for all covariate analyses related to collectivism variable.

* $p < .05$. ** $p < .01$. *** $p < .001$. ⁺ $p < .10$.

Table 6
Correlations among composite variables for Chinese-Americans

Measure	1	2	3	4	5	6	7	8	9	10
1. Adolescent Individualism	-	.06	-.23	.11	.07	-.10	.25 ⁺	-.08	-.03	-.06
2. Mother Individualism		-	.00	.00	-.33*	-.26 ⁺	.28 ⁺	.04	-.07	-.19
3. Adolescent Collectivism			-	.10	-.38**	-.27 ⁺	-.17	.00	-.20	-.12
4. Mother Collectivism				-	-.24	-.32*	.31*	.18	-.20	-.01
5. Adolescent Decision-making styles with mothers					-	.77***	-.10	-.05	.22	.20
6. Adolescent Decision-making styles with fathers							-	-.33*	-.01	.25 ⁺
7. Mother Decision-making styles with adolescents								-	-.04	-.25
8. Adolescent power perception with mothers									-	.29*
9. Adolescent power perception with fathers										-
10. Mother power perception with adolescents										

Note. Age was associated with some of the major variables. The numbers are Chinese-Americans' partial correlations, which control for the effects of their age. SES effect was significant on mothers' collectivism for the whole sample and European-Americans. Therefore, partial correlations controlling for the effects of SES were conducted for all covariate analyses related to collectivism variable.

* $p < .05$. ** $p < .01$. *** $p < .001$. ⁺ $p < .10$.

Table 7
Correlations among composite variables for European-Americans

Measure	1	2	3	4	5	6	7	8	9	10
1. Adolescent Individualism	-	.47**	-.35*	.10	.14	.08	.17	.24	.16	-.11
2. Mother Individualism		-	-.18	-.07	-.08	-.12	.24	.12	.28 ⁺	-.10
3. Adolescent Collectivism			-	.06	-.25	.03	-.34*	-.24	.00	.35*
4. Mother Collectivism				-	-.06	.07	-.02	.00	.08	-.02
5. Adolescent Decision-making styles with mothers					-	.68***	-.05	.23	.25	-.41**
6. Adolescent Decision-making styles with fathers						-	-.09	-.05	.30*	-.11
7. Mother Decision-making styles with adolescents							-	-.12	.01	.20
8. Adolescent power perception with mothers								-	.23	-.36*
9. Adolescent power perception with fathers									-	-.13
10. Mother power perception with adolescents										-

Note. Age was associated with some of the major variables. The numbers are European-Americans' partial correlations, which control for the effects of their age. SES effect was significant on mothers' collectivism for the whole sample and European-Americans. Therefore, partial correlations controlling for the effects of SES were conducted for all covariate analyses related to collectivism variable.

* $p < .05$. ** $p < .01$. *** $p < .001$. ⁺ $p < .10$.

5.3 Cultural value orientations in Chinese- and European-Americans

5.3.1 Cultural value orientations in adolescents

5.3.1.1 Comparison between Chinese- and European-Americans

A multivariate analysis of variance (MANOVA) was conducted to test whether Chinese-American adolescents differed from European-American adolescents on cultural value orientations (i.e., individualism and collectivism). No ethnic differences were found for adolescents' cultural value orientations in multivariate analyses. Examination of the univariate effects did not find ethnic differences in adolescents' orientations towards individualism and collectivism.

5.3.1.2 Cultural value orientations for the two ethnic groups

The results of a series of *t*-tests suggested that adolescents' endorsed individualism was less than collectivism in the total sample, Chinese-, and European-American, $t_s(100, 55, 44) = -5.94, -4.64, \text{ and } -3.70, p_s < .001, .001, \text{ and } .001,$ respectively.

5.3.1.3 SES differences in adolescents' individualism and collectivism for the two ethnic groups

MANOVAs were conducted to test if there were differences between adolescents from lower SES families (yearly household income less than 50,000) and adolescents from higher SES families (yearly household income more than 50,000) in their cultural value orientations towards individualism and collectivism in the whole sample and the two ethnic groups. Multivariate and univariate findings indicated no SES related differences in the two cultural value orientations.

5.3.1.4 Comparison of generational status for Chinese-American adolescents

A MANOVA was conducted to test whether Chinese-American adolescents of first or 1.5 generation differed from those of second generation on cultural value orientations towards individualism or collectivism. No generational differences were found in Chinese-American adolescents' cultural value orientations in multivariate and univariate analyses.

5.3.2 Cultural value orientations in mothers

5.3.2.1 Comparison between Chinese- and European-Americans

A MANOVA was executed to compare Chinese- and European-American mothers on cultural value orientations including individualism and collectivism. A significant ethnic difference was found in mothers' cultural value orientations, Wilks's $F(2, 86) = .93, p < .05$. Specifically, univariate results showed that Chinese-American mothers were significantly higher on individualism scores than European-American mothers, $F(1, 87) = 6.31, p < .02$.

5.3.2.2 Cultural value orientations for the two ethnic groups

Mothers in the total sample and the two ethnic groups were oriented towards individualism less than collectivism, $ts(88, 46, 41) = -9.45, -6.51, \text{ and } -7.02, ps < .001, .001, \text{ and } .001$.

5.3.2.3 SES differences in mothers' individualism and collectivism for the two ethnic groups

MANOVA results showed that there were significant SES related differences in mothers' cultural value orientations (i.e., individualism and collectivism) in the whole sample and European-Americans, Wilks's $F(2, 86) = 3.65$ and Wilks's $F(2, 39) = 4.06$,

$ps < .04$ and $.03$, respectively. Univariate results indicated that mothers from lower SES families were significantly higher on collectivism scores than those from high SES families in the whole sample and European-Americans, $F(1, 87) = 5.62$ and $F(1, 40) = 7.81$, $ps < .03$ and $.01$, respectively (The means and *SDs* on collectivism for mothers from lower SES families and mothers from higher SES families in the whole sample were $M_s = 4.96$ and 4.52 and $SD_s = .54$ and $.55$, respectively. The means and *SDs* on collectivism for mothers from lower SES families and mothers from higher SES families in European-American sample were $M_s = 5.36$ and 4.47 and $SD_s = .58$ and $.60$, respectively).

5.3.2.4 Relation between the length of residence in the U.S. and Chinese-American mothers' cultural value orientations

Mothers' length of residence in the U.S. was not significantly correlated with their orientation toward individualism or collectivism for Chinese-Americans.

5.3.3 Acculturation

5.3.3.1 Acculturation for adolescents

Levels of individualism and collectivism were inversely correlated with one another in the total sample (see Table 5) and European-American subgroup (see Table 7). For Chinese-American subgroup, levels of individualism and collectivism were not significantly associated with one another (see Table 6).

5.3.3.2 Acculturation for mothers

Individualism was unrelated to collectivism for mothers in the total sample (see Table 5) and in Chinese-American (see Table 6) and European-American (see Table 7) subgroups.

5.3.4 Consistency of cultural values between adolescents and their mothers

There was a correspondence between adolescents' and their mothers' orientations toward individualism in the whole sample (see Table 5). However, within each ethnic group, a correspondence between adolescent's and mothers' reports on individualism was found for European-Americans but not Chinese-Americans (see Tables 6 and 7).

No correspondence was found between adolescents' and their mothers' orientations toward collectivism in the whole sample or within each ethnic group (see Tables 5, 6, and 7).

5.3.5 The relationship between age and individualism and collectivism for adolescents

Adolescents' age was unrelated to their orientations toward individualism and collectivism in the whole sample and within each ethnic group.

5.3.6 Comparison of female and male adolescents' orientations toward individualism and collectivism

A MANOVA was conducted to examine if boys and girls differed on their orientations towards individualism and collectivism. Multivariate and univariate findings indicated no gender differences in the two cultural value orientations.

5.4 Parent-adolescent relationships in Chinese- and European-Americans

5.4.1 Decision-making styles and power perception of adolescents

5.4.1.1 A comparison between Chinese- and European-Americans

MANOVA results indicated no significant differences between Chinese- and European-American adolescents on decision-making styles and power perceptions with their fathers or mothers.

5.4.1.2 The relationship between decision-making styles and power perceptions for the two ethnic groups

In their relationship with mothers, adolescents' decision-making styles were unrelated to their power perceptions in the whole sample and within each ethnic group (see Tables 5, 6, and 7). However, in their relationships with fathers, adolescents' decision-making styles were positively related to their power perception in the total sample and within each ethnic group (although the correlation was marginally significant for Chinese-Americans) (see Tables 5, 6, and 7).

5.4.1.3 SES differences in adolescents' decision-making styles and power perceptions for the two ethnic groups

A MANOVA was conducted to examine whether there were SES related differences in adolescents' perceived relationships with mothers, which composed of decision-making styles and power perceptions. No SES related differences were found for the mother-adolescent dyads in multivariate and univariate analyses.

In the father-adolescent dyads, MANOVA was used to test whether there were SES related differences in adolescents' reports of their relationships with fathers as reflected in their decision-making styles and power perceptions. Multivariate results showed no significant SES related differences in these two variables. However, univariate results showed that adolescents from lower SES families rated power perception with fathers higher than did those from higher SES families with a marginal significance level in the whole sample and in European-Americans, $F(1, 94) = 2.78$ and $F(1, 42) = 3.05$, $ps < .10$ and $.10$, respectively (The means and *SDs* on power perception with fathers for adolescents from lower SES families and adolescents from higher SES

families in the whole sample were $M_s = .29$ and $-.48$ and $SDs = 1.50$ and 1.15 , respectively. The means and SDs on power perception with fathers for adolescents from lower SES families and adolescents from higher SES families in European-Americans were $M_s = .50$ and $-.60$ and $SDs = 1.29$ and 1.19 , respectively).

5.4.1.4 Comparison of generational status for Chinese-American adolescents

MANOVA results displayed that there were no generational differences in Chinese-American adolescents' decision-making styles and power perceptions with their mothers and fathers.

5.4.2 Decision-making styles and power perceptions of mothers

5.4.2.1 A comparison between Chinese- and European-Americans

MANOVA results indicated that there were significant ethnic differences in mothers' reports of their relationships with adolescents (i.e., their decision-making styles and power perception with adolescents), Wilks's $F(2, 84) = .91$, $p < .02$. Univariate results showed that Chinese-American mothers scored higher than European-American mothers on decision-making styles with adolescents, $F(1, 85) = 6.25$, $p < .02$. That is, Chinese-American mothers were more self-focused in decision-making with adolescents than European-American mothers.

5.4.2.2 The relationship between decision-making styles and power perceptions for the two ethnic groups

Mothers' reports of decision-making styles were positively correlated with their reports of power perceptions with adolescents in the whole sample and Chinese-Americans (see Tables 5 and 6), yet not in European-Americans (see Table 7).

5.4.2.3 SES differences in mothers' decision-making styles and power perception for the two ethnic groups

MANOVA results showed that there was no significant SES effect on mothers' relationship styles with adolescents including decision-making styles and power perceptions. Yet, univariate results indicated that mothers from lower SES families focused more on adolescents' needs in decision-making than those from higher SES families at marginal significance level in European-American sample, $F(1, 40) = 3.88, p < .10$ (The means and *SDs* on decision-making styles with adolescents for mothers from lower SES families and mothers from higher SES in European-American sample were $M_s = -1.23$ and $-.62$ and $SD_s = .29$ and $.61$, respectively).

5.4.2.4 The relationship between the length of residence in the U.S. and Chinese-American mothers' decision-making styles and power perceptions

Chinese-American mothers' length of residence in the U.S. was not significantly correlated with their decision-making styles or power perceptions.

5.4.3 The effect of adolescents' ages on their decision-making styles and power perceptions

5.4.3.1 The relationship between adolescents' ages and their decision-making styles and power perceptions

In their relationship with mothers, adolescents' age was significantly and positively correlated with adolescents' decision-making styles in the whole sample and in Chinese-American and European-American samples, $r_s(98, 55, 45) = .40, .27, \text{ and } .67, p_s < .001, .05, \text{ and } .001$, respectively. Yet, adolescents' age was unrelated to their power perceptions with mothers in the whole sample and within ethnic groups.

As for the relationship with fathers, adolescent age was significantly associated with adolescent decision-making styles in the whole sample and European-American sample, $r(93, 44) = .38$ and $.65$, $ps < .001$ and $.001$, respectively. There were also associations between adolescent age and their power perceptions with fathers for the whole sample and European-Americans, $r(94) = .20$ and $.46$, $ps < .05$ and $.003$, respectively.

5.4.3.2 The relationship between adolescents' ages and their mothers' decision-making styles and power perceptions

Adolescent age was marginally negatively correlated with maternal decision-making styles for Chinese-Americans, $r(47) = -.25$, $ps < .10$, but adolescent age was unrelated to maternal decision-making styles for the whole sample or for European-Americans.

Adolescent age was unrelated to maternal power perception in the whole sample, and in Chinese-American and European-American samples.

5.4.4 The effect of adolescent gender on decision-making styles and power perception

5.4.4.1 The adolescent gender difference in adolescents' decision-making styles and power perception

In the mother-adolescent dyads, multivariate analysis of variance (MANOVA) was used to examine whether there were gender differences in adolescents' perceived relationships with mothers composed of decision-making styles and power perception. No gender differences were found in the mother-adolescent dyads in multivariate and univariate analyses.

Similarly, multivariate analysis of variance (MANOVA) was conducted to examine whether there were gender differences in adolescents' reports of the relationship with fathers consisted of decision-making styles and power perception. Multivariate results showed no gender differences on these two variables. Yet, univariate findings indicated that girls rated power perception with fathers significant higher than did boys in the whole sample and in European-Americans, $F(1, 89) = 4.56$ and $F(1,37) = 5.33$, $ps < .04$ and $.03$, respectively. In other words, girls exhibited higher power over fathers than did boys (power perception with fathers for boys and girls in the whole sample, $Ms = -.81$ and $-.27$, $SDs = 1.12$ and 1.19 , respectively; power perception with fathers for boys and girls in European-Americans, $Ms = -1.21$ and $-.32$, $SDs = 1.12$ and 1.18 , respectively).

5.4.4.2 The adolescent gender difference in maternal decision-making styles and power perception

Multivariate analysis of variance (MANOVA) was conducted to examine whether there were gender differences in maternal relationship with adolescents embracing decision-making styles and power perception. No gender differences were found in multivariate and univariate findings of the two variables.

5.5 The relation between cultural value orientations and parent-adolescent relationships

5.5.1 The correlation analyses in Chinese- and European-American adolescents

5.5.1.1 Relations of individualism and collectivism with decision-making styles

There were no significant correlations between adolescents' individualism and decision-making styles either with mothers or with fathers across the total samples (see Table 5), Chinese-Americans (see Table 6), and European-Americans (see Table 7).

Inverse relations (of at least marginal significance) were found between adolescents' collectivism and their decision-making styles with their mothers and fathers in the whole sample and Chinese-Americans (see Table 5 and Table 6). For European-Americans, adolescents' collectivism was not significantly correlated with their decision-making styles with their mothers and fathers (see Table 7). Therefore, Chinese-American adolescents who value collectivism higher tend to more focus on others' needs when making decisions with their mothers and fathers.

5.5.1.2 Relations of individualism and collectivism with power perception

Adolescents' power perception was unrelated to individualism and collectivism for the total samples (see Table 5), Chinese-Americans (see Table 6), and European-Americans (see Table 7).

5.5.2 The correlation analyses in Chinese- and European-American mothers

5.5.2.1 Relations of individualism and collectivism with decision-making styles

Mothers' individualism was positively correlated to decision-making styles with adolescents for the total samples and Chinese-American subgroup, but not for European-Americans (correlations were of at least marginal significance level or higher) (see Table 5, Table 6, and Table 7).

The patterns of relation between mothers' collectivism and their decision-making styles with adolescents were different for Chinese Americans and European Americans. In the total sample, mothers' collectivism and their decision-making styles with adolescents were unrelated. This may be partly due to these variables being related in opposite or different ways for Chinese Americans and European Americans, with a significantly positive correlation found in Chinese-Americans but negative (albeit non-

significant) correlation found in European-Americans. In the other words, the higher collectivism Chinese-American mothers perceived the more self-focused styles they exhibited in decision-making with adolescents, whereas their European-American counterparts did not display significant correlation.

5.5.2.2 Relations of individualism and collectivism with power perception

Mothers' reports of power perception was unrelated to neither their individualism nor collectivism in the whole sample (see Table 5), Chinese-Americans (see Table 6), and European-Americans (see Table 7).

5.5.3 The regression analyses

5.5.3.1 Regression predicting adolescents' decision-making styles and power perception with mothers

Inasmuch as age was significantly correlated with adolescents' decision-making styles with mothers in both Chinese-Americans and European-Americans, this variable was the predictor in the models predicting adolescent and maternal decision-making styles and power perception for further comparing these models. Based on the similar reason above, because there was difference of mothers' decision-making styles with adolescents between Chinese-Americans and European-Americans, ethnicity was the predictor for the all total sample models. Yet, because SES was not significantly associated with major variables of parent-adolescent relationships, SES was not included in regression analyses. Table 8 showed how adolescents' decision-making styles and power perception separately were predicted by their age, ethnicity, their and mothers' cultural value orientations in the total sample and in the two ethnic groups (ethnicity was not predictor in the two ethnic groups). For the model predicting adolescents' decision-

making styles with mothers, age was a significant predictor for the total group and European-Americans. Adolescents' collectivism and their mothers' individualism were significant predictors of adolescents' decision-making styles for the total sample and Chinese-Americans, but not for European-Americans. Specifically, Chinese-American adolescents' high collectivism and mothers' high individualism predicted adolescents' mother-focused style in decision-making styles.

For the model predicting adolescents' power perception with mothers, no significant predictor was found for the whole sample or within each ethnic group.

5.5.3.2 Regression predicting mothers' decision-making styles and power perception with adolescents

The models predicting maternal decision-making styles and power perception with adolescents used the same predictors as those predicting adolescent decision-making styles and power perception with mothers for the whole sample, and the two ethnic groups. In the total sample, mothers' individualism significantly predicted their decision-making styles with adolescents (see Table 9). In Chinese-Americans, adolescents' age

Table 8
Regression predicting adolescent decision-making styles and power perception with mothers

Total samples	Decision-making			Power perception		
	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Predictor Variables						
Adolescent variables						
1. Individualism	.10	.10	1.00	.069	.05	.38
2. Collectivism	-.29	-.28	-2.92**	-.15	-.10	-.82
3. Age	.13	.38	3.98***	.03	.05	.41
4. Ethnicity	-.30	-.25	-2.55*	-.01	-.01	-.04
Mother variables						
1. Individualism	-.21	-.23	-2.35*	.10	.08	.63
2. Collectivism	-.14	-.13	-1.41	.07	.05	.40
Summary statistics: $R^2 = .33$, $F(6, 82) = 6.59***$. $R^2 = .03$, $F(6, 82) = .39$.						
Chinese-Americans						
Predictor Variables	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Adolescent variables						
1. Individualism	-.01	-.01	-.09	-.16	-.12	-.72
2. Collectivism	-.36	-.34	-2.47*	-.01	-.01	-.04
3. Age	.07	.20	1.50	.00	.00	.02
Mother variables						
1. Individualism	-.31	-.30	-2.34*	.05	.04	.27
2. Collectivism	-.26	-.19	-1.47	.36	.20	1.30
Summary statistics: $R^2 = .31$, $F(5, 41) = 3.73***$. $R^2 = .05$, $F(5, 41) = .43$.						
European-Americans						
Predictor Variables	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Adolescent variables						
1. Individualism	.13	.15	.98	.35	.22	1.11
2. Collectivism	-.17	-.17	-1.32	-.33	-.19	-1.11
3. Age	.22	.62	4.86***	.01	.02	.10
Mother variables						
1. Individualism	-.13	-.16	-1.17	-.02	-.01	-.07
2. Collectivism	-.03	-.03	-.27	-.12	-.08	-.47
Summary statistics: $R^2 = .51$, $F(5, 36) = 7.40***$. $R^2 = .12$, $F(5, 36) = 1.01$.						

Note. All variables were entered in one step in all regression analyses. β s are the standardized coefficients. For each group, the first R^2 in summary statistics is for the dependent variable decision-making and the second one of power perception.

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

and mothers' individualism marginally and only mothers' collectivism significantly explained mothers' decision-making styles with adolescents. These results indicated that Chinese-American mothers' higher individualism and higher collectivism predicted mothers' self-focused style in decision-making with adolescents, whereas Chinese-American adolescents' older age predicted mothers' child-focused style in decision-making with adolescents. In contrast to the model for Chinese-Americans, no significant predictors were found in the model for European-Americans.

For the model predicting mothers' power perception with adolescents, only European-American adolescents' collectivism significantly predicted mothers' power perception. That is, their orientation towards collectivism accounted for their mothers' high power exertion with them.

Table 9
Regression predicting mother decision-making styles and power perception with adolescents

Total	Decision-making			Power perception		
	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Predictor Variables						
Adolescent						
1. Individualism	.11	.11	1.03	-.04	-.03	-.27
2. Collectivism	-.17	-.17	-1.57	.14	.12	1.07
3. Age	-.05	-.14	-1.30	-.05	-.14	-1.21
4. Ethnicity	-.21	-.18	-1.65	.12	.09	.79
Mother						
1. Individualism	.21	.23	2.15*	-.13	-.13	-1.15
2. Collectivism	.06	.05	.53	.01	.01	.09
Summary statistics: $R^2 = .20$, $F(6, 82) = 3.31^{**}$. $R^2 = .08$, $F(6, 80) = 1.11$.						
Chinese-Americans						
Predictor Variables	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Adolescent						
1. Individualism	.16	.17	1.21	-.07	-.08	-.51
2. Collectivism	-.12	-.12	-.86	-.10	-.11	-.71
3. Age	-.08	-.24	-1.78 ⁺	-.04	-.12	-.74
Mother						
1. Individualism	.25	.26	1.99 ⁺	-.16	-.18	-1.15
2. Collectivism	.38	.31	2.30*	.03	.02	.14
Summary statistics: $R^2 = .28$, $F(5, 41) = 3.26^*$. $R^2 = .06$, $F(5, 40) = .52$.						
European-Americans						
Predictor Variables	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
Adolescent						
1. Individualism	.01	.01	.04	.04	.03	.17
2. Collectivism	-.29	-.28	-1.64	.47	.34	2.04*
3. Age	-.00	-.00	-.01	-.08	-.16	-.93
Mother						
1. Individualism	.16	.18	1.02	-.07	-.06	-.35
2. Collectivism	-.12	-.13	-.80	-.00	-.00	-.01
Summary statistics: $R^2 = .16$, $F(5, 36) = 1.36$. $R^2 = .17$, $F(5, 35) = 1.42$						

Note. All variables were entered in one step in all regression analyses. β s are the standardized coefficients. For each group, the first R^2 in summary statistics is for the dependent variable decision-making and the second one for power perception.

* $p < .05$. ** $p < .01$. ⁺ $p < .10$.

6. DISCUSSION

This study explored similarities and differences between Chinese-American and European-American adolescents' autonomy and connectedness through assessing their cultural value orientations and parent-adolescent relationships (which included information from both the mother and adolescent). Past research examined the role of acculturation and cultural values on Chinese-American adolescents' senses of autonomy and connectedness in terms of cultural value orientations and parent-adolescent relationships. The present study extended these findings allowing for examination of the similarities and/or differences within and across information from adolescents and mothers with respect to the interrelation between variables in the two constructs (i.e., individualism and collectivism, decision-making styles and power perception) for the two ethnic groups.

6.1 The cultural value orientations of Chinese- and European-Americans

6.1.1 Similarities between Chinese- and European-Americans' cultural value orientations

Inconsistent with previous studies (e.g., Oyserman et al., 2002; Triandis, 1995), the present study found that Chinese- and European-American adolescents showed similar levels of individualism and collectivism. Mothers' results were also surprising. Chinese-American mothers did not have higher tendency towards collectivism, and even displayed higher tendency towards individualism than European-American mothers. For both ethnic groups, adolescents and mothers endorsed collectivism more than individualism, which suggested that their self-concepts were related to a sense of connectedness more than of autonomy. Chinese-Americans' self-concepts may indeed

reflect the influence of heritage culture centering on a collectivistic belief system (e.g., Greenfield, 1994). In addition, there was no effect of generational status (for adolescents) or the length of residence in the U.S. (for mothers) on Chinese-Americans' cultural value orientations. With respect to European-Americans, it is plausible that results might be interpreted with consideration of specific sociodemographic and familial background factors.

For the parent subsample of European-Americans, results might take into consideration gender or SES factor. In regard to gender, past studies indicated that females living in Western countries tend to be less individualistic and more collectivistic than the males (e.g., Cross & Gore, 2002). This might partly explain the finding in the present study that European-American mothers' higher orientation towards collectivism and lower orientation towards individualism. In regard to SES, findings on European-Americans revealed that mothers from lower SES indeed were more collectivistic than mothers from higher SES. Such an SES difference was not found for Chinese-American mothers. Thus, albeit with small sample size of participants from lower SES, SES might be a salient factor for European-American mothers' cultural value orientations.

For both adolescent and maternal subsamples of European-Americans, religious backgrounds might be another possible factor to account for this unusual finding for European-Americans endorsing higher collectivism relative to individualism. Recall that a significant portion of the present sample was recruited from churches (Among European-Americans, the sample sizes of adolescent participants from non-church organizations and churches were 19 and 26, respectively; the sample sizes of maternal participants from non-church organizations and churches were 17 and 25, respectively).

Among Chinese-Americans, the sample sizes of adolescent participants from non-church organizations and churches were 29 and 27, respectively; the sample sizes of maternal participants from non-church organizations and churches were 26 and 21, respectively.). Auxiliary analyses were conducted using multivariate analysis of variance (MANOVA) to examine whether participants who were recruited from church versus non-church organizations differed in levels of individualism and collectivism. Indeed, results indicated that European-American adolescents from non-church organizations were significantly higher in individualism and lower in collectivism than those from churches (for multivariate finding, Wilks's $F(2, 42) = 6.76, p < .01$; for individualism and collectivism, $F_s(1, 43) = 6.00$ and $11.35, p_s < .05$ and $.01$, respectively). Similarly, European-American mothers from non-church organizations were higher in individualism than those from churches (for multivariate finding, Wilks's $F(2, 39) = 5.76, p < .01$; for individualism, $F(1, 40) = 10.40, p < .01$). In contrast, no differences between participants recruited from church and non-church organizations were found for Chinese-American adolescents' and mothers' orientations towards individualism and collectivism.

Plausibly, religious beliefs such as Christianity may be associated with collectivistic values for European Americans (although we cannot determine from the present study whether adolescents or mothers from non-church groups were of Christian background or not). Christian tradition and beliefs are embedded in values associated with individualism and collectivism (Sampson, 2000; Vacek, 1996). On the individualistic side, Christians emphasize self-uniqueness but not self-achievement, and on the collectivistic side, they emphasize the meaning of selves as being interdependent with others and sacrificing for groups (e.g., churches or families) (Vacek, 1994).

Because items on the individualism scale contained items that tapped individuals' uniqueness and achievement while items on the collectivism scale tapped interdependence and self-sacrifice, it is plausible that participants who were recruited from churches endorsed individualism less (because of an emphasis on personal achievement) relative to collectivism compared to participants who were recruited from non-church organizations among European-American adolescents and mothers. Regardless of being recruited from church or non-church organizations, Chinese-American adolescents and mothers appeared to be higher on collectivism than individualism perhaps because of the influence of their heritage culture. Because this study did not assess participants' religious backgrounds (orientations), conclusions can not be directly drawn between religious backgrounds and self-concepts. Participants' religious backgrounds were inferred according to the location of recruitment for the present study (i.e., church versus non-church organizations). Future studies should directly assess religious backgrounds and beliefs to examine the influence of religious beliefs on self-concepts.

6.1.2 Cultural value differences in Chinese-American adolescent-parent dyads

In the current study, results for Chinese-American adolescents indicated a lack of correspondence with their mothers in their orientation towards individualism and collectivism. In contrast, there was correspondence between European-American adolescents and their mothers in their orientation towards individualism. Therefore, European-American adolescents are likely to find accord with their parents (at least mothers) in regards to the dominant value (i.e., individualism), while Chinese-American adolescents and parents have discrepant scores in collectivism and individualism. Such

value discordance in Chinese-American families may lead to adolescents' struggle with two opposing values (i.e., individualism and collectivism) effectively with parents (at least mothers). Because individualism and collectivism served as cultural underpinnings of senses of autonomy and connectedness respectively (e.g., Triandis, 1995, 2001), such value turmoil easily exposes Chinese-American adolescents to family conflicts over issues respecting negotiating autonomy and connectedness (Nguyen, 1992). Previous studies have suggested that some psychological adjustment problems (e.g., depression or lower self-esteem) are related to individuals' inner turmoil over autonomy/connectedness issues (e.g., Neff & Harter, 2003). Future works need to focus on how cultural value differences in families increase risks for later parent-adolescent conflicts as well as adolescents' psychological adjustment problems (e.g., depression or lower self-esteem) in Chinese-Americans.

6.1.3 The effects of age and gender on cultural value orientations in Chinese- and European-American adolescents

Age and gender of adolescents were not related to their orientations towards individualism and collectivism for both ethnic groups. Past scholars (e.g., Watkins et al., 1996; Watkins et al., 1997) have proposed that the patterns of the association between gender of self-concepts and individualism and collectivism remains unclear across ethnicities and cultures. For the age factor, nevertheless, previous studies supported that older children's self-concepts were associated with individualism in terms of independence and social cognitive judgment in different ethnic or cultural contexts than younger children (e.g., Bersoff & Miller, 1993; Steinberg & Silverberg, 1986). Cautiously, although independence (or autonomy) may be positively related to

individualistic values, these constructs are viewed as unique and independent. Thus, the present study suggested that older adolescents do not necessarily endorse individualism more than collectivism.

6.2 Parent-adolescent relationships in Chinese- and European-Americans

6.2.1 Similarities of communication styles between Chinese- and European-American adolescents

Contrary to expectation, Chinese-American adolescents did not differ from European-American counterparts in communication styles (i.e., decision-making styles and power perception) with both parents. In addition, there were no generational differences in Chinese-American adolescents' relationship styles with mothers or fathers. Across daily-issues discussion, Chinese- and European-American adolescents were similar in being autonomous with both parents. This result suggested that Chinese-American adolescents identified with U.S. dominant culture in how they communicated with their parents. Alternatively, perhaps it may reflect that adolescents (regardless of ethnic) seek autonomy with their parents in negotiating daily-issues.

Surprisingly, European-American adolescents displayed low power with parents in situations of conflict. Furthermore, they did not differ from Chinese-American adolescents in the levels of power perception. Similarly, mothers of both ethnic groups consistently reported higher power over adolescents in conflicts. Although European-Americans tend to emphasize the importance of parents' openness to children's self-expression more than Chinese-Americans, parent-child conflict situations are of major concern for parents across ethnicities and cultures (Smetana, 2002). Findings supported the view that both adolescents and parents often view the parents as the authority figures

in children's decision-making process in conflicts across cultural and ethnic contexts (e.g., Fuligni, 1998; Smetana, 2000; Smetana & Asquith, 1994).

6.2.2 Differences of communication styles between Chinese- and European-American adolescents

Current findings on age and gender differences revealed that European-American adolescents perceived autonomy differently (and perhaps as more important) than Chinese-American counterparts in some domains. First, European-American adolescents showed more aspirations to be autonomous than Chinese-American adolescents with age. More specifically, older European-American adolescents showed stronger levels of autonomy in decision-making styles with both parents than younger European-American adolescents, while Chinese-American counterparts only exhibited this trend in decision-making styles with mothers. In addition, older European-American adolescents perceived higher power with fathers than younger European-American adolescents, whereas Chinese-American adolescents did not display this pattern in power perception with either parent. Second, European-American girls appeared to view autonomy as important in father-daughter dyads. Specifically, European-American girls desired more autonomy in power perception with fathers than did boys, whereas among Chinese-Americans, girls did not differ from boys in the ways of communicating with both parents. This study did not assess fathers' communication styles, but past research highlighted that girls across ethnicities or cultures are confronted with more barriers in being assertive before fathers than mothers, relative to boys (Hosley & Montemayor, 1997). Furthermore, the current mothers from both ethnic groups did report similar communication styles with boys and girls. In the mother-dyad, it is plausible that European-American daughters do not have to

purposely exert influence if they view their mothers as benevolent caregivers (e.g., LeCroy, 1988; Noller & Bagi, 1985), while in the father-dyad, they may need to assert themselves in conflict situations if they view their fathers as authoritarian. That is, European-American girls might view being autonomous as one critical task for adolescent development more so than Chinese-American counterparts in U.S. mainstream culture.

6.2.3 Differences of communication styles between Chinese- and European-American mothers

Chinese-American adolescents appeared to identify with the mainstream culture to show autonomy with parents, but Chinese-Americans' parenting styles appeared to reflect the heritage culture more so than the dominant one. Similar as past findings that the pace of acculturation tends to be relatively slow for Chinese-Americans' parenting styles (e.g., Rosenthal & Feldman, 1990), results did not show that the longer Chinese-American mothers resided in the U.S., the more they were to adopt what traditionally has been viewed as a Western style of parenting. Recall that the average length of residence in the U.S. for Chinese-American mothers in the present study was 20.07 years ($SD = 7.35$, range = 5-35), Chinese-American mothers who endorsed heritage value (i.e., collectivism) tended to parenting practices that were similar to authoritarian parenting styles. In spite of exhibiting child-focused connectedness style (the negative mean score in decision-making styles, $M = -.36$, $SD = .59$), Chinese-American mothers appeared to require respect from their children in discussions about daily-issue decisions more so than their European-American counterparts. Through examining the relation of decision-making styles and power perception, the pattern of findings suggested that Chinese-

American mothers adopted Chinese *relationalism* in child-rearing philosophy. In contrast to European-American mothers, Chinese-American mothers displayed similar styles of communication with adolescents across daily issues and conflict situations. Hwang's (2000) review explained that the way Chinese build and maintain relationships is defined by some cardinal rules of role (including the rule of parent-child relationship). In other words, Chinese-American mothers appeared relatively rigid in adhering to their established principle in parenting across contexts (e.g., daily events and conflict settings), while European-American mothers appeared flexible as their parenting styles differed across contexts (Nucci & Smetana, 1996; Nucci & Weber, 1995). Another potential influence of the heritage culture upon Chinese-Americans' parenting may be seen in the association of adolescent age with maternal communication styles. Rooted in conservative parenting strategies of Chinese culture, Chinese-American parents may want to protect their children and be reluctant to allow them to make personal decisions. Thus, Chinese-American children may become autonomous at later ages than their European-American counterparts (e.g., Juang et al., 1999; Rosenthal & Feldman, 1990). The present study documented that with adolescents' increasing age, Chinese-American mothers tended to increasingly focus on children's needs in decision-making at marginal significance level ($r(47) = -.25, p < .10.$), while European-American counterparts did not change the degrees in rendering children autonomy in both decision-making and power perception. Albeit approaching significance, this finding suggested that age is one indicator for Chinese-American mothers to adjust restrictions on children's liberty of choice-making.

6.2.4 A gap of acculturation between Chinese-American adolescents and mothers in expected family relationships

For Chinese-Americans, adolescents were closer to the major group in the U.S. than their mothers in communication styles in parent-adolescent relationships. In other words, Chinese-American adolescents appeared more acculturated in parent-adolescent communication styles than were their mothers. Previous studies have shown that Chinese-American mothers hold onto traditional parenting styles that emphasize children's connectedness and conformity, while Chinese-American adolescents struggle with being the same as their Western schoolmates in being assertive (e.g., Juang et al., 1999; Rosenthal & Feldman, 1990; Spencer & Dornbusch, 1990). For the current sample, Chinese- and European-American mothers grew up in different cultures (Chinese culture versus U.S. culture) during their formative years (e.g., in childhood and adolescence), whereas their children were socialized by U.S. dominant culture. For Chinese-American parents (at least the mothers), they appear to hold onto the heritage culture more so than their children. The present study provided preliminary evidence on the discrepancy of acculturation between adolescents and mothers with respect to expected parent-adolescent relationships. Future longitudinal or cross-sectional research may be important to examine whether such a discrepancy in acculturation between parent and child might be associated with child psychological functioning (e.g., self-esteem or self-identification) and whether length of residence is a moderator for Chinese-Americans.

6.3 The relation between cultural values and parent-adolescent relationships

6.3.1 Ethnic comparison on the role of adolescents' collectivism on parent-adolescent relationships

Adolescents' collectivistic values perhaps play a significant role in their relationships with parents for Chinese-Americans more than European-Americans. Compared with European-American counterparts, Chinese-American adolescents with higher collectivism more likely displayed collectivistic communication style, that is, focusing on both parents' needs. Further regression analyses indicated that Chinese-American adolescents' collectivism predicted their collectivistic communication style with mothers the most among predictors of the present study (i.e., adolescent age, adolescents' cultural value orientations, and mothers' cultural value orientations). Collectivism is the main belief system of Chinese culture that emphasizes familial connectedness and maintaining harmonious relationships (e.g., Hwang, 2000; Lam, 1997). For Chinese-American adolescents, even though they are being socialized by the dominant culture they are also being socialized by their parents and their heritage culture. Consistent with past research (e.g., Cooper et al., 1993; Juang et al., 1999), Chinese-American adolescents tend to internalize their heritage culture as well as show collectivism-related values in family relationships.

One distinctive finding for European-Americans was that adolescents' orientation towards collectivism predicted their mothers' higher power in conflict settings. That is, European-American adolescents' self-concepts related with collectivism might interact with their mothers' tendency for authoritarian parenting style. However, this study did not find this kind of association in Chinese-Americans but it is plausible that the

relatively small sample size may reduced power to detect such associations, particularly those that were approaching significance. Hence, future works could conduct larger-scale studies to examine whether such association is unique to European-Americans or common to both ethnic groups.

6.3.2 Ethnic similarities in the role of adolescents' individualism on parent-adolescent relationships

For both ethnic groups, adolescents' individualism failed to predict their own or partners' individualistic communication style in parent-adolescent relationships. Inconsistent with past studies (e.g., Oyserman et al., 2002; Smetana, 1995, 2002), adolescents with higher individualism should show more individualism-related communication style (i.e., self-focused style or higher power perception) with parents, or transform parents' communication towards child-focused style across ethnic groups. However, research on parent-adolescent relationships indicated that communication styles emerge from the interplay between individuals' self-concepts, dyadic partners' characters and communication contexts (Grotevant & Cooper, 1982, 1985). Consistent with such a view, the present findings suggested that parent-adolescent attitudes or communication settings may determine whether adolescents' self-concepts related with individualism (e.g., autonomy or independence) can be realized in parent-adolescent communication.

6.3.3 Ethnic differences in the role of mothers' cultural values on parent-adolescent relationships

Chinese- and European-American mothers exhibited different associations between cultural values and parent-adolescent relationships. For European-American

mothers, cultural values did not explain maternal or adolescent communication styles in parent-adolescent relationships. Such a result may suggest that other factors (e.g., the interaction within mother-adolescent dyad or mothers' flexible parenting) might play the important role in impacting parent-adolescent communication beyond mothers' cultural value orientations. For Chinese-American mothers, traditionally cultural values perhaps played the critical role in parent-adolescent relationships. Results revealed that Chinese-American mothers who endorsed individualism still train children to feel a sense of connectedness, following traditional cultural values. Furthermore, Chinese-American mothers' individualism predicted children's connectedness with parents. Such results were inconsistent with past view on cultural psychology which held that parents with higher individualism should tend to cultivate children's sense of autonomy in families (e.g., Markus & Kitayama, 1991; Triandis, 2001). One explanation of this divergent result comes from Neo-Individualism. Triandis (1989) explained that U.S. immigrants who value heritage culture can act individualistically outside the family and meanwhile adhere to the family rules or norms. Further, past studies have shown that Chinese-American parents adhere to traditional child-rearing philosophy (e.g., require children's conformity or respect) (e.g., Chao, 1994; Cooper et al., 1993; Juang et al., 1999). Findings on Neo-Individualism combined with Chinese-American adherence to the traditional child-rearing philosophy supported the current study. That is, Chinese-American mothers might hold onto traditional values, so that even those with high individualism still adopt Chinese parenting style in families. Future studies may include mixed methods approaches that include the use of quantitative measurement with interviews to allow for exploration of Chinese-American parents' values or beliefs

underlying child-rearing patterns. This will expand our understandings on the role of mothers' cultural values on Chinese-Americans' parent-adolescent relationships.

6.3.4 Evaluation of the role of cultural values on parent-adolescent relationships

Overall, some findings help distinguish Chinese-Americans from European-Americans in how cultural values of collectivism relate to parent-adolescent relationships or communication styles (e.g., Chinese-Americans with high collectivism were more likely to exhibit corresponding parent-adolescent relationships than European-Americans). However, similar patterns of results were not found for cultural values of individualism for either ethnic group (e.g., individuals' individualism predicted their own or partners' individualism-related communication style). Furthermore, some unexpected relations for Chinese-Americans were found (i.e., Chinese-American mothers' individualism predicted their own and adolescents' collectivistic communication style). Recall that patterns of parent-adolescent relationships are probably dependent on contexts (e.g., daily issue discussion or conflict settings) and qualities in which the dyad is embedded (e.g., the flexibility of parenting styles). The present mixed results highlight the complexity of the relations of individuals' culture values (e.g., collectivism and individualism) with their external behaviors (e.g., communication patterns) across ethnicities and cultures.

7. SUMMARY

7.1 Limitations

There were some limitations of the present study, and study results must be interpreted with these constraints in mind. Given the relative challenges of recruiting Chinese-American participants in Southeast Texas, Chinese churches were effective and convenient locations to contact potential Chinese-American participants. European-American participants were similarly recruited from American churches to account for this limitation. As a result, the generalization of the results might be somewhat confined to Chinese- and European-Americans with Christian beliefs. Another limitation to consider is that adolescents' ages ranged from 12 to 18 years, which is a relatively broad age range that spans early, middle, and late adolescence. By combining and analyzing different-stage adolescents as a whole, unique differences in each stage were lost. Yet, the sample size for adolescents of each stage was not enough to allow for between-ethnic-group comparisons. Future studies should examine adolescents of different stages separately to enrich knowledge of ethnic differences in self-concepts for each developmental stage. Regarding parent data, despite the fact that most Chinese-American mothers were middle or high SES, a number of them grew up in Chinese communities adopting Chinese (Mandarin) as the native language. For some Chinese-American mothers, language barriers may have compromised their interpretation of the meanings of the survey. Future studies might consider facilitating Chinese-American mothers' response to participation by developing the survey in Chinese. Another limitation is that parent data did not include fathers' reports. Future studies should include paternal

information to examine fathers' roles in adolescents' acculturation and self-concept development. In terms of measurement, the power perception scale was assessed by only one item and the reliability of this scale could not be easily verified. Regarding the collectivism scale, the alpha reliability for Chinese-American mothers was relatively low ($\alpha = .55$). Caution must be taken in interpretation of related results. Also, note that although Chinese-American and European-American mothers were similar in their levels of collectivism, the standard deviation was lower for Chinese-American mothers than their European-American counterparts (see Table 4). Thus, the relatively low reliability could partly be influenced by relatively little variance within Chinese-American mothers' responses to the nine items that assessed collectivism. Additional work needs to be done in regards to measurement of individualism-collectivism to examine issues such as measurement invariance across ethnic groups. Future studies need to examine possible item-response biases or compare the factor structure of collectivism for Chinese-American and European-American participants (Coon & Kemmelmeier, 2001; Oyserman et al., 2002). Furthermore, Chinese-American mothers' acculturation was assessed by their present cultural value orientations and parent-adolescent relationships. Future studies might consider Chinese-American parents' orientations on individualism and collectivism prior to and after immigration to better understand the acculturative process.

7.2 Conclusion and future directions

In spite of sampling and measurement limitations, the present study found similarities as well as differences in Chinese- and European-American adolescents (i.e., the major ethnic group in the U.S.) in negotiating self-concepts related with autonomy and connectedness. Through these findings, this study offered insight into the roles of

acculturation and cultural values on Chinese-American adolescents' self-concepts, and distinction of their self-concepts from European-American counterparts. From the angle of cultural value orientations (i.e., individualism and collectivism), Chinese-American adolescents' self-concepts were influenced by the heritage culture more than the dominant culture. Inconsistent with past view (e.g., Oyserman et al., 2002), one interesting finding was the similar tendencies towards individualism and connectedness between Chinese- and European-Americans. Post-hoc analyses suggested that individuals with Christian affiliations differed from those without such affiliations in cultural value orientations among European-Americans. Future studies may include religious values when comparing European-Americans with other ethnic groups in individualism or collectivism. Information on parent-adolescent relationships provided an alternative interpretation of acculturation on Chinese-American adolescents' self-concepts in comparison to information on cultural value orientations. Even though Chinese-American adolescents had less esteem for the importance of autonomy in some domains than European-American counterparts (e.g., more desires on autonomy with age or girls' awareness of active assertion with fathers), Chinese-American adolescents appeared to identify with U.S. dominant culture and showed similar desires to be autonomous as their European-American counterparts.

Albeit they identified with the mainstream culture to certain degrees, study results suggested that Chinese-American adolescents may experience some acculturation barriers. First, Chinese-American adolescents did not agree with their mothers in tendencies towards the heritage and mainstream cultures. Future studies need to explore whether such cultural value differences in families are linked with latent adjustment

problems (e.g., depression or lower self-esteem) for Chinese-American adolescents. Second, there might be a gap or rift of acculturation between Chinese-American adolescents and parents with respect to their expected parent-adolescent relationship styles. Longitudinal or cross-sectional studies would be helpful for exploring whether length of residence moderates the discrepancy of acculturation between adolescent and parents as well as its association with adolescent psychological functioning (e.g., self-esteem or self-identification) for Chinese-Americans.

By examining the relations of cultural values with decision-making styles as well as power perception, the present study furthered our understanding of the similarities and differences of Chinese- and European-Americans in the role of cultural values on their parent-adolescent relationships. Consistent with past research on Chinese-Americans' parent-adolescent relationships (e.g., Chao, 1994, 2001; Cooper et al., 1993), traditional values play an important role in shaping Chinese-American parents' parenting style which appears to be authoritarian. Living in such family environments, Chinese-American adolescents formed stronger associations between collectivism and corresponding relationships with parents than European-American counterparts. Another distinctive finding for Chinese-Americans was that mothers who endorsed individualism still tended to train children's sense of connectedness. Future studies would benefit from including both quantitative measurements with (qualitative) interviews to disentangle Chinese-American parents' values or beliefs underlying child-rearing patterns. In spite of such differences, this study did not find relations between individualism and individualism-related communication style in parent-adolescent relationships. As a whole, this study suggested that individuals' cultural values could explain a portion of styles of

parent-adolescent relationships, but features of the parent-adolescent dyad (e.g., the flexibility of parenting styles) and context factors (e.g., regular discussion versus conflict settings) also play essential roles in directing patterns of parent-adolescent relationships across ethnicities and cultures.

REFERENCES

- Allen, J. P., Hauser, S. T., Bell, K. L., & O'Connor, T. G. (1994). Longitudinal assessment of autonomy and relatedness in adolescent-family interactions as predictors of adolescent ego development and self-esteem. *Child Development, 65*, 179-194.
- Baltes, M. M., & Silverberg, S. B. (1994). The dynamics between dependency and autonomy: Illustrations across the life span. In D. L. Featherman, R. M. Lerner, & M. Perlmutter (Eds.), *Life-span development and behavior* (Vol. 12, pp. 42-90). Hillsdale, NJ: Erlbaum.
- Baranowski, M. D. (1978). Adolescents' attempted influence on parental behaviors. *Adolescence, 13*, 585-604.
- Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation, and autonomy in the family, school, and neighborhood, and with peers. *Journal of Adolescent Research, 12*, 287-315.
- Basow, S. A., & Rubin, L. R. (1999). Gender influences on adolescent development. In N. G. Johnson, M. C. Roberts, & J. Worell (Eds.), *Beyond appearance: A new look at adolescent girls* (pp. 25-52). Washington, DC: American Psychological Association.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4* (1, Pt. 2), 1-103.

- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence, 11*, 56-95.
- Beavers, W. R. (1976). A theoretical basis for family evaluation. In J. M. Lewis, W. R. Beavers, J. T. Gossett, & V. A. Phillips (Eds.), *No single thread: Psychological health in family systems* (pp.46-82). New York: Brunner/Mazel.
- Bell, D. C., & Bell, L. G. (1983). Parental validation and support in the development of adolescent daughters. In H. D. Grotevant & C. R. Cooper (Eds.), *Adolescent development in the family: New directions for child development* (pp. 27-42). San Francisco: Jossey-Bass.
- Bellah, R., Madsen, R., Sullivan, W., Swidler, A., & Tipton, S. (1985). *Habits of the heart: Individualism and commitment in American life*. Berkeley: University of California Press.
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. (2002). Negotiating biculturalism: Cultural frame-switching in biculturals with “oppositional” vs. “compatible” cultural identities. *Journal of Cross-Cultural Psychology, 33*, 492-516.
- Bengtson, P. L., & Grotevant, H. D. (1999). The individuality and connectedness Q-sort: A measure for assessing individuality and connectedness in dyadic relationships. *Personal Relationships, 6*, 213-225.
- Berk, L. E. (2006). *Child development* (7th ed.). Boston: Pearson.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. M. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 9-25). Boulder, CO: Westview Press.

- Bersoff, D. M., & Miller, J. G. (1993). Culture, context, and the development of moral accountability judgments. *Developmental Psychology, 29*, 664-676.
- Bhopal, R., & Donaldson, L. (1998). White, European, Western, Caucasian, or what? Inappropriate labeling in research on race, ethnicity, and health. *American Journal of Public Health, 88*, 1303-1307.
- Blos, P. (1979). The second individuation process of adolescence. In P. Blos (Ed.), *The adolescent passage: Developmental issues* (pp. 141-170). New York: International University Press.
- Bond, M. H. (1986). *The psychology of the Chinese people*. Oxford, UK: Oxford University Press.
- Celano, M., & Tyler, F. (1990). Behavioral acculturation among Vietnamese refugees in the United States. *Journal of Social Psychology, 131*, 373-385.
- 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. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*, 1832-1843.
- Collins, W. A., & Repinski, D. J. (1994). Relationships during adolescence: Continuity and change in interpersonal perspective. In R. Montemayor & G. R. Adams (Eds.), *Advances in adolescent development: Relationships during adolescence* (Vol. 6, pp. 7-36). Thousand Oaks, CA: Sage.

- Coon, H. M., & Kimmelmeier, M. (2001). Cultural orientations in the United States: (Re)-examining differences among ethnic groups. *Journal of Cross-Cultural Psychology, 32*, 348-364.
- Cooper, C. R. (1999). Multiple selves, multiple worlds: Cultural perspectives on individuality and connectedness in adolescent development. In A. S. Masten (Ed.), *Cultural processes in child development: Vol. 29. The Minnesota Symposia on Child Psychology* (pp. 25-57). Mahwah, NJ: Erlbaum.
- Cooper, C. R., Baker, H., Polochar, D., & Welsh, M. (1993). Values and communication of Chinese, European, Filipino, Mexican, and Vietnamese American adolescents with their families and friends. In S. Shulman & W. A. Collins (Eds.), *Father-adolescent relationships: New directions in child development* (Vol. 62, pp. 73-89). San Francisco: Jossey-Bass.
- Cooper, C. R., Grotevant, H. D., & Condon, S. M. (1983). Individuality and connectedness in the family as a context for adolescent identity formation and role taking skill. In H. D. Grotevant & C. R. Cooper (Eds.), *Adolescent development in the family: New directions for child development* (pp.43-59). San Francisco: Jossey-Bass.
- Copeland, A. P., Hwang, M. S., & Brody, L. R. (1996, March). *Asian-American adolescents: Caught between cultures?* Paper presented at the Society for Research on Adolescence Conference, Boston, MA.
- Cross, S. E., & Gore, J. (2002). Cultural models of the self. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 536-564). New York: Guilford.

- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin, 122*, 5-37.
- Dasgupta, S. D. (1998). Gender roles and cultural continuity in the Asian Indian immigrant community in the U.S. *Sex Roles, 38*, 953-974.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. A. Dienstbier (Ed.), *Perspectives on motivation: Vol. 38. Nebraska Symposium on Motivation, 1990* (pp. 237-288). Lincoln: University of Nebraska Press.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31-49). New York: Plenum.
- Dhawan, N., Roseman, I. J., Naidu, R. K., Thapa, K., & Rettek, S. I. (1995). Self-concepts across two cultures: India and the United States. *Journal of Cross-Cultural Psychology, 26*, 606-621.
- Dion, K. K., & Dion, K. L. (2001). Gender and cultural adaptation in immigrant families. *Journal of Social Issues, 57*, 511-521.
- Dornbusch, S. M., Carlsmith, J. M., Bushwall, S. J., Ritter, P. L., Leiderman, H., Hastorf, H., et al. (1985). Single parents, extended households, and the control of adolescents. *Child Development Special Issue: Family Development, 56*, 326-341.

- Dornbusch, S. M., Ritter, P. L., Mont-Reynaud, R., & Chen, Z. Y. (1990). Family decision making and academic performance in a diverse high school population. *Journal of Adolescent Research, 5*, 143-160.
- Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: W. W. Norton & Company.
- 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.
- Fincham, E., & Jaspars, J. (1979). Attribution of responsibility to the self and other in children and adults. *Journal of Personality and Social Psychology, 37*, 1589-1602.
- Franzoi, S. L. (2006). *Social psychology* (4th ed.). New York: Mc-Graw Hill.
- Freeman, M. A. (1997). Demographic correlates of individualism and collectivism. *Journal of Cross-Cultural Psychology, 28*, 321-341.
- Freud, S. (1961). *The ego and the id*. New York: W. W. Norton & Company.
- Fuligni, A. J. (1998). Authority, autonomy, and parent-adolescent conflict and cohesion: A study of adolescents from Mexican, Chinese, Filipino, and European backgrounds. *Developmental Psychology, 34*, 782-792.
- Gaenslen, F. (1986). Culture and decision making in China, Japan, Russia and the United States. *World Politics, 39*, 78-103.
- Gaertner, L., Sedikides, C., & Graetz, K. (1999). In search of self-definition: Motivational primacy of the individual self, motivational primacy of the collective self, or contextual primacy? *Journal of Personality and Social Psychology, 76*, 5-18.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1988). Remapping the moral domain: New images of self-in relationship. In C. Gilligan, J. Ward, & J. Taylor (Eds.), *Mapping the moral domain* (pp. 3-19). Cambridge, MA: Harvard University Press.
- Green, E. G. T., Deschamps, J., & Páez, D. (2005). Variation of individualism and collectivism within and between 20 countries: A typological analysis. *Journal of Cross-cultural Psychology, 36*, 321-339.
- Greenfield, P. M. (1994). Independence and interdependence as developmental scripts: Implications for theory, research, and practice. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 1-37). Mahwah, NJ: Erlbaum.
- Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology, 54*, 461-490.
- Grotevant, H. D., & Cooper, C. R. (1982). *Identity formation and role taking skill in adolescence: An investigation of family structure and family process antecedents*. Final report prepared for the National Institute of Child Health and Human Development, Rockville, MD.
- Grotevant, H. D., & Cooper, C. R. (1985). Patterns of interaction in family relationships and the development of identity formation in adolescence. *Child Development, 56*, 415-428.
- Grotevant, H. D., & Cooper, R. C. (1986). Individuation in family relationships. *Human Development, 29*, 82-100.

- Grotevant, H. D., & Cooper, R. C. (1998). Individuality and connectedness in adolescent development: Review and prospects for research on identity, relationships, and context. In Eva E. A. Skoe, & A. L. von der Lippe (Eds.), *Personality development in adolescence: A cross national and life span perspective* (pp. 3-37). London: Routledge.
- Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism–collectivism, self-construals, and individual values on communication styles across cultures. *Human Communication Research, 22*, 510-543.
- Haines, D. W. (1988). Kinship in Vietnamese refugee resettlement: A review of the U.S. experience. *Journal of Comparative Family Studies, 19*, 1-16.
- Haritatos, J., & Benet-Martínez, V. (2002). Bicultural identities: The interface of cultural, personality, and socio-cognitive processes. *Journal of Research in Personality, 6*, 598-606.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford.
- Harter, S., Waters, P. L., Pettitt, L. M., Whitesell, N., & Jordan, J. (1997). Autonomy and connectedness as dimensions of relationship styles in men and women. *Journal of Social and Personal Relationships, 14*, 147-164.
- Henriques, J., Hollway, W., Urwin, C., Venn, C., & Walkerdine, V. (1984). *Changing the subject: Psychological, social regulation, and subjectivity*. London: Methuen.
- Ho, D. Y. F., Chen, S. J., & Chiu, C. Y. (1991). Relational orientation: In search of methodology for Chinese social psychology. (in Chinese). In K. S. Yang & K. K.

- Hwang (Eds.), *Chinese psychology and behavior* (pp. 49-66). Taipei, Taiwan: Laureate.
- Hoff, E., Laursen, B., & Tardiff, T. (2002). Socioeconomic status and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 2. Biology and ecology of parenting* (2nd ed., pp. 231-252). Mahwah, NJ: Erlbaum.
- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage.
- Hosley, C. A., & Montemayor, R. (1997). Fathers and adolescents. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp.162-178). New York: Wiley.
- Hsu, F. L. K. (1972). *Americans and Chinese: Reflections on two cultures and their people*. New York: Doubleday Natural History.
- Hwang, K. K. (1995). *Knowledge and action: A social-psychological interpretation of Chinese cultural tradition*. (in Chinese). Taipei, Taiwan: Sin-Li.
- Hwang, K. K. (1997). Guanxi and mientze: Conflict resolution in Chinese society. *Intercultural Communication Studies*, 7, 17-37.
- Hwang, K. K. (2000). Chinese relationalism: Theoretical construction and methodological considerations. *Journal for the Theory of Social Behaviour*, 30, 155-178.
- Joe, J. R. (1994). Revaluing Native-American concepts of development and education. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 107-114). Mahwah, NJ: Erlbaum.
- Josephs, R. A., Markus, H. R., & Tafarodi, R. W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology*, 63, 391-402.

- Juang, L. P., Lerner, J. V., McKinney, J. P., & von Eye, A. (1999). The goodness of fit in autonomy timetable expectations between Asian-Americans late adolescents and their parents. *International Journal of Behavioral Development, 23*, 1023-1048.
- Julian, T. W., McKenry, P. C., & McKelvey, M. W. (1994). Cultural variations in parenting: Perceptions of Caucasian, African-American, Hispanic, and Asian-American parents. *Family Relations, 43*, 30-37.
- Kashima, Y., Yamaguchi, S., Kim, U., Choi, S. C., Gelfand, M. J., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology, 69*, 925-937.
- Kenny, M. (1987). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence, 16*, 17-29.
- Killen, M. (1997). Culture, self, and development: Are cultural templates or useful or stereotypic? *Developmental Review, 17*, 239-249.
- Killen, M., & Wainryb, C. (2000). Independence and interdependence in diverse cultural contexts. *New Directions for Child and Adolescent Development, 87*, 5-21.
- Kim, B. S. K., & Abreu, J. M. (2001). Acculturation measurement: Theory, current instruments, and future directions. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 394-424). Thousand Oaks, CA: Sage.
- Kim, B. S. K., Atkinson, D. R., & Yang, P. H. (1999). The Asian Values Scale: Development, factor analysis, validation, and reliability. *Journal of Counseling Psychology, 46*, 342-352.

- Kim, M., Hunter, J. E., Miyahara, A., & Horvath, A. (1996). Individual vs. culture-level dimensions of individualism and collectivism: Effects on preferred conversational styles. *Communication Monographs*, *63*, 28-49.
- Kim, M., Sharkey, W. F., & Singelis, T. M. (1994). The relationship between individuals' self-construals and perceived importance of interactive constraints. *International Journal of Intercultural Relations*, *18*, 117-140.
- Kim, U. (1994). Individualism and collectivism: Conceptual clarification and elaboration. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 19-40). Thousand Oaks, CA: Sage.
- Kim, U., & Choi, S. (1994). Individualism, collectivism, and child development: A Korean perspective. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 351-362). Hillsdale, NJ: Erlbaum.
- Kohn, M. L. (1979). The effects of social class on parental values and practices. In D. Reiss & H. A. Hoffman (Eds.), *The American family: Dying or developing* (pp. 45-68). New York: Plenum.
- Kohn, M. L. (1987). Cross-national research as an analytic strategy. *American Sociological Review*, *52*, 713-731.
- Kwak, K., & Berry, J. W. (2001). Generational differences in acculturation among Asian families in Canada: A comparison of Vietnamese, Korean, and East-Indian groups. *International Journal of Psychology*, *36*, 152-162.
- LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, *114*, 395-412.

- Lam, C. M. (1997). A cultural perspective on the study of Chinese adolescent development. *Child and Adolescent Social Work Journal, 14*, 95-113.
- Laroche, M., Kim, G, Hui, M., & Joy, A. (1996). An empirical study of multidimensional ethnic change: The case of the French Canadians in Quebec. *Journal of Cross-Cultural Psychology, 27*, 114-131.
- Lay, C., Fairlie, P., Jackson, S., Ricci, T., Eisenberg, J., Sato, T., et al. (1998). Domain-specific allocentrism–idiocentrism: A measure of family connectedness. *Journal of Cross-Cultural Psychology, 29*, 434-460.
- LeCroy, C. W. (1988). Parent-adolescent intimacy: Impact on adolescent functioning. *Adolescence, 23*, 137-147.
- Lewis, C. (1981). How adolescents approach decisions: Changes over grades seven through twelve and policy implications. *Child Development, 52*, 538-544.
- Liang, S. M. (1974). *The essence of Chinese culture*. (in Chinese). Taipei, Taiwan: Zheng Zhong.
- Lin, C. Y. C., & Fu, V. R. (1990). “A comparison of child-rearing practices among Chinese, immigrant Chinese, and Caucasian-American parents.” *Child Development, 61*, 429-433.
- Luster, T., Rhoades, K., & Haas, B. (1989). The relation between parental values and parenting behavior: A test of the Kohn hypothesis. *Journal of Marriage and the Family, 51*, 139-147.
- Ma, V., & Schoeneman, T. J. (1997). Individualism versus collectivism: A comparison of Kenyan and American self-concepts. *Basic and Applied Social Psychology, 19*, 261-273.

- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.
- Markus, H. R., Kitayama, S., & Heiman, R. J. (1996). Culture and “basis” psychological principles. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principle* (pp. 875-913). New York: Guilford.
- Neff, K. D., & Harter, S. (2002a). The authenticity of conflict resolutions among adult couples: Does women’s other-oriented behavior reflect their true selves? *Sex Roles*, *47*, 403-417.
- Neff, K. D., & Harter, S. (2002b). The role of power and authenticity in relationship styles emphasizing autonomy, connectedness, or mutuality among adult couples. *Journal of Social and Personal Relationships*, *19*, 827-849.
- Neff, K. D., & Harter, S. (2003). Relationship styles of self-focused autonomy, other-focused connectedness, and mutuality across multiple relationship contexts. *Journal of Social and Personal Relationships*, *20*, 81-99.
- Nguyen, N.A. (1992). Living between two cultures: Treating first-generation Asian Americans. In L.A. Vargas & J. D. Koss-Chioino (Eds.), *Working with culture: Psychotherapeutic interventions with ethnic minority children and adolescents* (pp.204-222). San Francisco: Jossey-Bass.
- Nidorf, J. F. (1985). Mental health and refugee youths: A model for diagnostic training. In T. C. Owen (Ed.), *Southeast Asian mental health: Treatment, prevention, services, training, and research* (pp. 391-427). Washington, DC: National Institute of Mental Health.

- Noller, P., & Bagi, S. (1985). Parent-adolescent communication. *Journal of Adolescence*, 8, 125-144.
- Nucci, L. P., & Smetana, J. G. (1996). Mothers' concepts of young children's areas of personal freedom. *Child Development*, 67, 1870-1886.
- Nucci, L. P., & Turiel, E. (2000). The moral and the personal: Sources of social conflicts. In L. P. Nucci, G. B. Saxe, & E. Turiel (Eds.), *Cultural, thought, and development* (pp. 115-137). Mahwah, NJ: Erlbaum.
- Nucci, L. P., & Weber, E. K. (1995). Social interactions in the home and the development of young children's conceptions of the personal. *Child Development*, 66, 1438-1452.
- Oyserman, D., Coon, H. M., & Markus, K. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3-72.
- Peterson, G. W., Bush, K. R., & Supple, A. (1999). Predicting adolescent autonomy from parents: Relationship connectedness and restrictiveness. *Sociological Inquiry*, 69, 431-457.
- Peterson, G. W., Cobas, J. A., Bush, K. R., Supple, A., & Wilson, S. M. (2005). Parent-youth relationships and the self-esteem of Chinese Adolescents: Collectivism versus individualism. *Marriage & Family Review*, 36, 173-200.
- Pettys, G. L., & Balgopal, P. R. (1998). Multigenerational conflicts and new immigrants: An Indo-American experience. *Families in Society: The Journal of Contemporary Human Services*, 79, 410-423.
- Piaget, J. (1932). *The moral judgment of the child*. London: Routledge & Kegan Paul.

- Pipp, S., Jennings, S., Shaver, P., Lamborn, & Fischer, K. W. (1985). Adolescents' theories about the development of their relationships with parents. *Journal of Personality and Social Psychology*, *48*, 991-1001.
- Pleck, J. H. (1997). Paternal involvement: Levels, sources and consequences. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp. 66-103). New York: Wiley.
- Pomerantz, E. M., & Ruble, D. N. (1998). The role of maternal control in the development of sex differences in child self-evaluative factions. *Child Development*, *69*, 458-478.
- Raeff, C., Greenfield, P. M., & Quiroz, B. (2000). Conceptualizing interpersonal relationships in the cultural contexts of individualism and collectivism. In S. Harkness, C. Raeff, & C. Super (Eds.), *New directions in child development: No. 87. Variability in the social construction of the child* (pp. 59-74). San Francisco: Jossey-Bass.
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist*, *38*, 149-152.
- Rhee, E., Uleman, J. S., Lee, H. K., & Roman, R. J. (1995). Spontaneous self-descriptions and ethnic identities in individualistic and collectivistic cultures. *Journal of Personality and Social Psychology*, *69*, 142-152.
- Rosenthal, D. A., & Feldman, S. S. (1990). The acculturation of Chinese immigrants: Perceived effects on family functioning of length of residence in two cultural contexts. *Journal of Genetic Psychology*, *151*, 495-514.

- Rosenthal, D. A., Ranieri, N., & Klimidis, S. (1996). Vietnamese adolescents in Australia: Relationships between perceptions of self and parental values, intergenerational conflict, and gender dissatisfaction. *International Journal of Psychology, 31*, 81-91.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy and the self in the psychological development. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation: Development perspective on motivation* (Vol. 40, pp.1-56). Lincoln: University of Nebraska.
- Ryan, R. M., & Solky, J. A. (1996). What is supportive about social support? On the psychological needs for autonomy and relatedness. In G. R. Pierce, B. R. Sarason, & I. G. Sarason (Eds.), *Handbook of social support and the family* (pp. 249-267). New York: Plenum.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*, 45-69.
- Sampson, E. E. (2000). Reinterpreting individualism and collectivism: Their religious roots and monologic versus dialogic person-other relationship. *American Psychologist, 55*, 1425-1432.
- Shweder, R. A., & Bourne, E. J. (1982). Does the concept of the person vary cross-culturally? In A. J. Marsella & G. M. White (Eds.), *Cultural conceptions of mental health and therapy* (pp. 97-137). New York: Reidel.

- Singelis, T. M., Triandis, H. C., Bhawuk, D., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research, 29*, 240-275.
- Sinha, D., & Tripathi, R. (1994). Individualism in a collectivistic culture: A case of coexistence of opposites. In U. Kim, H. C. Triandis, C., S. Kagitcibasi, S. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 123-136). San Anselmo, CA: Sage.
- Smetana, J. G. (1988). Concepts of self and social convention: Adolescents' and parents' reasoning about hypothetical and actual family conflicts. In M. G. Gunnar & W. A. Collins (Eds.), *Development during the transition to adolescence: Minnesota Symposium on Child Development* (Vol. 21, pp. 79-122). Hillsdale, NJ: Erlbaum.
- Smetana, J. G. (1989). Adolescents' and parents' reasoning about actual family conflict. *Child Development, 60*, 1052-1067.
- Smetana, J. G. (1995). Context, conflict, and constraint in parent-adolescent authority relationships. In M. Killen & D. Hart (Eds.), *Morality in everyday life: Developmental perspectives* (pp. 225-255). Cambridge, MA: Cambridge University.
- Smetana, J. G. (2000). Middle-class African American adolescents' and parents' conceptions of parental authority and parenting practices: A longitudinal investigation. *Child Development, 71*, 1672-1686.
- Smetana, J. G. (2002). Culture, autonomy, and personal jurisdiction in adolescent-parent relationships. In R. V. Kail & H. W. Reese (Eds.), *Advances in child development and behavior* (Vol. 29, pp. 51-87). San Diego, CA: Academic.

- Smetana, J. G., & Asquith, P. (1994). Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development, 65*, 1147-1162.
- Spencer, M. B., & Dornbusch, S. M. (1990). Challenges in studying minority youth. In S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 123-146). Cambridge, MA: Harvard University.
- Steinberg, L. D., & Silverberg, S. (1986). The vicissitudes of autonomy in early adolescence. *Child Development, 57*, 841-851.
- Suina, J. H., & Smolkin, L. B. (1994). From natal culture to school culture to dominant society culture: Supporting transition for Pueblo Indian students. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 115-132). Hillsdale, NJ: Erlbaum.
- Szapocznik, J., Scopetta, M. A., Kurtines, W., & Arandale, M. A. (1978). Theory and measurement of acculturation. *Interamerican Journal of Psychology, 12*, 113-120.
- Takanishi, R. (1994). Continuities and discontinuities in the cognitive socialization of Asian-originated children: The case of Japanese Americans. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 351-362). Hillsdale, NJ: Erlbaum.
- Tang, T. N., & Dion, K. L. (1999). Gender and acculturation in relation to traditionalism: Perceptions of self and parents among Chinese students. *Sex Roles, 41*, 17-29.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology, 60*, 649-655.

- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, *96*, 506-520.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality*, *69*, 907-924.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, *74*, 118-128.
- Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology*, *59*, 1006-1020.
- Tudge, J. R.H., Hogan, D. M., Snezhkova, I. A., Kulakova, N. N., & Etz, K. E. (2000). Parents' child-rearing values and beliefs in the United States and Russia: The impact of culture and social class. *Infant and Child Development*, *9*, 105-121.
- Turiel, E., & Wainryb, C. (1994). Social reasoning and the varieties of social experience in cultural contexts. In H. W. Reese (Ed.), *Advances in child development and behavior* (Vol. 25, pp. 289-326). New York: Academic Press.
- Turiel, E., & Wainryb, C. (2000). Social life in cultures: Judgments, conflict, and subversion. *Child Development*, *71*, 250-256.
- Vacek, E. C. (1994). *Love, human and divine*. Washington, DC: Georgetown University Press.
- Vacek, E. C. (1996). Love, Christian and diverse. *Journal of Religious Ethics*, *24*, 29-34.
- Valsiner, J. (2000). *Culture and human development*. Thousand Oaks, CA: Sage.

- von der Lippe, A. L. (1998). Ego development and family communication. In Eva E. A. Skoe & A. L. von der Lippe (Eds.), *Personality development in adolescence: A cross national and life span perspective* (pp. 38-60). London: Routledge.
- Wainryb, C. (1997). The mismeasure of diversity: Reflections on the study of cross-cultural differences. *New Directions for Child and Adolescent Development*, 76, 51–65.
- Ward, C. (2001). The A, B, Cs of acculturation. In D. Matsumoto (Ed.), *The handbook of culture and psychology* (pp. 411-445). New York: Oxford University.
- Waterman, A. S. (1984). *The psychology of individualism*. New York: Praeger.
- Watkins, D., Adair, J., Akande, A., Gerony, A., McInerney, D., Sunar, D., et al. (1996, August). *Individualism-collectivism, gender, and the self-concept: A nine-culture investigation*. Paper presented at the 13th Congress of the International Association for Cross-Cultural Psychology, Montreal, Canada.
- Watkins, D., Akande, A., Fleming, J., Ismail, M., Lefner, K., Regmi, M., et al. (1998). Cultural dimensions, gender, and the nature of self-concept: A fourteen-country study. *International Journal of Psychology*, 33, 17-31.
- Watkins, D., Yau, J., Dahlin, B., & Wondimu, H. (1997). The twenty statements test: Some measurement issues. *Journal of Cross-cultural Psychology*, 28, 626-633.
- Whiting, B., & Edwards, C. P. (1998). A cross-cultural analysis of sex differences in the behavior of children aged 3 through 11. In G. Handel (Ed.), *Childhood socialization* (pp. 281-297). New York: Aldine De Gruyter.
- Yang, K. S. (1986). Chinese personality and its change. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 106-170). New York: Oxford University.

- Yau, J., & Smetana, J. (1996). Adolescent–parent conflict among Chinese adolescents in Hong Kong. *Child Development, 67*, 1262-1275.
- Yau, J., & Smetana, J. (2003). Adolescent-parent conflict in Hong Kong and Shenzhen: A comparison of youth in two cultural contexts. *International Journal of Behavioral Development, 27*, 201-211.
- Yeh, K. H. (1997). Changes of Taiwan people's concept of filial piety. (in Chinese). In L. Y. Cheng, Y. H. Lu, & F. C. Wang (Eds.), *Taiwanese Society in the 1990s*. (pp. 171-214). Taipei, Taiwan: Institute of Sociology, Academia Sinica.
- Yeh, K. H., & Bedford, O. (2004). Filial belief and parent-child conflict. *International Journal of Psychology, 39*, 132-144.
- Youniss, J., & Ketterlinus, R. D. (1987). Communication and connectedness in mother- and father-adolescent relationships. *Journal of Youth and Adolescence, 16*, 191-197.
- Youniss, J., & Smollar, J. (1985). *Adolescent relationships with mothers, fathers, and friends*. Chicago: University of Chicago.

APPENDIX A

THE CONSENT FORM FOR ADOLESCENTS

Consent Form, Adolescents

ID# _____

**Consent Form (For Adolescents)
My Family and I****Introduction**

The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research. You have been asked to participate in a research study about how you interact with your parents. You were selected to be a possible participant because we are studying adolescents (age range between 12 and 18) and their parents.

What will I be asked to do?

If you agree to participate in this study, you will be asked to complete six short questionnaires that will take approximately 30 minutes.

What are the risks involved in this study?

There are no foreseeable risks and/or discomforts in this study. Any possible risks would be minimal, and not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

Your participation will provide information about adolescent and parent relationships, provide you the experience of participating in research.

Do I have to participate?

No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Who will know about my participation in this research study?

This study is confidential. To ensure confidentiality, we use I.D. numbers instead of your name on all questionnaires (except for the demographic form). All data will be stored in a locked room at Texas A&M University, and your identity as a participant will be known only to the researchers **Tzufen Chang** and **Jeffrey Liew** and never be used in any report of this research. We will not share information about participants to others.

Whom do I contact about my rights as a research participant?

This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Signature

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. If you would like to be in the study, please sign your consent.

Signature of Participant: _____ **Date:** _____

Printed Name: _____

For questions about this study, please contact:	
Jeffrey Liew, Ph. D. Assistant Professor Department of Educational Psychology (979) 845-1239 Email: jeffrey.liew@tamu.edu	Tzufen Chang, Master student Department of Educational Psychology, University of Texas A&M (979)739-1799 Email: tzufen.chang@gmail.com

*******THIS IS A COPY FOR YOU TO KEEP*******
Consent Form (For Adolescents)

Introduction

The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research. You have been asked to participate in a research study about how you interact with your parents. You were selected to be a possible participant because we are studying adolescents (age range between 12 and 18) and their parents.

What will I be asked to do?

If you agree to participate in this study, you will be asked to complete six short questionnaires that will take approximately 30 minutes.

What are the risks involved in this study?

There are no foreseeable risks and/or discomforts in this study. Any possible risks would be minimal, and not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

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Do I have to participate?

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Signature

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. If you would like to be in the study, please sign your consent.

Signature of Participant: _____ **Date:** _____

Printed Name: _____

For questions about this study, please contact:	
Jeffrey Liew, Ph. D. Assistant Professor Department of Educational Psychology (979) 845-1239 Email: jeffrey.liew@tamu.edu	Tzufen Chang, Master student Department of Educational Psychology, University of Texas A&M (979)739-1799 Email: tzufen.chang@gmail.com

APPENDIX B

THE CONSENT FORM FOR PARENTS

Consent Form, Parents

ID # _____

Consent Form (For Parents)
My Family and I

Introduction

The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research. You have been asked to participate in a research study about how you interact with your child. You were selected to be a possible participant because we are studying adolescents (age range between 12 and 18) and their parents.

What will I be asked to do?

If you and your child agree to participate in this study, you and your child will be asked to complete a short set of questionnaires that will take you approximately 15 minutes and your child 30 minutes. (If you have more than one child in adolescent, only one of children has to participate.)

What are the risks involved in this study?

There are no foreseeable risks and/or discomforts in this study. Any possible risks would be minimal, and not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

You and your child's participation will provide information about adolescent and parent relationships, provide you the experience of participating in research.

Do I have to participate?

No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Who will know about my participation in this research study?

This study is confidential. To ensure confidential, we use I.D. numbers instead of your name on all questionnaires (except for the demographic form). All data will be stored in a locked room at Texas A&M University, and your identity as a participant will be known only to the researchers **Tzufen Chang** and **Jeffrey Liew** and never be used in any report of this research. We will not share information about participants to others.

Whom do I contact about my rights as a research participant?

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Signature

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. If you would like **yourself and your child** to be in the study, please sign your consent.

Signature of Participant: _____ **Date:** _____

Printed Name: _____

For questions about this study, please contact:	
Jeffrey Liew, Ph. D. Assistant Professor Department of Educational Psychology (979) 845-1239 Email: jeffrey.liew@tamu.edu	Tzufen Chang, Master student Department of Educational Psychology, University of Texas A&M (979)739-1799 Email: tzufen.chang@gmail.com

*****THIS IS A COPY FOR YOU TO KEEP*****

Consent Form (For Parents)

Introduction

The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research. You have been asked to participate in a research study about how you interact with your child. You were selected to be a possible participant because we are studying adolescents (age range between 12 and 18) and their parents.

What will I be asked to do?

If you and your child agree to participate in this study, you and your child will be asked to complete a short set of questionnaires that will take you approximately 15 minutes and your child 30 minutes.(If you have more than one child in adolescent, only one of children has to participate.)

What are the risks involved in this study?

There are no foreseeable risks and/or discomforts in this study. Any possible risks would be minimal, and not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?

You and your child's participation will provide information about adolescent and parent relationships, provide you the experience of participating in research.

Do I have to participate?

No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Who will know about my participation in this research study?

This study is confidential. To ensure confidentiality, we use I.D. numbers instead of your name on all questionnaires (except for the demographic form). All data will be stored in a locked room at Texas A&M University, and your identity as a participant will be known only to the researchers **Tzufen Chang** and **Jeffrey Liew** and never be used in any report of this research. We will not share information about participants to others.

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Signature

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. If you would like **yourself and your child** to be in the study, please sign your consent.

Signature of Participant: _____ **Date:** _____

Printed Name: _____

For questions about this study, please contact:	
Jeffrey Liew, Ph. D. Assistant Professor Department of Educational Psychology (979) 845-1239 Email: jeffrey.liew@tamu.edu	Tzufen Chang, Master student Department of Educational Psychology, University of Texas A&M (979)739-1799 Email: tzufen.chang@gmail.com

Please estimate **your overall GPA** (grade point average). If you can't give an exact number, please estimate a range.

Your Overall GPA:

Please estimate **your child's overall GPA** (grade point average). If you can't give an exact number, please estimate a range.

Your Child's Overall GPA:

APPENDIX E

INDIVIDUALISM AND COLLECTIVISM SCALE FOR ADOLESCENTS

Section One: About Me

Instructions:

Please read each statement carefully and then indicate the degree to which you agree or disagree with the statement using the scale showed as below.

strongly disagree **disagree** **slightly disagree** **slightly agree** **agree** **strongly agree**
 1 2 3 4 5 6

Items	strongly disagree					strongly agree
	1	2	3	4	5	6
Example: It is important for me to eat breakfast	1	2	3	4	5	6
1. I rely on myself most of the time; I rarely rely on others.	1	2	3	4	5	6
2. The well-being of my fellows is important for me.	1	2	3	4	5	6
3. I usually sacrifice my self-interest for the benefit of my group.	1	2	3	4	5	6
4. It is important to me that I respect the decisions made by my groups.	1	2	3	4	5	6
5. I often do my own thing.	1	2	3	4	5	6
6. Winning is everything.	1	2	3	4	5	6
7. I enjoy being unique and different from others in many ways.	1	2	3	4	5	6
8. To me, pleasure is spending my time with others.	1	2	3	4	5	6
9. I feel good when I cooperate with others.	1	2	3	4	5	6
10. Children should be taught to place duty before pleasure.	1	2	3	4	5	6
11. It is important that I perform better than others.	1	2	3	4	5	6
12. Competition is the law of nature.	1	2	3	4	5	6
13. I would do what would please my family, even if I detested that activity.	1	2	3	4	5	6
14. When another person does better than I do, I get tense and aroused.	1	2	3	4	5	6
15. I am a unique individual.	1	2	3	4	5	6
16. If a classmate gets a prize, I would feel proud.	1	2	3	4	5	6
17. I would sacrifice an activity that I enjoy very much if my family did not approve of it.	1	2	3	4	5	6

APPENDIX F

INDIVIDUALISM AND COLLECTIVISM SCALE FOR PARENTS

Section One: About Me

Instructions:

Please read each statement carefully and then indicate the degree to which you agree or disagree with the statement using the scale showed as below.

strongly disagree **disagree** **slightly disagree** **slightly agree** **agree** **strongly agree**
 1 2 3 4 5 6

Items	strongly Disagree					strongly agree
	1	2	3	4	5	6
Example: It is important for me to eat breakfast	1	2	3	4	5	6
1. I rely on myself most of the time; I rarely rely on others.	1	2	3	4	5	6
2. The well-being of my fellows is important for me.	1	2	3	4	5	6
3. I usually sacrifice my self-interest for the benefit of my group.	1	2	3	4	5	6
4. It is important to me that I respect the decisions made by my groups.	1	2	3	4	5	6
5. I often do my own thing.	1	2	3	4	5	6
6. Winning is everything.	1	2	3	4	5	6
7. I enjoy being unique and different from others in many ways.	1	2	3	4	5	6
8. To me, pleasure is spending my time with others.	1	2	3	4	5	6
9. I feel good when I cooperate with others.	1	2	3	4	5	6
10. Children should be taught to place duty before pleasure.	1	2	3	4	5	6
11. It is important that I perform better than others.	1	2	3	4	5	6
12. Competition is the law of nature.	1	2	3	4	5	6
13. I would do what would please my family, even if I detested that activity.	1	2	3	4	5	6
14. When another person does better than I do, I get tense and aroused.	1	2	3	4	5	6
15. I am a unique individual.	1	2	3	4	5	6
16. If a co-worker(if you don't have to work, please change "a co-worker" into "a neighbor")gets a prize, I would feel proud.	1	2	3	4	5	6
17. I would sacrifice an activity that I enjoy very much if my family did not approve of it.	1	2	3	4	5	6

APPENDIX G

DECISION-MAKING STYLES SCALE FOR ADOLESCENTS

Section Two: My Parent and Me-Part I

Instructions:

Please answer each statement carefully and then **check one of the options** that best describes what you do when you make decisions with your parents in **general situations**. In the first section, you will describe how you make decisions with **your mother**. In the second section, you will describe how you make decisions with **your father**.

Please use the scale show below.

Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus mother's needs moderately	Focus mother's needs strongly
1	2	3	4	5

The Formal Questions: Part One--- Your MOTHER and You

(Item 11 is optional. If you have any idea, please describe the topic in the space and check one number.)

Item	Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus mother's needs moderately	Focus mother's needs strongly
1. When making decisions with your mother on how late you can stay out, you would	1	2	3	4	5
2. When making decisions with your mother on how long you can watch TV, you would	1	2	3	4	5
3. When making decisions with your mother on your phone use, you would	1	2	3	4	5
4. When making decisions with your mother on doing your chores, you would	1	2	3	4	5
5. When making decisions with your mother on your bedtime, you would	1	2	3	4	5
6. When making decisions with your mother on your leisure time activities, you would	1	2	3	4	5
7. When making decisions with your mother on how much time you do school work, you would	1	2	3	4	5
8. When making decisions with your mother on your choice of friends, you would	1	2	3	4	5

9. When making decisions with your mother on your choice of appearance (e.g., wearing clothes and hair-style), you would	1	2	3	4	5
10. When making decisions with your mother on your use of money or allowance, you would	1	2	3	4	5

Before answering all items, please see this instruction.

Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus father's needs moderately	Focus father's needs strongly
1	2	3	4	5

The Formal Questions: Part Two--- Your FATHER and You

(Item 11 is optional. If you have any idea, please describe the topic in the space and check one number.)

Item	Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus father's needs moderately	Focus father's needs strongly
1. When making decisions with your father on how late you can stay out, you would	1	2	3	4	5
2. When making decisions with your father on how long you can watch TV, you would	1	2	3	4	5
3. When making decisions with your father on your phone use, you would	1	2	3	4	5
4. When making decisions with your father on doing your chores, you would	1	2	3	4	5
5. When making decisions with your father on your bedtime, you would	1	2	3	4	5
6. When making decisions with your father on your leisure time activities, you would	1	2	3	4	5
7. When making decisions with your father on how much time you do school work, you would	1	2	3	4	5
8. When making decisions with your father on your choice of friends, you would	1	2	3	4	5
9. When making decisions with your father on your choice of appearance (e.g., wearing clothes and hair-style), you would	1	2	3	4	5
10. When making decisions with your father on your use of money or allowance, you would	1	2	3	4	5

APPENDIX H

DECISION-MAKING STYLES SCALE FOR PARENTS

Section Two: Child and Me- Part I

Instructions:

Please answer each question carefully and **check one of options** what you often **will do (or prefer to)** on **your child's** decision making with you in **general situations**. (If you have more than one child, please focus on the child who fills in the questionnaire.)

Before answering all items, please see this instruction.

Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus child's needs moderately	Focus child's needs strongly
1	2	3	4	5

Before answering all items, please see this instruction.

Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus child's needs moderately	Focus child's needs strongly
1	2	3	4	5

Item	Focus your own needs strongly	Focus your own needs moderately	Focus Mutual needs	Focus child's needs moderately	Focus child's needs strongly
1. When making decisions on how late your child can stay out, you are the one	1	2	3	4	5
2. When making decisions on how long one week your child can watch TV, you are the one	1	2	3	4	5
3. When making decisions on your child's phone using, you are the one	1	2	3	4	5
4. When making decisions on your child's chores-doing, you are the one	1	2	3	4	5
5. When making decisions on your child's bedtime, you are the one	1	2	3	4	5
6. When making decisions on your child's leisure time activities, you are the one	1	2	3	4	5
7. When making decisions on your child's time on academic engagement, you are the one	1	2	3	4	5
8. When making decisions on your child's choice of friends, you are the one	1	2	3	4	5
9. When making decisions on your child's choice of appearance (e.g., wearing clothes and hair-style), you are the one	1	2	3	4	5
10. When making decisions on your child's use of money or allowance, you are the one	1	2	3	4	5

APPENDIX I

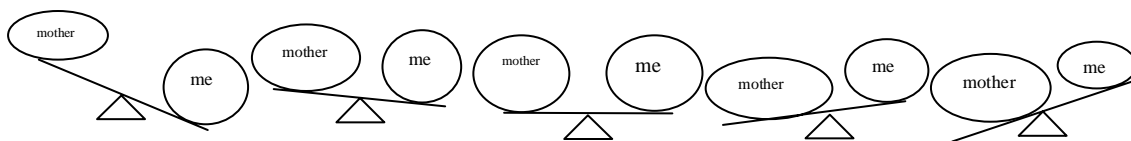
POWER PERCEPTION SCALE FOR ADOLESCENTS

Section Three: My Parent and Me- Part II

Instructions:

Please read each question carefully and then indicate the response that best describes how you feel or think.

1. In general, when you have a conflict and need to make a decision with **your MOTHER**, who usually gets their way? (Check one of them):



I am the one who gets my way **usually.**

()

I am the one who gets my way **more often than not.**

()

My mother and I each get our way **pretty equally** or we compromise

()

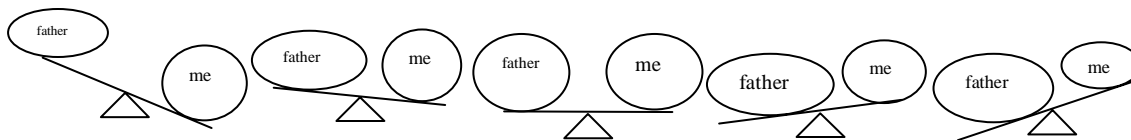
My mother is the one who gets her way **more often than not.**

()

My mother is the one who gets her way **usually.**

()

2. In general, when you have a conflict and need to make a decision with **your FATHER**, who usually gets their way? (Check one of them):



I am the one who gets my way **usually.**

()

I am the one who gets my way **more often than not.**

()

My father and I each get our way **pretty equally** or we compromise

()

My father is the one who gets his way **more often than not.**

()

My father is the one who gets his way **usually.**

()

APPENDIX J

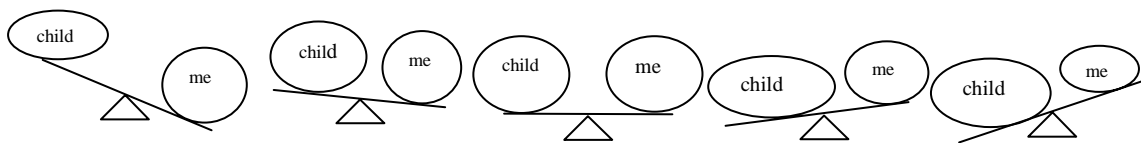
POWER PERCEPTION SCALE FOR PARENTS

Section Three: Child and Me- Part II

Instructions:

Please read each question carefully and then indicate the response that best describes how you feel or think. (If you have more than one child, please focus on the child who fills in the questionnaire.)

In general, when you have a conflict and need to make a decision with **your child**, who usually gets his or her way? (Check one of them):



I am the one who gets my way **usually.**

()

I am the one who gets my way **more often than not.**

()

My child and I each get our way **pretty equally** or we compromise

()

My child is the one who gets way **more often than not.**

()

My child is the one who gets way **usually.**

()

VITA

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