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Cultural Values and Family Experiences in Diverse Ecological Contexts:  
Implications for Social Change

A dissertation to be submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy  
in Psychology

by

Heejung Park

2014



## ABSTRACT OF THE DISSERTATION

Cultural Values and Family Experiences in Diverse Ecological Contexts:  
Implications for Social Change

by

Heejung Park

Doctor of Philosophy in Psychology

University of California, Los Angeles, 2014

Professor Patricia Greenfield, Co-Chair

Professor Anna Lau, Co-Chair

Ethnic minorities and members of non-Western societies are considered to hold a strong sense of family obligation, which shapes behaviors and relationship characteristics. Ethnic and national group differences must be reconciled with an understanding of how economically driven transformation of learning ecologies also shape child and adolescent development worldwide. I investigated how diverse socioeconomic characteristics may shape the learning ecology that promotes cultural values (Study 1, 2, 3), daily behaviors (Study 3), and parent-child relationships (Study 3). In Study 1, I interviewed 115 children and mothers in rural Korea, urban Korea, and immigrant communities in Los Angeles, to assess familistic values. European American families from Los Angeles served as a reference group to disentangle the role of heritage culture and learning ecology. Koreans in urban Korea and European Americans in Los Angeles did not

differ in familism, suggesting that urbanization may reduce East-West value differences. While the traditional value appears to lose relevance in urban Korea, Korean immigrants were more familistic than European Americans, suggesting promotion of familism in immigrant communities. Furthermore, nuclear family residence and higher education level predicted lower familism. Given that cultural learning begins early on, Study 2 tested whether parental valuation of childrearing goals is predicted by individual and national socioeconomic standing. In this study, data from 227,431 parents from 90 nations were included. Individual socioeconomic status predicted greater likelihood of personal valuation of independence and less valuation of obedience as childrearing goals; national socioeconomic characteristics predicted greater national popularity of independence and lower popularity of obedience at the nation-level. In Study 3, I tested how values shape daily behaviors and family relationship characteristics in 872 Vietnamese adolescents in rural Vietnam, urban Vietnam, and urban U.S. Family obligation values were still reinforced in urban Vietnam compared to rural Vietnam, but the values manifested in academic pursuit in urban Vietnam. Family obligation values shaped parent-child relationship characteristics in urban U.S. immigrant households. Vietnamese American adolescents with higher sense of family obligation reported less conflict with parents. This dissertation contributes to scholarship by unpacking the contributions of heritage culture and socioeconomic development worldwide.

The dissertation of Heejung Park is approved.

Andrew Fuligni

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2014

*To My Family*

## Table of Contents

Introduction.....	5
Cultural Values in the East and the West.....	5
Collectivism and Individualism .....	6
Familism .....	7
Theoretical Perspectives Guiding the Dissertation .....	8
The Dissertation .....	9
Overview of Three Studies .....	11
Study 1: Sociodemographic Factors Influence Cultural Values: Comparing European American with Korean Mothers and Children in Three Settings - Rural Korea, Urban Korea, and Los Angeles	
Introduction.....	11
Method .....	15
Results .....	22
Discussion .....	25
Study 2: Parental Valuation of Child Independence and Obedience Around the World	
Introduction.....	30
Methods.....	37
Results .....	41
Discussion .....	46
Study 3: Cultural Values and Family Experiences of Vietnamese Adolescents in Rural Vietnam, Urban Vietnam, and the U.S.	
Introduction.....	60
Methods.....	73
Results .....	79
Discussion .....	85
General Discussion .....	99
References.....	101
Appendices.....	109



## List of Tables and Figures

Table 1.1: Sample Characteristics.....	32
Table 1.2: Sociodemographic Factors and Cultural Group Predicting Home Cultural Value Orientation.....	33
Table 2.1: Sample Size and Demographic Characteristics across Five Study Waves.....	56
Table 2.2: Nation-level Endorsement Percentage of Independence and Obedience across all Waves and Nations .....	57
Table 2.3: Multiple Mixed-Effects Regression Analyses Predicting National Endorsement of Child Independence and Obedience from National Socioeconomic Indicators.....	58
Table 2.4: Multilevel Mixed-Effects Logistic Regression Predicting Parental Goal Endorsement of Child Independence and Obedience from Nation-Level and Person-Level Socioeconomic Characteristics.....	59
Table 2.5: Multilevel Mixed-Effects Logistic Regression Showing that Study Wave and National Socioeconomic Indicators Interacted to Predict Parental Goal Endorsement of Child Independence and Obedience .....	60
Figure 2.1: Association between national endorsement % of child independence and national socioeconomic characteristics around the world: (A) GNI per capita, (B) % post- secondary school enrollment, and (C) % urban population .....	61
Figure 2.2: Association between national endorsement % of child obedience and national socioeconomic characteristics around the world: (A) GNI per capita, (B) % post- secondary school enrollment, and (C) % urban population .....	62

Figure 2.3: The effect of time on the probability of endorsing independence as a function of (A) Gross National Income (GNI) per capita and (B) national % post-secondary school enrollment.....	63
Figure 2.4: The effect of time on the probability of endorsing obedience as a function of (A) Gross National Income (GNI) per capita, (B) national % post-secondary school enrollment, and (C) national % urban population .....	64
Table 3.1: Means, Standard Deviations, and Group Differences across all Variables of Interests.....	94
Table 3.2: Bivariate Correlations.....	95
Table 3.3: Hierarchical Multiple Regression Predicting Adolescents' Time Use from Learning Ecology, Sociodemographic Variables, and Family Obligation .....	96
Table 3.4: Hierarchical Multiple Regression Predicting Adolescents' Relationship Tension with Parents from Learning Ecology, Sociodemographic Variables, and Family Obligation.....	97
Figure 3.1: Association between adolescents' family obligation value and their time spent on (a) studying, (b) chores, and (c) working at a job by learning ecology .....	98
Figure 3.2: Association between adolescents' family obligation value and reported tension with parents. (a) parental unresponsiveness, (b) unmet expectations, (c) overt conflict and (d) Asian American Family Conflict Scale .....	99

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---

**Park, H.**, Greenfield, P. M., Joo, J., & Quiroz, B. (invited revision). Sociodemographic Factors Influence Cultural Values: Comparing European American with Korean Mothers and Children in Three Settings - Rural Korea, Urban Korea, and Los Angeles, *Journal of Cross-Cultural Psychology*

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Shimizu, M., **Park, H.**, & Greenfield, P. M. (invited revision). Infant sleeping arrangements and parental ethnotheories among contemporary Japanese mothers, *Culture and Psychology*.

**Park, H.**, Coello, J. A. & Lau, A. S. (in press). Child socialization goals in Western versus East Asian nations from 1989 to 2010: Evidence for social change in parenting, *Parenting: Science and Practice*.

**Park, H.**, Twenge, J. M., & Greenfield, P. M. (2014). The Great Recession: Implications for adolescent values and behavior. *Social Psychological and Personality Science*, 5, 310-318. doi: 10.1177/194855061349 5419

**Park, H.**, Tsai, K. M., Liu, L. L., & Lau, A. S. (2012). Transactional associations between supportive family climate and young children's heritage language proficiency in immigrant families. *International Journal of Behavioral Development*, 36, 226-236. doi: 10.1177/0165025412439842

Tsai, K. M., **Park, H.**, Liu, L., & Lau, A. (2012). Distinct pathways from parental cultural orientation to young children's bilingual development. *Journal of Applied Developmental Psychology*, 33, 219-226. doi: 10.1016/j.appdev.2012.07.002

Yu, D., **Park, H.**, Gerold, D., & Legge, G. E. (2010). Comparing reading speed for horizontal and vertical English text. *Journal of Vision*, 10, 1-17. doi: 10.1167/10.2.21

Yu, D., Legge, G. E., **Park, H.**, Gage, E., & Chung, S. T. L. (2010). Development of a training protocol to improve reading performance in peripheral vision. *Vision Research*, 50, 36-45. doi: 10.1016/j.visres.2009.10.005

Yu, D., Gerold, D., **Park, H.**, & Legge, G. E. (2008). Reading horizontal and vertical English text. *Journal of Vision*, 8, 629-629. doi: 10.1167/8.6.629

## **Cultural Values and Family Experiences in Diverse Ecological Contexts: Implications for Social Change**

Over the past few decades, cultural and developmental research on values and attitudes has compared Eastern and Western cultures and established the general notion that Eastern cultures are collectivistic and Western cultures are individualistic. This has inevitably promoted the assumption of cultural stability rather than fluidity. Nevertheless, globalization has consistently increased East-West intercultural contact such as through immigration and rapid urbanization, commercialization, and formal schooling. This contact has altered the learning ecologies and daily routines within Asian nations that have long been associated with collectivism and related cultural attributes, such as a sense of obligation towards one's family. In my dissertation, such environmental changes are considered to have significant developmental implications for children and adolescents. I investigated whether the transformation of recently rural socioecologies into urban socioecologies within a nation and immigration to Western urban ecologies erode the traditional collectivistic values of family orientations and obligations, as well as influence daily behaviors and parent-child dynamics. In addition to socioecologies at the societal level, person-level sociodemographic factors are considered as drivers of cultural values. I begin by introducing cultural constructs that have been associated with Eastern and Western cultures. I then argue for the need to consider the dynamic aspects of cultures and discuss theoretical perspectives informing my dissertation. Finally, I provide my dissertation overview, followed by presentation of three interrelated studies that comprise the dissertation.

### **Cultural Values in the East and the West**

Ethnic minorities and members of non-Western societies are often understood as collectivistic and placing themselves in the social and relational contexts, whereas Westerners

are characterized as individualistic and valuing autonomous and separated self (Markus & Kitayama, 1991; Triadis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis, McCusker & Hui, 1990). In particular, comparisons of individuals from Eastern versus Western nations and Asian American versus European American backgrounds within North America have indicated stark cultural differences across various domains of values and attributes.

**Collectivism and individualism.** Importance of the group is the key feature in understanding collectivism as opposed to individualism. In collectivistic societies, the in-group versus out-group distinction is considered crucial, and in-groups are viewed to share some kinds of “common fate”, whether that be the family lineage or work group (Triandis et al., 1990). Given that groups are deeply embedded in one’s cognition (Markus & Kitayama, 1991), collectivism follows the model of interdependence, which views the individual as interrelated with others and prioritizes groups over individuals (Keller et al., 2006; Markus & Kitayama, 1991, Triandis et al., 1988; Triandis et al., 1990). It is also worth noting that the concept of “prioritizing” the group over the individual would be non-existent in a completely collectivistic society where a total oneness of self and in-group is expected. On the contrary, in individualistic societies, there is little emphasis on drawing the line between in-group and out-group since the basic unit of analysis is “individuals” rather than “groups” (Triandis et al., 1990). The independent model views individuals as separated and autonomous (Keller et al., 2006; Markus & Kitayama, 1991). Collectivism and individualism are two distinctive cultural pathways that provide a meaningful means to understand cultural values (Greenfield, Keller, Fuligni, & Maynard, 2003).

In an early pivotal study on values and attitudes, Hofstede (1980) conducted the largest scale of its kind at the time, comparing the attitudes of IBM employees across 40 nations. The

results showed that individualism was a core cultural dimension, whereas individualism was salient in the U.S. and in other Western nations, especially those on which Britain exerted influence. Conversely, Asian nations along with nations from Africa and Latin America were found to show the opposing cultural pattern of collectivism. Research contrasting Eastern and Western cultures has since flourished, leading to the general portrayal of Asian cultures as collectivistic (e.g., Markus & Kitayama, 1991; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis et al., 1990), although not without mixed findings and criticism (for review, see Fernández, Paez, & González, 2005; Oyserman, Coon, & Kemmelmeier, 2002).

**Familism.** An in-group, which is central to the concept of collectivism, can share broad commonalities such as nationalities and ethnicities. Yet, there appears to be something unique about family as the in-group. Family is the most immediate and proximal environment into which a person is born (Bronfenbrenner, 1986) and gives a person the first form of social identity (Newman & Newman, 2001). The distinction of family versus non-family members is made as early as toddlerhood (Newman, Roberts & Syre, 1993). This universal significance of the family is especially highlighted in collectivistic cultures that emphasize identification of in-groups (Triandis et al., 1990). Indeed, additional analyses of Hofstede's (1980) original collectivism-individualism factors found a family-specific domain as one of the two aspects of collectivism, along with interdependence (Triandis et al., 1990). Therefore, familism can be considered a more restrictive and exclusive type of collectivism that deserves classification of its own (Burgess, Locke & Thome, 1963; Greenfield & Quiroz, 2013). When assessing attitudes towards family-related values and beliefs (e.g., children should live with their parents until they get married or children should support parents in the future), studies find higher levels of familism among Easterners than Westerners (e.g., Triandis et al., 1990), as well as among Asian

Americans than European Americans (e.g., Fuligni, Tseng & Lam, 1999; Hardway & Fuligni, 2006).

In summary, individuals from Asian backgrounds highly value in-groups (collectivism), of which the unit of family is particularly important (familism). The collectivistic tendency leads them to place selves in relational contexts. This in turn fosters cultural values that guide behaviors.

### **Theoretical Perspectives Guiding the Dissertation**

Nevertheless, this widespread view has largely emerged based on comparing Western and non-Western societies, or ethnic majority and minority groups within North America, often confounding heritage cultural influences with a range of other socioeconomic or minority status characteristics. The widespread cultural differences based on the East-West and Asian American-European American comparisons assume cultural stability and do not adequately address the dynamic nature of culture. Markus and Kitayama (2010) propose that human experience is socio-culturally patterned and that culture and self are dynamic. That is, culture is not a stable set of values residing inside people but located in the pattern of ideas, practices, institutions, economy, and ecology. Since these sociocultural factors constantly undergo change, construction of self is a dynamic process even in the tight-knit collectivistic societies.

Individuals make adaptations to the sociocultural alterations.

Greenfield (2009) offers a developmental approach that highlights the impact of socio-environments (e.g., urbanization, financial capital, technology development) in shaping cultural value development. The terms used to describe two opposing socio-environmental prototypes are *Gemeinschaft* (community) and *Gesellschaft* (society) that were coined by the German sociologist Tönnies (1957/1988) and widely used in the field of sociology. *Gemeinschaft* is



characterized by rural residence, informal home education, subsistence economy, low-technology environment, and little outside contact. Gesellschaft characteristics are the opposite and include urban residence, formal schooling, commerce, high-technology environment, and active contact with outside world (Tönnies, 1957/1988). In a Gemeinschaft environment, collectivism is the adaptive cultural value prototype given the face-to-face interactions in small communities where sharing and group consciousness should gain high importance. Conversely, individualism is promoted in a Gesellschaft environment that requires frequent contacts and interactions with strangers, as well as participation in independence-promoting activities in economic and educational domains. Given the need to adapt to the socio-environments, the shift from Gemeinschaft to Gesellschaft moves cultural values from collectivism to individualism (e.g., Manago & Greenfield, 2011; Keller et al., 2006). The theory is bidirectional in that the environmental shift from Gesellschaft to Gemeinschaft predicts declining individualism and rising collectivism, although there is a lack of empirical research testing this reversal direction.

Kagitcibasi (2005) also recognizes economic development and urbanization as important phenomenon in altering cultural values. However, she conceptually distinguishes autonomy (as opposed to heteronomy) from separation (as opposed to relatedness) and proposes the family model of autonomy-relatedness for traditionally collectivistic societies undergoing social change. That is, decreased intergenerational material interdependency in the family indeed allows room for increased agency (autonomy), but intergenerational psychological interdependency remains (relatedness).

### **The Dissertation**

My dissertation is comprised of three interrelated studies that examine how social change may shape cultural values (Study 1, 2, 3), daily behaviors (Study 3), and parent-child relationship

characteristics (Study 3). I consider both Greenfield's (2009) and Kagitcibasi's (2005) theoretical perspectives on social change to examine whether traditional family obligation values decline (Greenfield, 2009) or remain strong (Kagitcibasi, 2005) in diverse sociocultural contexts that can be distinguished on relative rural-urban continuum.

In Study 1, I investigate how urbanization in South Korea (hereafter Korea) and immigration from urban Korea to an ethnic enclave in urban U.S. may shape cultural values across two generations. Korean children and mothers residing in rural Korea, urban Korea, and an ethnic enclave in urban U.S. are compared on their collectivism-individualism orientations regarding the family and the school contexts. I also utilize comparable European American data from the period in which my Korean American sample immigrated to the U.S.; this provides the cultural context of the host society into which the Korean families immigrated.

In Study 2, I use the publically available World Values Survey dataset to examine parental socialization goals around the world. I also cull data from World Bank Data Catalog to examine national socioeconomic indicators in addition to indicators of personal socioeconomic status within each nation. The main research question is whether indicators of socioeconomic development and mobility predict parental endorsement of child independence and obedience as socialization goals. The two goals represent facets of individualistic and collectivistic socialization, respectively.

In Study 3, I examine family obligation values in Vietnamese adolescents residing in three cultural contexts reminiscent of the research design in Study 1 (rural Vietnam, urban Vietnam, and urban U.S.). Compared to Korea, the rural-urban distinction is expected to be clearer in Vietnam, given that Vietnam is undergoing economically driven social change but without reaching the ceiling in urbanization, commercialization, and formal schooling. I also

explore implications of social change for the family dynamics concerning cultural value adaptations by examining whether adolescents in more Gesellschaft environments report more conflicts with parents arising from value discrepancies.

**Study 1: Sociodemographic Factors Influence Cultural Values: Comparing European American with Korean Mothers and Children in Three Settings - Rural Korea, Urban Korea, and Los Angeles**

Research has repeatedly shown that people from East Asian heritages are collectivistic—that is, they have strong family and group orientations—whereas those from Western Anglo nations are individualistic—that is, personal goals and desires take primacy. Comparing nations and comparing ethnic groups within a nation have yielded this same pattern of results (e.g., Chao & Tseng, 2002; Markus & Kitayama, 1991; Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000). Nevertheless, culture is a dynamic system, instead of stable and constrained to race, ethnicity, or nationality. Various components such as ecology, language, and political factors build upon each other in an ongoing cycle to mutually define and construct culture (Markus & Kitayama, 2010). As such, we must strive to understand how various components interact to shape characteristics of a given culture (Greenfield, 2009; Markus & Kitayama, 2010), which can then yield cultural differences when compared with another set of culture.

Sociodemographic factors are considered as a major force in shaping cultural values. Both Hofstede (1980, 2001) and Triandis (1993) have noted sociodemographic influences on individualism and collectivism at both the societal and individual level. Collectivistic values are adapted to a community that includes rural ecology, extended family residence, less importance of formal education, less development of technology, lesser wealth, and ethnic homogeneity. Individualistic values are adapted to an urban ecology with more emphasis on formal education,

nuclear family residence, complex technology, ethnic diversity, and greater wealth (Greenfield, 2009). Based on Tönnies (1957/1988), the first socioecology is labeled as *Gemeinschaft* (community) and the second *Gesellschaft* (society).

Given the role of sociodemographic factors in cultural values, it remains unclear whether the widely endorsed East-West differences are attributable to heritage cultural differences or variability in the sociodemographic contexts. To disentangle the two, research can examine those who share a common heritage background but live in different sociodemographic contexts such as: 1) country of origin versus immigrant-receiving country, and 2) rural versus urban settings. Research should also take into account specific sociodemographic characteristics of individuals within each sample. In this study of mothers and their 5<sup>th</sup> grade children, we focused on multigenerational versus nuclear family households, maternal education, and paternal occupation.

Within the urban environment, individualism may increase with age following the heightened demands for competition and achievement (e.g., Greenfield & Quiroz, 2013). Thus, it is important to also understand how cultural value orientation may be shaped by sociodemographic factors among young children as well as adults. By including both mothers and children in our sample, we introduced a way of understanding the transmission process on developing individuals. That is, mothers' values can provide an anchor towards which the children's values will move under maternal influence.

In addition, there have been increasing waves of migration and immigration in the world today (Suarez-Orozco & Sattin, 2007). The global direction of immigration and migration is from poorer to wealthier environments, from rural to urban environments, and from environments with less opportunity for formal education to environments with more opportunity

for formal education. This pattern of immigration can produce an environmental press on migrating populations in the individualistic direction (Greenfield & Quiroz, 2013; Raeff, Greenfield, & Quiroz, 2000). At the same time, ethnic enclaves can have Gemeinschaft characteristics of linguistic and cultural isolation. As such, residence in ethnic enclaves may prompt cultural freezing of collectivistic values, while their homelands experience cultural shift towards individualism as the environments are becoming wealthier, more educated, and more integrated with the world economy after their departure. The inclusion of contemporaneous samples from Korea and Koreatown in Los Angeles allows this issue to be explored.

Utilizing vignettes about interpersonal dilemmas in home and school situations, we examined 5<sup>th</sup> grade children's and mothers' inclination towards collectivistic versus individualistic resolutions. To consider the effect of sociodemographic factors, we recruited participants sharing Korean heritage cultural background but residing in three distinctive regions: rural Korea, urban Korea, and urban U.S. We also assessed the effect of individual sociodemographic factors, notably maternal education, paternal occupation, and family structure at the household level. To examine the role of heritage culture, we utilized European American data to make a comparison with the Korean samples. Importantly, because these data were collected at the time most of the families immigrated from Korea to the U.S., this sample also provided information about the dominant U.S. culture at the time of immigration for the Korean American sample. The notion was that this group provides benchmark values of the dominant host culture environment available for assimilation at the time of immigration. Value orientations were examined separately for the home and the school domains because schools may particularly emphasize individualistic socialization (Greenfield & Quiroz, 2013).

Our analyses were designed to test five hypotheses and to explore one research question.

**Hypothesis 1: Urban Koreans will be more individualistic than rural Koreans.** In the U.S. and the United Kingdom, urbanization has been associated with increasing individualism on the cultural level for two centuries (Greenfield, 2013).

**Hypothesis 2: Heritage value systems, represented by ethnicity, will lead to group differences in values.** Specifically, the three Korean groups (urban Korea, rural Korea, and Koreatown, Los Angeles) as a whole will have more collectivistic values in the home domain than the European American sample, whose values will be more individualistic. This is based on research showing that East Asian samples are more collectivistic than European American samples. Notably, Kim and Choi (1994) specifically applied this idea to maternal socialization in the early years of life.

**Hypothesis 3: The ethnic group differences in home values will be explained by sociodemographic factors: Multigenerational residence, maternal education, and paternal occupation.** Three-generation households will be associated with more collectivistic values. Higher maternal education and father occupation will be associated with more individualistic values. Three-generation family households manifest greater family unity and family-centered values, the most basic form of collectivism. In addition, in Korea, grandparents would have grown up in a more *Gemeinschaft* world in which family orientation had greater importance.

**Hypothesis 4: Values will be more individualistic in the school domain, more collectivistic in the home domain.** School is an intrinsically individualistic domain. Most centrally, grades are given to individuals rather than to groups. Therefore, there will be no ethnic-group or sociodemographic differences in the application of values to the school domain. Prior research using these same scenarios with a Latino immigrant sample, as well as our same European American sample, found more individualistic values expressed in response to school-

centered, compared with home-centered scenarios; no ethnic group differences were observed (Greenfield & Quiroz, 2013).

**Hypothesis 5: For developmental reasons, children of both Korean and European American ethnicity will be more collectivistic than their parents in both the home and school domain.** This prediction is based on findings concerning cooperation and competition, in which, across cultures, cooperative behavior emerges before competitive (Madsen, 1971). Using this same set of scenarios as the present study, Greenfield and Quiroz (2013) found that both Latino immigrant and the present sample of European American fifth-grade children were more collectivistic in their values than were their mothers.

**Research Question:** Will the Korean American sample, who immigrated from urban Korea, be different in values from the Korean sample in current urban Korea because of acculturation to the dominant U.S. culture of individualism (culture shift)? Or will their values be more collectivistic than the European American sample, representing the environment from which they immigrated (culture freezing)?

## **Method**

### **Participants**

Participants in our study were 115 5<sup>th</sup> grade children (30% rural Korean, 26% urban Korean, 27% Korean American, 17% European American) and 70 of their mothers (19% rural Korean, 30% urban Korean, 28% Korean American, 23% European American). We recruited rural Korean participants from two neighboring elementary schools in the county of Yang-Pyeong, which is known for farming and gardening. The urban Korean sample came from two local elementary schools in Incheon Metropolitan City, which is located adjacent to the capital of Korea, Seoul. Korean American participants were recruited from a summer program at a Korean

church in Los Angeles (in a neighborhood known as Koreatown). Korean churches in the U.S. function as an epicenter of the immigrant community, a situation that is reflected in 75-80% church membership among the Korean population in the U.S., compared with only 30% in Korea (Kim & Min, 2002); data were collected in 2009 and 2010. For the European American sample, we utilized a preexisting archived dataset (Raeff, Greenfield, & Quiroz, 2000; Greenfield & Quiroz, 2013) that was collected in 1994, which coincided with the average year of when the immigration took place for Korean American mothers in our study, providing mainstream values in the era of immigration. This European American group was part of the original sample for which the scenarios in the current study were designed (Raeff, Greenfield, & Quiroz, 2000; Greenfield & Quiroz, 2013).

Characteristics of the four groups are presented in Table 1.1. Mother's years of formal education was highest for European American ( $M = 16.33$ ,  $SD = 2.23$ ), followed by Korean American ( $M = 15.44$ ,  $SD = 1.94$ ), urban Korean ( $M = 14.43$ ,  $SD = 1.99$ ), and rural Korean ( $M = 14.20$ ,  $SD = 2.48$ ). 32% of rural Korean children lived in multigenerational households (i.e., at least one grandparent living in the household), while 20% urban Korean children, 21% Korean American children, and none of the European American children lived in multigenerational households.

## **Procedure**

Eight scenarios were presented to every participant individually. Each scenario introduced an interpersonal dilemma concerning collectivistic and individualistic ideas, and participants were asked 1) how to resolve each situation and 2) why that would be the best way to handle the situation. They were told that there were no right or wrong answers. All interviews were audio-recorded.



The procedure of individual interviews was modified for the rural Korean children, whose school personnel raised a concern about children's possible discomfort with being interviewed alone. Following the school's recommendation, we conducted a group interview for rural Korean children, but took steps to ensure procedural compatibility with the other groups where children were interviewed individually. First, rural Korean children were given paper copies of the scenarios and asked to prepare individual responses by jotting down their responses to each scenario. This allowed them the time to formulate individual responses while prevented them from changing responses when children gathered in a group later. Once rural Korean children prepared their responses, interviews were conducted in groups of three to four children. At this time, the scenarios were orally presented, and participants in the group took turns sharing the responses they had prepared. After the interview, we collected their written responses to compare with the audio-recorded interview responses, which ensured that none of the children changed their individually prepared responses while in the group setting.

Whereas all children were interviewed in person, mothers were interviewed in person or by telephone, whichever was more convenient and comfortable for them. 40% of mothers chose to be interviewed by telephone. By interviewing in the environment in which participants felt most comfortable, we gave priority to functional equivalence (familiarity and comfort with the medium) over stimulus matching (all interviews by phone or all interviews face-to-face; all interviews individually or all interviews in a group) (Greenfield & Quiroz, 2013; Greenfield & Zukow, 1978). In addition, mothers filled out a sociodemographic questionnaire. Mothers who did in-person interviews completed the form after responding to the scenarios. For mothers who were interviewed by telephone or did not participate in the interview, children took the form home to be filled out and returned it to school.

## Measures

**Interpersonal dilemma scenarios.** Eight hypothetical scenarios introducing dilemmas between collectivistic and individualistic ideas were used to assess participants' cultural value orientation. Four scenarios involved family members (e.g., two sisters are fighting over one T-shirt), and four scenarios dealt with school situations (e.g., two students want to work together and submit one poster for a class project that requires an individual submission). The scenarios had been previously used to examine the cultural value orientation of 5<sup>th</sup> grade children and parents from European American and Latino backgrounds (Raefl et al., 2000; Greenfield & Quiroz, 2013). Using the method of back translation, English scenarios were translated into Korean by three bilinguals. There were male and female versions of the scenarios and two scenario presentation orders. To prevent English versus Korean names priming Korean American participants' responses to the scenarios, we replaced names with initials in the scenarios that were administered to the Korean American group. Korean names were used in the scenarios given to the urban Korean and rural Korean samples, and English names were used for European American sample.

Participants' open responses to the scenarios were coded following the coding scheme developed by a multicultural research team in previous studies that used the same scenarios (Greenfield & Quiroz, 2013; Raefl et al., 2000). In the first training stage, two bilingual coders utilized some of the existing coded data of the European American sample from the previous studies to learn the coding scheme and practice coding. Utilizing the existing European American data and their original coding for the coding training also ensured that comparison could be reliably made between the European American and the Korean data in our study, since this was our source for the archived European American data for the current study. Once the

two coders went through an extensive practice period and felt comfortable with coding, they each coded another set of the existing European American data. Each coder achieved the inter-rater reliability with the original coding ( $Kappa = .95$  for the first coder;  $Kappa = .80$  for the second coder). Then in the actual coding stage, the two coders independently coded 33% of all Korean data in the current study and achieved the inter-rater reliability with each other ( $KAPPA = .85$ ); discrepancies were resolved by reaching consensus through discussion. Finally, the remainder of the Korean data was equally split for coding between the two coders.

For each scenario, we had categories that captured the central themes of the responses based on both participants' decision (i.e., what they would do) and justification (i.e., why they would do that) towards the dilemma. These categories were further classified as individualistic, collectivistic, or mixture of the two. Scores were assigned to each of the eight scenarios (0 = individualistic; 0.5 = mixture; 1 = collectivistic), then scores were added across the four family and four school scenarios to produce two final cultural value orientation composite scores (range = 0-4) where higher scores represented more collectivistic orientation. We were not concerned about item internal consistency as we were not interested in creating homogeneous scales. Instead, we intended to find out in how many home situations and school situations participants would select collectivistic versus individualistic solutions to interpersonal dilemmas. Examples of the family domain and the school domain dilemmas are as follows:

*Family domain:* "A" and "B" are sisters. They both got \$20 from their mother. "A" bought a T-shirt with the money. A week later, "B" wants to wear "A"'s T-shirt. "A" says, "This is my T-shirt and I bought it with my own money". "B" says, "But you're not using it right now".

*School domain:* A class of fifth grade students is working on posters in their art class. Next week some teachers will come to select five posters for an art show. Then, one poster will be chosen for a \$50 prize. "A" and "B" realize that they have some similar ideas for a really neat

poster, and they want to work together.

For instance, to the family domain scenario shown above, a participant responded, *“Since she’s just trying to borrow, not keep it... since they are sisters, it would be good if they helped each other and shared.”* This response fit one of the thematic categories, “Share; sisters,” which was subsequently coded as collectivistic and given a score of 1. Another participant said, *“Even if ‘B’ wants to wear it, it’s ‘A’’s T-Shirt... even though they are family members, that’s not quite right. ‘B’ can use her money to borrow ‘A’’s T-shirt”.* This was classified as “Protect private property” and coded as individualistic and given a score of 0. Responses were coded as mixture when they had both collectivistic and individualistic themes (e.g., Tell them to share because sisters should share, but they should first have a conversation since the shirt is one person’s property).

To the school domain scenario presented above, a participant said, *“Of course I will let them do that. Besides prizes and other things, if two children have the same idea, they will produce a good poster”*, which was coded as “Together; better final project.” Given its implication that working together for one better outcome was desirable, this theme was coded collectivistic and assigned a score of 1. Another participant responded, *“They want to do it together? But I think it’s better to do it individually. Even if they have similar ideas, they have unique ways of portraying those ideas, so I don’t think they will produce the same exact pictures.”* This response emphasizing uniqueness of individuals and individual achievement belonged to “separately; individual achievement” was coded “individualistic” and received a score of 0.

**Family sociodemographics.** On a sociodemographic form or in a telephone interview (the European American sample), mothers were asked to report the highest education level they attained, entered as the number of years they received education. They were also asked

about household composition.

Father's occupation was also part of the interview or form. This information was used as an index of family socioeconomic standing by converting each occupation into a score using an existing scale (Nam & Boyd, 2004). The scores are based on the calculation that uses the combination of income level of the occupation and the education required for the occupation. The score ranges from 1 to 100 for 975 different occupations (e.g. dishwasher = 1, surgeon = 100). Three coders were involved in the occupation scoring and ensured the reliability by reaching 100% consensus. Since many mothers did not work outside the home, only father's occupation score was meaningful; father's occupation score was used as a family socioeconomic status indicator.

### **Data Analyses**

Our main analytic tools were analyses of variance and covariance. Urban-rural residence was the independent variable in a model comparing the urban and rural Korean samples. Ethnicity and generation served as the independent variables in the second model comparing the three Korean groups with the European American group. Each model was utilized twice, once with individualism-collectivism score in the home domain as dependent variable and once with individualism-collectivism in the school domain dependent variable. Our analyses of covariance used three-generational household, maternal education, and father's occupation as the covariates.

Given that 40% of children participated without their mothers, we did not run paired-samples tests. In fact, when we examined the bivariate associations between the child and the mother for participating pairs, we did not find a significant association for the cultural value orientation scores between the child and the mother, either for the home domain or for the school

domain. In addition, there was no effect of gender and scenario order. However, we did use a paired-samples t-test to compare individualism-collectivism scores on the home and school scenarios.

## **Results**

**Hypothesis 1: Urban Koreans will be more individualistic than rural Koreans in the family domain.** This hypothesis was not confirmed; an analysis of variance showed no significant difference.

**Hypothesis 2: Heritage value systems, represented by ethnicity, will lead to group differences in values in the family domain.** Specifically, the three Korean groups (urban Korea, rural Korea, and Koreatown, Los Angeles) as a whole will have more collectivistic values in the family domain than the European American sample, whose values will be more individualistic. To test this hypothesis, we conducted a one-way analyses of variance, where participants' ethnic group (Korean or European American) was entered as the independent value for their cultural value orientation in the home.

The one-way analysis of variance yielded a main effect for ethnic group on the home domain cultural value orientation score,  $F(1, 179) = 10.044, p = .002$ . As hypothesized, the three Korean ethnic groups as a whole were significantly more collectivistic in the home domain ( $M = 2.34, SD = .94$ ) than the European American ethnic group ( $M = 1.77, SD = 1.02$ ). The main effect of generation was also significant,  $F(1, 175) = 64.27, p < .001$ , such that children were more collectivistic ( $M = 2.62, SD = 0.82$ ) than mothers ( $M = 1.58, SD = 0.88$ ). There was no significant interaction effect.

**Hypothesis 3: The ethnic group differences in home values will be explained by sociodemographic factors.** Three-generation households will be associated with more

collectivistic values. Higher maternal education will be associated with more individualistic values. The two parts of this hypothesis were both confirmed an analysis of covariance. Once the covariates of multigenerational residence and maternal education were entered into the two-way analysis of variance already described, the effect of ethnicity was no longer significant.

The covariate of three-generation residence was significant at the .012 level, with almost one-fourth of Korean ethnic families across the three Korean groups living in three-generational households, compared with none of the European American families. Indeed, a series of t-tests showed that three-generation households were significantly higher in each of the three Korean ethnic groups, in comparison with the European American group, which had zero extended family households. (European American vs. Korean American,  $M = 20\%$ ,  $SD = 40\%$ ,  $t = 3.31$ ,  $p = .001$  [one-tailed, equal variances not assumed]; European American vs. Urban Korean,  $M = 18\%$ ,  $SD = 39\%$ ,  $t = 3.29$ ,  $p = .001$  [one-tailed, equal variances not assumed]; European American vs. Rural Korean,  $M = 32\%$ ,  $SD = 47\%$ ,  $t = 4.64$ ,  $p = .000$ ). In short, collectivism was higher in three-generation households, compared with two-generation households; and each of the ethnic Korean groups had a significantly higher rate of three-generation households than the European American sample, which had none.

The covariate of maternal education was significant at the .014 level, with higher maternal education associated with greater individualism. The average educational level of the more collectivistic Korean groups was two years of post-secondary education; the average educational level of the more individualistic European American group was four years of post-secondary education. Contrary to the hypothesis, father's occupation was not a significant covariate and was excluded in the final model.

**Hypothesis 4: Values will be more individualistic in the school domain, more collectivistic in the home domain; there will be no group differences in school domain.**

Combining the four groups, this hypothesis was confirmed by a repeated measures analysis of variance. As hypothesized, there was significantly greater collectivism in the home domain ( $M = 2.23$ ,  $SD = .98$ ) and greater individualism in the school domain ( $M = 1.87$ ,  $SD = .80$ ) ( $F(1, 182) = 16.38$ ,  $p < .001$ ). When we isolated the school domain, an analysis of variance indicates that, as predicted, there was neither a significant ethnic group difference nor a significant generational difference in values in the school domain.

**Hypothesis 5: For developmental reasons, children will be more collectivistic than their parents across both domains.** This hypothesis was confirmed by a one-way analysis of variance. Children across both ethnic groups were significantly more collectivistic ( $M = 4.51$ ,  $SD = 1.16$ ) than the mothers ( $M = 3.41$ ,  $SD = 1.29$ ) ( $F [1, 181] = 35.22$ ,  $p < .001$ ). Generation remained significant at the  $< .001$  level even after entering extended family residence and maternal education as covariates ( $F [1, 139] = 37.31$ ).

**Questions:** Will the Korean American sample, who immigrated from urban Korea, be different in values from the Korean sample in current urban Korea because of acculturation to the dominant U.S. culture of individualism (culture shift)? A t-test indicated no significant difference between these two groups.

Or will their values be more collectivistic than the European American sample, representing the environment from which they immigrated (culture maintenance)? A t-test answered this question in the affirmative: Korean Americans were significantly more collectivistic ( $M = 1.77$ ,  $SD = 1.03$ ) than European Americans ( $M = 2.43$ ,  $SD = .91$ ) in the family domain, supporting the notion of culture freezing rather than assimilation.



## **Discussion**

We attempted to disentangle the effects of sociodemographic factors and heritage culture on value orientations in home and school situations. Utilizing vignettes about interpersonal dilemmas, we examined mothers' and children's inclination towards collectivistic versus individualistic resolutions. In general, ethnic Koreans were more collectivistic than European Americans in family situations. This effect of heritage culture was removed by the effect of two sociodemographic factors: higher maternal education and three-generation households. The European American mothers had two years more education than the ethnic Korean mothers, on the average. All the European American families lived in nuclear family households; in contrast almost one-quarter of ethnic Koreans lived in three-generation households. In short, the group difference between European Americans and ethnic Koreans seemed to have occurred because the European American mothers were more highly educated than the other groups and, in addition, there were no grandparents living in their households. Together, our findings indicate that sociodemographic factors are meaningful determinants of socialization values beyond ethnic and heritage cultural differences.

For values in the school domain, there were no ethnic group differences or generational difference. It appeared that all groups found individualistic values to be adaptive in the school domain. Across ethnic groups, in both home and school domains, children were more collectivistic than mothers. This finding suggests that the development of social cognition creates more individualism with age (Greenfield & Quiroz, 2013). As predicted, across generations, participants responded more individualistically to school situations than home situations.

In terms of the non-significant difference between rural and urban Koreans, it may be that

collectivism is maintained in urban Korea to a certain extent (Kagitcibasi, 2005). However, the notion of cultural maintenance is not as likely in the case of our urban Korean sample, who did not differ from European American sample in cultural value orientation scores. Alternatively, it is possible that the relatively *Gesellschaft* environment in which rural Koreans resided washed out the effect of urbanization. Their town had advanced technology in its school and exposure to some ethnic diversity – a Latino from the U.S. was the children’s English teacher. Thus, their ecology, albeit rural, included other individualizing sociodemographic elements. These factors may have compensated for their less urban environment, yielding no difference from the urban Korean sample. Future research should investigate cultural values of urban and rural residents in less developed Asian nations in order to address this issue.

Having at least one grandparent in the household seems to be a strong vehicle for reinforcing and maintaining traditional cultural values that are more collectivistic, as grandparents likely contribute to child socialization and overall dynamic of the family (Bengtson, 2001; Silverstein, Cong, & Li, 2006). The implications of grandparents’ roles in child socialization and family dynamics may be even more crucial in rapidly changing sociocultural contexts such as Korea, as there would be sizeable generational gaps between grandparents and parents who both aim to reinforce cultural values for children in their household. Grandparents, who grew up in a less urban, wealthy, educated, and technological world may represent the more collectivistic childrearing described in the 1990s (Kim & Choi, 1994).

Formal schooling, which is often accompanied by urbanization and globalization (Greenfield, 2009), is a powerful pathway through which individuals are socialized to become more individualistic. While it is not surprising that we found the association between mother’s education level and more individualistic values, our study adds to the literature by

showing that mother's education level is an influence that may eventually converge East-West value differences. The role of school as an individualizer is further supported by the fact that all groups preferred more individualistic resolutions in the school situations compared to the home situations.

Utilizing the four-group design, our study provides a meaningful way of disentangling the effect of sociodemographic factors central to global social change from the effect of heritage culture on cultural values and human development. Our findings imply that formal education and nuclear family households make cultural values more individualistic and that these sociodemographic factors drive differences in cultural values across ethnic groups. The major weakness in our design is that the European American sample was assessed about 15 years before the Korean samples. This was an advantage for the comparison with the Korean American immigrants as that sample represents the environment into which they immigrated. However, on the negative side, it meant that the ethnic Korean group included members tested in different time periods. Most likely the ethnic difference in cultural values would be larger if the European American sample had been more recent, for recent research has shown that individualism has climbed steadily in the U.S. up through 2010 (Park, Twenge, & Greenfield, 2013). Therefore, our findings are a conservative estimate of the ethnic group difference. Most important, they have implications for the role of social change in the era of globalization when rapid movement towards formal education and nuclear family households is taking place worldwide.

Table 1.1.

*Sample Characteristics*

Variables	Rural Korean	Urban Korean	Korean American	European American
Child gender	38% female	53% female	60% female	45% female
Mother's education	14.20 (2.48)	14.43 (1.99)	15.44 (1.94)	16.33 (2.23)
Father's occupation	38.28 (23.06)	56.21 (23.89)	59.23 (27.73)	75.73 (23.48)
Multigenerational household	32%	20%	21%	0%

Table 1.2.

*Sociodemographic Factors and Cultural Group Predicting Home Cultural Value Orientation*

Variables	df	<i>F</i>	<i>p</i>
Multigenerational household	1,136	7.02	.009
Mother's education level	1,136	8.93	.003
Generation	1,136	56.41	<.001
Cultural group	3,136	2.27	.084

## **Study 2: Parental Valuation of Child Independence and Obedience Around the World**

Around the world, children's socializing environments continue to shift towards more urbanized, educated, and wealthier sociodemographic settings (Greenfield, 2009). At the family level, social class is related to parenting: child-centered parenting is common in middle-class families, whereas working-class parents issue directives to their children (Lareau, 2002, 2011). But to what extent does societal economic climate shape child socialization? Is it one's social class or national socioeconomic standing that explains greater variance in parenting priorities around the world? Aggregating multiple datasets to include parents from five cohorts (1981-2008) and 90 nations, we examined the link between socioeconomic characteristics and parental valuation of child *independence* and *obedience* at national level and family level. In addition, we explored whether the extent to which parents valued *independence* and *obedience* changed across cohorts (1981-2008) as a function of national socioeconomic characteristics.

### **Pathways of Development and Parental Valuation of Child Independence and Obedience**

In socializing their children, parents around the world aim to cultivate values and behavior governing the society (Super & Harkness, 1986; Quinn, 2005), but there are cultural variations in which values take priority (Greenfield, Keller, Fuligni & Maynard, 2003; Quinn, 2005). The models of independence and interdependence have provided a theoretical framework to consider variations in developmental pathways. The developmental pathway of independence is thought to emphasize achieving personal autonomy and individual goals, based on the understanding of self as independent from others (Greenfield et al., 2003; Heine, 2008; Keller et al., 2006; Markus & Kitayama, 1991). By contrast, the developmental pathway of interdependence tends to focus on cultivating relatedness and collectivism, such as prioritizing

group goals over personal goals; the self is construed in the context of others and one's group (Greenfield et al., 2003; Keller et al., 2006; Heine, 2008; Markus & Kitayama, 1991).

In the current study, we examine parental valuation of *independence* and *obedience* as child socialization goals. The socialization goal of *independence* is akin to the developmental pathway of independence, and the goal of *obedience* relates to the interdependence pathway. Importantly, the item choice of *obedience* helps to address concerns regarding the overgeneralization of the term interdependence. Scholars have asserted that general relationality is often erroneously conflated with the broad term interdependence, when it is a specific dimension of relationality that seems to discriminate different cultures: the duty to subordinate personal goals to group goals, or vertical collectivism (Cross, Bacon & Morris, 2000; Fernández, Paez, & González, 2005; Oyserman, Coon, & Kemmelmeier, 2002; Triandis & Gelfand, 1998).

In parental socialization, the cultivation of duty in interdependence may be observed in the valuation of child *obedience* (Park, Coello, & Lau, in press). Indeed, interdependence-promoting infant practice (e.g., bodily proximity and body stimulation) is found in societies where obedience and hierarchy are emphasized during childhood (Keller, 2007; Keller et al., 2005; Keller et al., 2006). Prospective data also show that experience of proximal parenting in infancy is associated with the development of compliance among toddlers, such as the ability to inhibit a rewarding but forbidden act (Keller et al., 2004). These findings suggest that interdependence-promoting parenting may highlight obedience, hierarchy, and compliance beginning early in development. Therefore, our selection of *obedience* as a parental goal provides us one way to examine parents' inclination towards the interdependent developmental pathway.

On the contrary, independence-oriented societies such as industrialized Western nations (Keller et al., 2006) encourage children's engagement in exploration away from caregivers and movement towards autonomy (Gonzalez-Mena & Eyer, 2009; Greenfield et al., 2003). In these social contexts, positive development is often evinced by self-assertion and self-enhancement (Greenfield et al., 2003; Keller et al., 2006). Parents who display high levels of directiveness and solicitation during parent-child interactions may be viewed as controlling and thwarting children's learning and achievement of self-regulation (e.g., Landry, Smith & Swank, 2003; Rubin, Cheah, & Fox, 2001); in interdependence-promoting cultures, the same caregivers may be viewed as practicing appropriate parenting to foster obedience, respect, and competence in children (Bugental & Grusec, 1998; Chao & Tseng, 2002; Rudy & Grusec, 2006). Thus, we examined *independence* as a parental goal embedded in the independent parenting model.

### **Theoretical Perspectives on Consequences of Economically Driven Social Change in Families**

Developmental emphasis in socialization can shift when environmental change is introduced, given that culture is dynamically constructed based on human interactions with the surrounding context (Markus & Kitayama, 2010). With economically driven social change, Greenfield (2009) theorizes declines in interdependence and rises in independence. Kağıtçıbaşı (2005, 2013) proposes a hybrid family model, which suggests maintenance of interdependence despite rises in independence. They commonly point to the relevance of social change in autonomy promotion, but the two perspectives differ in whether the rising emphasis on independence and autonomy should be coupled with declines in one's sense of group membership and relatedness.



Specifically, Greenfield (2009) contends that sociodemographics drive cultural values as people make ecological adaptations: in a rural community with little economic and educational development, parents may emphasize group solidarity and obligatory social roles to meet communal needs in face-to-face interactions. By contrast, parents in an urban environment with formal schooling and commercial economies encourage children to participate in independent pursuits and compete in educational and economic realms. According to this perspective, socioeconomic indicators should be linked to valuing more *independence* and less *obedience*.

Kağıtçıbaşı (2005, 2013) also recognizes economic development as crucial in determining value priorities, but she conceptualizes autonomy as a separate dimension from relatedness. In her alternative model for traditionally collectivistic societies undergoing social change, she asserts that decreased intergenerational material interdependency in the family allows room for more autonomy, yet intergenerational psychological interdependency remains. According to this view, valuation of *independence* and *obedience* may not respond to socioeconomic climates in opposite directions. We reflect on both Greenfield's (2009) and Kağıtçıbaşı's (2005, 2013) models as we investigate how family and national socioeconomic characteristics relate to parental valuation of child *independence* and *obedience*. We examine the two goals separately, as we do not presuppose high *independence* should mean low *obedience*.

### **Linking Socioeconomic Characteristics and Parental Values: Family and National Levels**

Even outside Western Anglo cultures, socioeconomic indicators appear to be linked to independence-cultivating parenting. Keller et al. (2006) found that urban, educated Indian and Chinese mothers endorsed autonomy goals (e.g., development of self-confidence and early self-regulation during infancy) in a manner similar to mothers from traditionally independent nations (e.g., German and European American). In another study, higher maternal education was

associated with more independence-promoting parenting and less interdependence-promoting proximal parenting (Keller et al., 2009). The link between family socioeconomic status and independence orientation was also demonstrated in Chinese adolescents, for whom family affluence and parental education predicted independent self-construal on a variety of self-report, social-cognitive, perceptual, and behavioral tasks (Hamamura, Xu, & Du, 2012).

In fact, socioeconomic characteristics may discriminate parenting priorities beyond differences in race and ethnicity, which are more typically considered as cultural factors. Based on home observations and interviews with white and black families, Lareau (2002, 2011) noted that the logic of parenting seems to be driven by family socioeconomic differences beyond race. According to the researcher, middle-class parents placed children in child-centered organized activities and used talking as a disciplinary strategy, which are thought to cultivate individualism within the family and emphasize children's performance. By contrast, working-class parents used less verbal speech and issued more directives to their children, rather than focusing on developing special talents for their individual children.

Such salient distinctions based on social class bolsters the notion that socioeconomic characteristics should receive more attention as determinants for societal and cultural priorities shaping parenting and child socialization. Socioeconomic conditions are often treated as individual or family factors affecting family stress and functioning (e.g., Conger et al., 1992, 1993; Conger, Rueter, & Conger, 2000). When studied in relation to parental values, research both within and outside Western nations has focused on family socioeconomic factors. As such, less is known about whether and how socialization is shaped by socioeconomic characteristics, especially at the societal level (Child Trends, 2013). Is it one's social class within the nation or

national socioeconomic standing in the globe that differentiate parenting priorities? How do families in wealthy versus poor nations differ in parental values?

Research that includes multiple historical time points shed some light on whether societal socioeconomic conditions may precipitate changes towards increased independence and decreased interdependence. In their cohort analyses of U.S. high school seniors from the 1970s to the 2010s, Park et al. (2014) found high self-orientation and low group-orientation among adolescents in times of national economic prosperity. Hamamura (2012) culled data from multiple sources and reported robust increases in individualism and some declines in collectivism in the U.S. and Japan from the 1960s to the 2010s; the trends corresponded with national data evincing economic growth and urbanization and declines in household size both in the U.S. and Japan. In China, previously favored interdependence-oriented social goals may be losing relevance in the era of market economy. Shyness is consonant with hierarchical collectivistic values of deference and humility, and it was associated with positive social adjustment for children in the late 1980's and early 1990's (Chen et al, 1998). But by the early 2000's, shyness correlated with poor social functioning in urban China as it was in North America. Bolstering the interpretation that economic growth and urbanization might have influenced cultural values in child attributes, shyness remained linked to positive adjustment in rural China (Chen, Cen, Li, & He, 2005; Chen, Wang, & Wang, 2009).

Nevertheless, these studies are limited to one or a few nations and cannot capture global trends. There also needs to be a focused investigation on how national socioeconomic climates may guide child socialization in families specifically (Child Trends, 2013). The current study captured parental values across five cohorts (1981-2008) and 90 nations, including many developing nations underrepresented in scholarship. The link between socioeconomic

characteristics and parental valuation of child *independence* and *obedience* were examined both at national level and family level.

### **Time Trends by National Socioeconomic Characteristics**

Investigating overall time trends by socioeconomic characteristics may help to explain discrepancies in research concerning the consequences of social change—that is, whether value change following economic development occurs uniformly or unevenly across cultures.

Particularly, views differ on as to what extent developing nations follow the high-independence and low-interdependence value trajectory of developed nations (e.g., Greenfield, 2009; Inglehart & Baker, 2000; Kağıtçıbaşı, 2005, 2013). One possible reason for the divergence is the role of other societal factors in shaping values (Hamamura, 2012; Inglehart & Baker, 2000; Markus & Kitayama, 2010). Certainly, during the data collection period (1981-2008), societal changes took place around the world including but not limited to socioeconomic shifts. Thus, in addition to investigating the direct link between socioeconomic characteristics and parental values, we explored the overall effect of time on parental valuation of child *independence* and *obedience* as a function of national socioeconomic characteristics. Has the extent to which parents valued *independence* and *obedience* changed across cohorts (1981-2008) as a function of national socioeconomic characteristics? Has the degree of difference in valuation of *independence* and *obedience* remained the same between developing and developed nations?

### **The Current Study**

The current study captured parental values across five study waves (1981-2008) and 90 nations to understand parental valuation of child *independence* and *obedience* in relation to national and family socioeconomic characteristics, with parental birth cohorts spanning over 100 years. First, we hypothesized that socioeconomic characteristics will predict parental goals for

child socialization both at national and individual levels. Specifically, we hypothesized that national indicators of higher socioeconomic standing (higher gross national income [GNI] per capita, post-secondary school enrollment %, urban population %) and individual indicators of socioeconomic status (higher family income and education levels) will be associated with higher valuation of *independence* and lower valuation of *obedience*. Second, we explored the overall effect of time on parental goals. We examined whether popularity of child *independence* and *obedience* differed over time as a function of national socioeconomic characteristics. We hypothesized that the effect of time (high *independence* and low *obedience*) would be stronger in less developed nations, given that there would be more room for overall societal and cultural change.

## **Method**

### **Data**

Data on parents' valuation of child goals and their socioeconomic status were obtained from aggregating the European Values Study (EVS, 2011) and the World Values Survey (WVS, 2009). EVS and WVS are two large-scale, cross-national, and multi-wave surveys that provide wave-aggregate data for public downloads. EVS and WVS include many overlapping survey questions with some nation- and wave-specific items, and they have an agreement to harmonize variables and data on a basis of a common dictionary. To merge wave-aggregate EVS data and wave-aggregate WVS data, we followed the official protocol based on their global data dictionary and common recoding of variables that ensured compatibility (Inglehart, Basanez, Diez-Medrano, Halman, & Luijkx, 2004). It resulted in a single dataset that included EVS and WVS data collected over five study waves (Wave 1: 1981-1984, Wave 2: 1989-1993, Wave 3: 1994-1998, Wave 4: 1999-2004, and Wave 5: 2005-2008). Nations varied in the number of

study waves in which they participated; on average, nations participated in 3 waves. All nations were included in the analyses to represent the global trend.

Within each data collection period, stratified random sampling was used to draw a representative national sample of adults aged 18 years and older. Regional sampling points (e.g., census units, election sections) were randomly selected within each nation, taking into account the population size and the degree of urbanization of the primary sampling units. Principal investigators from participating nations worked together to formulate and agree upon the survey and sampling procedures, which were monitored during check-ins throughout the data collection. Internal consistency checks and rigorous data cleaning procedures were also carried out before the archived data were made available to public. In our study, we excluded non-parents from our study sample (42.94%), based on their responses to an item asking “how many children do you have?”; respondents were excluded if they reported having no children.

National socioeconomic data were drawn from the World Bank Data Catalog. We culled national indicators of wealth (GNI per capita), education (% post-secondary enrollment), and urbanization (% urban population), matching on each nation and data collection year for respondents in the EVS/WVS aggregate data (e.g., urban population in South Africa was 49% in 1982 [Wave 1], 52% in 1990 [Wave 2], 55% in 1996 [Wave 3], 57% in 2001 [Wave 4], and 60% in 2006 [Wave 5]). The national socioeconomic dataset from the World Bank was then merged with our EVS/WVS aggregate dataset of parents to yield a two-level dataset where parents (Level 1) were nested within nations (Level 2). That is, all participating parents from a nation in a given study wave were assigned the same Level 2 national socioeconomic data of the survey year (e.g., 2,061 South African parents who participated in Wave 5 were assigned 60% for their national urban population % variable). Our final dataset included 227,431 parents (54.94%

mothers) from 90 nations, with sample sizes for analyses ranging from 114,058 to 227,431 parents and from 75 to 90 nations due to listwise deletion of missing data.

### **Outcome Variables: Parental Valuation of Child Independence and Obedience.**

Participants were presented with a list of “*qualities which children can be encouraged to learn at home*” and asked to choose up to five qualities that they considered most important. Our study sample was limited to parents who selected between one to five goals (5.86% of respondents across waves were excluded because they selected no socialization goals or more than five goals). For the purpose of this study, we examined and coded participants’ selection of *independence* and *obedience* at the nation level (national endorsement percentage of each goal) and individual level (whether or not a parent selected each goal). For the nation-level coding, we calculated each nation’s percentage of parents who endorsed *independence* and *obedience* as important child qualities in each study wave (e.g., in Wave 4, 61.50% of the U.S. parents who participated in the study endorsed *independence*). At the individual level, *independence* and *obedience* was each coded as a binary variable (0 = *not endorsed*; 1 = *endorsed*).

### **Nation-level Socioeconomic Indicators**

**Gross national income (GNI) per capita.** GNI per capita came from the World Bank Data Catalog that used the Atlas method for conversion. GNI per capita is the gross national income divided by the midyear population. Using the Atlas method, the World Bank converts GNI per capita in national currency to U.S. dollars at the official average exchange rates for that year, with additional calculations to handle inflation for comparison across economies. The method reduces the impact of exchange rate fluctuations in the cross-country comparison by taking into consideration each nation’s exchange rates for the two preceding years, rate of inflation in the country, and international inflation.

Raw GNI per capita data culled for the nations in our study ranged from \$210 to \$85,560 and showed positive skewness. Thus, we performed a logarithmic data transformation (Howell, 2007; Tabachnick & Fidell, 2007), which resulted in the transformed GNI per capita index that ranged from 2.32 (\$210) to 4.93 (\$85,560). The log transformation of GNI was also needed for meaningful interpretation of coefficients in our data analyses. The unit of raw GNI is \$1, thus using raw GNI would have meant that we expected a linear relationship between raw GNI and our outcome variables (every \$1 makes a difference in whether or not *independence/obedience* is valued). This did not make conceptual sense given our use of GNI as an index for national variations in economic standing. Data transformation allowed us to interpret that every log of GNI (e.g., going from \$100 to \$1000) was associated with our outcome variables. We confirmed in our data analyses that using raw GNI and log GNI did not change our findings.

**Post-secondary education enrollment.** Gross enrollment ratio for post-secondary education was used as an index of the penetration of higher education at the population level across nations. This statistic was the percentage of people who went on to receive post-secondary education within five years of completing secondary school, regardless of age.

**Urban population.** The degree of urbanization was assessed as an index of modernization at the nation level. The index was the percentage of the population living in urban areas as defined by national statistical offices.

### **Person-level Socioeconomic Indicators**

**Household income.** Participants were asked to indicate their annual household income by selecting an income band that corresponded from a 10-point scale of income levels in their nation (1 = *lowest income decile*; 10 = *highest income decile*).



**Education level.** Participants were asked to report the highest educational level they attained by selecting one of the eight options: 1 = *some elementary education*; 2 = *completed elementary education*; 3 = *some technical/vocational type secondary school*; 4 = *completed technical/vocational type secondary school*; 5 = *some university-preparatory type secondary school*; 6 = *completed university-preparatory type secondary school*; 7 = *some university/higher education*; 8 = *completed university/higher education*.

### **Cohort Variables**

Participants were assigned to a birth cohort based on their birth year (range = 1886-1988) irrespective of the study wave in which they participated. The birth cohort variable ranged from 1 (born in 1880-1889) to 11 (born in 1980-1989) yielding a 100 year span. In addition, the study wave indexed the historical time of participant responses. It corresponded to following years: Wave 1: 1981-1984, Wave 2: 1989-1993, Wave 3: 1994-1998, Wave 4: 1999-2004, and Wave 5: 2005-2008.

### **Results**

Table 2.1 shows the sample size and demographic characteristics in each study wave. There was a wide range in socioeconomic characteristics both at nation- and person-levels. Birth cohort spanned across over 100 years, and gender of participants was relatively evenly distributed across the waves. Table 2.2 shows the general distribution pattern of endorsing *independence* and *obedience*. Overall, *independence* (43.81%) was more frequently endorsed than *obedience* (36.09%). The frequency of endorsing *independence* but not *obedience* (33.60%) was also higher than the frequency of endorsing *obedience* but not *independence* (25.88%). There was relatively infrequent joint endorsement of both goals (10.21%).

All analyses were performed with STATA version 12 (StataCorp, 2011), which was suitable for handling large complex survey datasets nested data structures. To test our first research hypothesis that socioeconomic characteristics would predict valuation of *independence* and *obedience*, we estimated multilevel mixed regression models where socioeconomic characteristics were entered as predictors of parental endorsement of *independence* and *obedience*. The outcome variables of parental values were examined both as the national (i.e., national popularity of each goal) and personal (i.e., whether or not a parent values each goal) indicators.

### **National Popularity of Child Independence and Obedience**

First, we focused solely on the national analysis, where national socioeconomic characteristics (GNI per capita, % post-secondary school enrollment, % urban population) predicted national endorsement percentage of *independence* and *obedience*. That is, the unit of analysis for our outcome variables was the percentage of national population in a given year that endorsed *independence* and *obedience* as parenting goals for their children. Separate models were run for the three national sociodemographic indicators, because we were interested in understanding how each national indicator individually predicted national patterns of child socialization. Study wave (1-5) was included as a control variable to account for the variability in which nations participated across waves. Given that there were multiple data points for the 90 nations in our study, we conducted these analyses as 2-level multilevel models, where observations from different waves at Level 1 were nested within nations at Level 2.

In line with our hypothesis, multilevel regression analyses revealed that higher national socioeconomic standing predicted higher national valuation of *independence* and lower national valuation of *obedience* as child socialization goals, controlling for study wave (Table 2.3).

Specifically, national endorsement % of *independence* was positively associated with GNI per capita ( $b = 7.33, SE = 2.46, p = .003$ ) and post-secondary school enrollment % ( $b = 1.69, SE = .76, p = .026$ ). By contrast, national endorsement % of *obedience* was negatively associated with GNI per capita ( $b = -9.25, SE = 2.08, p < .001$ ), post-secondary school enrollment % ( $b = -2.37, SE = .59, p < .001$ ), and urban population % ( $b = -3.10, SE = .69, p < .001$ ). These results are also illustrated as scatterplots in Figure 2.1 (*independence*) and Figure 2.2 (*obedience*).

### **Personal Endorsement of Child Independence and Obedience**

To test our hypothesis that personal endorsement of child *independence* and *obedience* would be predicted by national socioeconomic characteristics, and also by one's social class within a nation, we employed multilevel mixed-effects logistic regression. The model was designed to nest individuals within nations, as well as fit binary responses; outcome variable was now whether or not a parent endorsed each goal, not national endorsement rate. At Level 1, group mean centered person-level socioeconomic indicators (household income, education level) were modeled. That is, household income and education level were centered within each nation and each wave. At Level 2, we modeled national socioeconomic characteristics (GNI per capita, % post-secondary school enrollment, % urban population). Given that EVS/WVS data were collected from different individuals across five time periods, study wave was treated as a person-level variable and modeled at Level 1, along with birth cohort. The person-level analysis was based on a subsample of 114,058 parents from 75 nations (55.24% of the full sample from 90 nations) because of missing data in the person-level variables.

Table 2.4 presents results from the multilevel mixed-effects logistic regression models. In line with our hypothesis, parents were more likely to endorse child *independence* if they had higher annual household income ( $b = .05, SE = .003, p < .001$ ), attained higher formal education

( $b = .09$ ,  $SE = .003$ ,  $p < .001$ ), and were born in later decades ( $b = .08$ ,  $SE = .005$ ,  $p < .001$ ). By contrast, also as hypothesized, parents were more likely to value child *obedience* if they had lower household income ( $b = -.05$ ,  $SE = .003$ ,  $p < .001$ ) and attained less formal education ( $b = -.12$ ,  $SE = .004$ ,  $p < .001$ ). But contrary to our hypothesis, parents were more likely to value obedience if they were born in later, not earlier, decades ( $b = .01$ ,  $SE = .005$ ,  $p = .043$ ).

Whereas one's own socioeconomic standing within a nation (household income, education level) always predicted his/her likelihood of endorsing *independence* and *obedience*, national socioeconomic standing (GNI per capita, % post-secondary school enrollment, % urban population) infrequently predicted one's valuation of *independence* and *obedience*. The only national socioeconomic characteristic that predicted one's endorsement of child *independence* was % post-secondary school enrollment ( $b = .30$ ,  $SE = .04$ ,  $p < .001$ ). For *obedience*, it was only % urban population that predicted a parent's likelihood of the goal endorsement ( $b = -.17$ ,  $SE = .07$ ,  $p = .012$ ). As such, one's social class within a nation was a stronger predictor of his/her valuation of child independence and obedience than one's residence nations of certain socioeconomic standing. Study wave and parent gender were controlled for in the analyses.

### **Time Effects on Goal Endorsement as a Function of National Socioeconomic Characteristics**

The question of time effect on parental goal endorsement by national characteristics was explored in moderation analyses. We tested whether study wave interacted with the three national socioeconomic characteristics to predict parental valuation of child *independence* and *obedience*. Multilevel mixed-effects logistic regression was used to nest parents (Level 1) within nations (Level 2). Examining the interaction was meant to test whether and how parents in nations of varying socioeconomic standing differed in their likelihood to value child

*independence* and *obedience* across study waves. It also allowed us to investigate whether developing nations should expect time trends in parental goal endorsement that are different from developed nations.

Interaction terms were created for each national indicator (i.e., wave X GNI per capita, wave X post-secondary school enrollment %, wave X urban population %). Separate models were run to examine the moderating effect of the three national indicators, because we were interested in the role of national wealth, education, and urbanization independently from one another. Separate models also maximized the number of nations included in the analyses, and importantly, prevented the deletion of developing nations that did not have all three national indicators available in the World Bank Data Catalog. Study wave was entered as a random effect parameter to account for other potential nation effects beside the effect of national socioeconomic characteristics on parental valuation of *independence* and *obedience*.

As shown in Table 2.5, across five of the six models, national socioeconomic indicators moderated the extent to which study wave was associated with parental endorsement of *independence* and *obedience*. The only exception was that % urban population did not moderate the association between study wave and endorsing *independence*. To interpret significant interactions, we estimated simple slopes of the association between study wave and endorsing *independence* and *obedience* by levels of national wealth (GNI per capita), education (% post-secondary enrollment), and urbanization (% urban population) (Figures 2.3 and 2.4). For instance, simple slopes were estimated at 0%, 25%, 50%, 75%, and 100% for urban population (Figure 2.4C). Each slope represented the expected probability of endorsing *independence* or *obedience* across study waves (1981-2008) under certain national socioeconomic characteristics.

As shown in Figure 2.3, the probability of endorsing *independence* was significantly

higher in later study waves than in earlier waves for parents in nations with low GNI per capita and low % post-secondary enrollment. But the probability of endorsing *independence* was not associated with study wave if parents lived in nations with high GNI per capita and high % post-secondary enrollment. This is consistent with our expectation that general movement towards increasing *independence* over time would be greater in developing nations. In addition, in Wave 1 (1981), there was a greater probability of endorsing *independence* for parents in nations with high GNI per capita and high % post-secondary enrollment, but the difference by national socioeconomic characteristics converged in Wave 4 (1999 - 2004) for GNI per capita and Wave 5 (2005 - 2008) for % post-secondary enrollment. That is, in later waves, national socioeconomic characteristics no longer discriminated whether or not parents endorsed *independence* as a valued child quality.

Figure 2.3 displays simple slopes for parental endorsement of *obedience* across study waves by national socioeconomic characteristics. Looking across study waves, in nations with low GNI per capita, low % post-secondary enrollment, and low % urban population, parents were more likely to endorse *obedience* in later waves than in earlier waves. In nations that were high on these three socioeconomic indicators, study wave was not associated with parental endorsement of child *obedience*. The direction of the time effect was the opposite to our expectation; we had expected a general pattern of declines, not rises, in endorsing *obedience* among parents in developing nations across time. Looking across simple slopes, parents in nations with low % post-secondary enrollment and low % urban population were more likely to value child *obedience* than those in nations with high % post-secondary enrollment and % urban population. In addition, the probability difference in endorsing *obedience* by national socioeconomic characteristics became more apparent in later waves than earlier waves.

## Discussion

We examined parental valuation of child *independence* and *obedience* in relation to national and family socioeconomic characteristics. We found that child *independence* was more popular in nations with greater wealth and higher percentage of educated populations, whereas *obedience* was more popular in nations with less wealth and lower percentages of educated and urban populations. Yet, when examined personal endorsement of the two goals, it was one's own social class rather than national socioeconomic characteristics that predicted whether or not a parent selected *independence* and *obedience* as something to be valued in his/her child. Lastly, our time effect analyses showed that valuation of both *independence* and *obedience* increased between 1981 and 2008 among parents in developing nations.

It was as hypothesized that we found a robust link between national socioeconomic indicators and national endorsement of *independence* and *obedience* as valued child qualities. The national popularity of *independence* was greater in high-socioeconomic standing nations, whereas the national popularity of *obedience* was greater in low-socioeconomic standing nations. The national association findings support Greenfield's (2009) view that *independence* is more adaptive and *obedience* is less adaptive in relatively wealthier, more educated, and more urban environments. Findings also suggest that national economic climate shapes cultural values and societal mores, which may come to define parenting priorities of the society.

Nevertheless, when it came to one's own values concerning child socialization, it was family socioeconomic characteristics that mattered more than did national socioeconomic standing. This finding bolsters the notion that social class may be a defining factor for value orientations (Kraus, Piff, & Keltner, 2011), including in the realm of parenting (Lareau, 2011). Our study adds to the literature by showing that family socioeconomic characteristics predicted

personal valuation of child *independence* and *obedience* above and beyond the effect of national socioeconomic climate. Perhaps because family conditions rather than national conditions represent an individual's most proximal social environment (Bronfenbrenner, 1986), national socioeconomic climate is less likely to exert influence on a person's value orientation for child socialization than his/her own level of education or affluence. But it is still worthwhile to note that, although infrequently, national socioeconomic characteristics at times predicted personal endorsement of *independence* and *obedience*. Future research should continue to unpack the relationship between national economic climate and a person's own social class in shaping values. Relatedly, research on parenting should attend to other national indicators tapping national and societal economic climates, such as poverty rate and income inequality.

We found that time effects were apparent in developing nations but rather nonexistent in developed nations. Consistent with our hypotheses, point-estimation of time slopes revealed expected increases in parental valuation of child *independence* in poorer or less educated nations; wealthier and more highly educated nations showed patterns of stability in parental valuation of *independence* over time. The expected rises in valuation of *independence* among parents in developing nations is consistent with Greenfield's (2009) and Kağıtçıbaşı's (2005; 2013) assertion that economically driven social change brings increased needs and desires for personal autonomy. Nevertheless, our study did not examine the degree of economic change in each nation but investigated the general effect of time by national socioeconomic characteristics. Therefore, future research needs to capture economic development beyond national wealth, urbanization, and education at static points of time.

The effect of time on valuation of *independence* can be also understood looking at the endorsement likelihood across national socioeconomic characteristics at each study wave. In



earlier study waves, parental valuation of *independence* was distinguished based on national socioeconomic differences (higher valuation of *independence* in nations with greater wealth and education). But in later waves, national socioeconomic characteristics no longer discriminated parental valuation of *independence*. One possibility for this pattern is that other societal factors such as globalization and introduction of Western cultures around the world may converge the importance of *independence* across nations despite variations in national wealth and education.

We were surprised to observe a pattern of increasing, rather than decreasing, parental valuation of *obedience* over time. As with *independence*, rising importance of *obedience* was driven by parents in socioeconomically less developed nations. The results revealing a coupling rises of *independence* and *obedience* in developing nations support Kağıtçıbaşı's (2005) family model of autonomy-relatedness for developing nations. It appears that intergenerational interdependency and relatedness in the form of child deference and parental authority may remain intact across time. The dual valuation of personal *independence* and hierarchical *obedience* prompts future research to investigate the negotiation processes for families in developing nations. In North America, children and youth from immigrant families are expected to behave autonomously in school, while socialized to defer to parents and fulfill family responsibilities at home (Fuligni, Tseng, & Lam, 1999; Quiroz, Greenfield, & Altchech, 2003). In fact, the motivation for individual achievement in school for these children may be their high sense of obligation to their parents who stress academic success and giving back to family (e.g., Esparza, Sanchez, & Bernadette, 2008).

Furthermore, the pattern of increase—rather than stability or retention—in valuation of *obedience* suggests that there must be other societal factors besides economic climates that reinforce child *obedience* among parents in developing nations (Markus & Kitayama, 2010). For

instance, economically less developed nations tend to have higher political instability such as government collapse and conflicts (Alesina, Ozler, Roubini, & Swagel, 1996). The present danger in these nations may prompt parents to emphasize *obedience* in children to prepare for their life in the context (Furstenberg et al., 1993; Pinderhughes, Nix, Foster, & Jones, 2001). Unique cultural traditions and history (Gelfand & Brett, 2004; Gelfand et al., 2011; Inglehart & Baker, 2000), and close kinship bonds in the face of family challenges (Child Trends, 2013) may also contribute to continuing importance of *obedience* even with increased valuation of *independence*.

Our data were culled from multiple data sources to assess parental values, individuals' social class, and national socioeconomic characteristics across five study waves and from 90 nations. This meant that we worked within the limitations of extant survey data. The measurement of *independence* and *obedience* as valued socialization goals emerged from an item asking parents to select from a list up to five important child qualities that should be cultivated. This was a single item measure, with each goal treated as a dichotomy (endorsed versus not). Although a multi-item rating scale may have been preferred, this goal selection method may have certain advantages. Cross-cultural scholars assert that cross-cultural contrasts of Likert-scale attitude ratings are problematic because of potential cultural variation in response style and reference group effects (e.g., Heine, Lehman, Peng, & Greenholtz, 2002). Our measure may not be subject to the same concerns, although replication is clearly needed with alternate instrumentation.

Moreover, future research should investigate specific domains and understand how valuation of *independence* and *obedience* may differently manifest behaviorally across cultures. Relatedly, it is possible that parents from different cultural and historical contexts might have

interpreted the words *independence* and *obedience* differently (Rudy & Grusec, 2001; Suizzo, 2002). For instance, valuation of *independence* may appear in various domains including psychological independence, material independence, autonomous decision-making, and promotion of physical separation (Manzi, Regalia, Pelucchi, & Fincham, 2012; Soenens et al., 2007). Another limitation that should be addressed in future research is assessing information on child age, because parents likely have different parenting goals according to children's developmental stage.

Our study adds to the effort in family research to understand cultural variation in parenting and family dynamics by focusing on the role of socioeconomic climate as a potential factor shaping parental values for child socialization at national and family levels. Our data of parents from 90 nations that varied greatly in national socioeconomic levels addresses the limitations in past research that relied on two-culture/nation comparisons, or analyses of one or a few nations across multiple historical time points. Also meaningfully, our study included many developing nations traditionally underrepresented in scholarship. Another strength of our study was capturing participants' birth cohort spanning over 100 years.

Our study revealed complexity in ways that social change may be occurring, with some preliminary support for the notion that rising socialization toward independence does not necessarily mean that interdependent socialization is on the decline. Scholars, practitioners, and policy makers should consider differences in social class and national economic climate to foster healthy child development, such as by adjusting programs to different dynamics and expectations of high- and low-income communities and nations (Child Trends, 2013; Park et al., in press).

Table 2.1

*Sample Size and Demographic Characteristics across Five Study Waves*

		Wave 1 (1981-1984)	Wave 2 (1989-1993)	Wave 3 (1994-1998)	Wave 4 (1999-2004)	Wave 5 (2005-2008)
Nation-level						
N		22	42	54	68	55
GNI per capita (log)	Range	3.34 - 4.19	2.42 - 4.51	2.32 - 4.65	2.40 - 4.64	2.36 - 4.89
	M (SD)	3.90 (0.29)	3.84 (0.57)	3.46 (0.61)	3.58 (0.64)	3.74 (0.64)
GNI per capita (raw, \$)	Range	2170 - 15550	260 - 32670	210 - 44860	250 - 43450	230 - 76990
	M (SD)	9438.12 (4555.03)	12183.16 (9615.99)	7387.93 (10786.41)	9499.48 (11150.47)	13733.79 (17019.75)
Post-sec edu (%)	Range	3.32 - 56.72	3.04 - 90.30	4.48 - 79.63	.69 - 82.73	2.43 - 93.49
	M (SD)	26.73 (11.58)	29.82 (18.40)	35.03 (17.42)	36.92 (19.13)	41.70 (24.77)
Urban pop (%)	Range	48.80 - 95.49	25.55 - 96.38	22.07 - 90.70	12.32 - 100	12.39 - 100
	M (SD)	73.70 (10.98)	68.27 (15.49)	64.00 (16.64)	63.95 (18.97)	62.22 (21.07)
Person-level						
N		16738	41025	52796	65278	51594
% mother		55.47	54.68	54.14	55.24	55.44
Age	Range	18 - 100	18 - 94	18 - 95	18 - 99	18 - 98
	M (SD)	46.77 (15.77)	46.64 (14.62)	44.93 (14.51)	46.50 (14.76)	46.82 (14.99)
Birth cohort	Range	1 - 9	2 - 10	3 - 11	3 - 11	3 - 11
	M (SD)	6.03 (1.60)	6.89 (1.49)	7.68 (1.48)	7.92 (1.53)	8.47 (1.54)
Income	Range	1 - 10	1 - 10	1 - 10	1 - 10	1 - 10
	M (SD)	5.78 (2.45)	4.63 (2.35)	4.47 (2.51)	4.57 (2.41)	4.56 (2.31)
Edu level	Range		1 - 8	1 - 8	1 - 8	1 - 8
	M (SD)	Not available	4.56 (2.33)	4.35 (2.27)	4.08 (2.29)	4.02 (2.36)

Table 2.2

*Nation-level Endorsement Percentage of Independence and Obedience across all Waves and Nations*

	Obedience endorsed	Obedience not endorsed	Total
Independence endorsed	10.21%	33.60%	43.81%
Independence not endorsed	25.88%	30.31%	56.19%
Total	36.09%	63.91%	100%

Table 2.3

*Multiple Mixed-Effects Regression Analyses Predicting National Endorsement of Child Independence and Obedience from National Socioeconomic Indicators*

	National endorsement %			
	Independence		Obedience	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
National wealth				
GNI per capita	7.33**	(2.46)	-9.25***	(2.08)
Wave	5.55***	(.70)	2.71***	(.51)
National education standing				
% post-secondary school enrollment	1.69*	(.76)	-2.37***	(.59)
Wave	4.52***	(.91)	3.60***	(.67)
National urbanization level				
% urban population	1.06	(.83)	-3.10***	(.69)
Wave	5.90***	(.69)	2.11***	(.48)

*Note:* GNI per capita was log-transformed, such that an increment of one unit represented a tenfold increase (e.g., from \$100 to \$1,000). % post-secondary school enrollment and % urban population values were entered such that an increment of one unit represented 10% increase.

\*\* $p < .01$ . \*\*\* $p < .001$ .

Table 2.4

*Multilevel Mixed-Effects Logistic Regression Predicting Parental Goal Endorsement of Child Independence and Obedience from Nation-Level and Person-Level Socioeconomic Characteristics*

	Independence		Obedience	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Nation-level				
GNI per capita	-.26	(.14)	-.20	(.12)
% post-secondary school enrollment	.30***	(.04)	.05	(.03)
% urban population	-.10	(.09)	-.17**	(.07)
Person-level				
Household income	.05***	(.00)	-.05***	(.00)
Education level	.09***	(.00)	-.12***	(.00)
Birth cohort	.08***	(.00)	.01*	(.00)
Wave	.12*	(.06)	.03	(.04)
Gender	.00	(.01)	-.03*	(.01)

*Note:* GNI per capita was log-transformed, such that an increment of one unit represented a tenfold increase (e.g., from \$100 to \$1,000). % post-secondary school enrollment and % urban population values were entered such that an increment of one unit represented 10% increase. Gender was coded such that male = 0 and female = 1.

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

Table 2.5

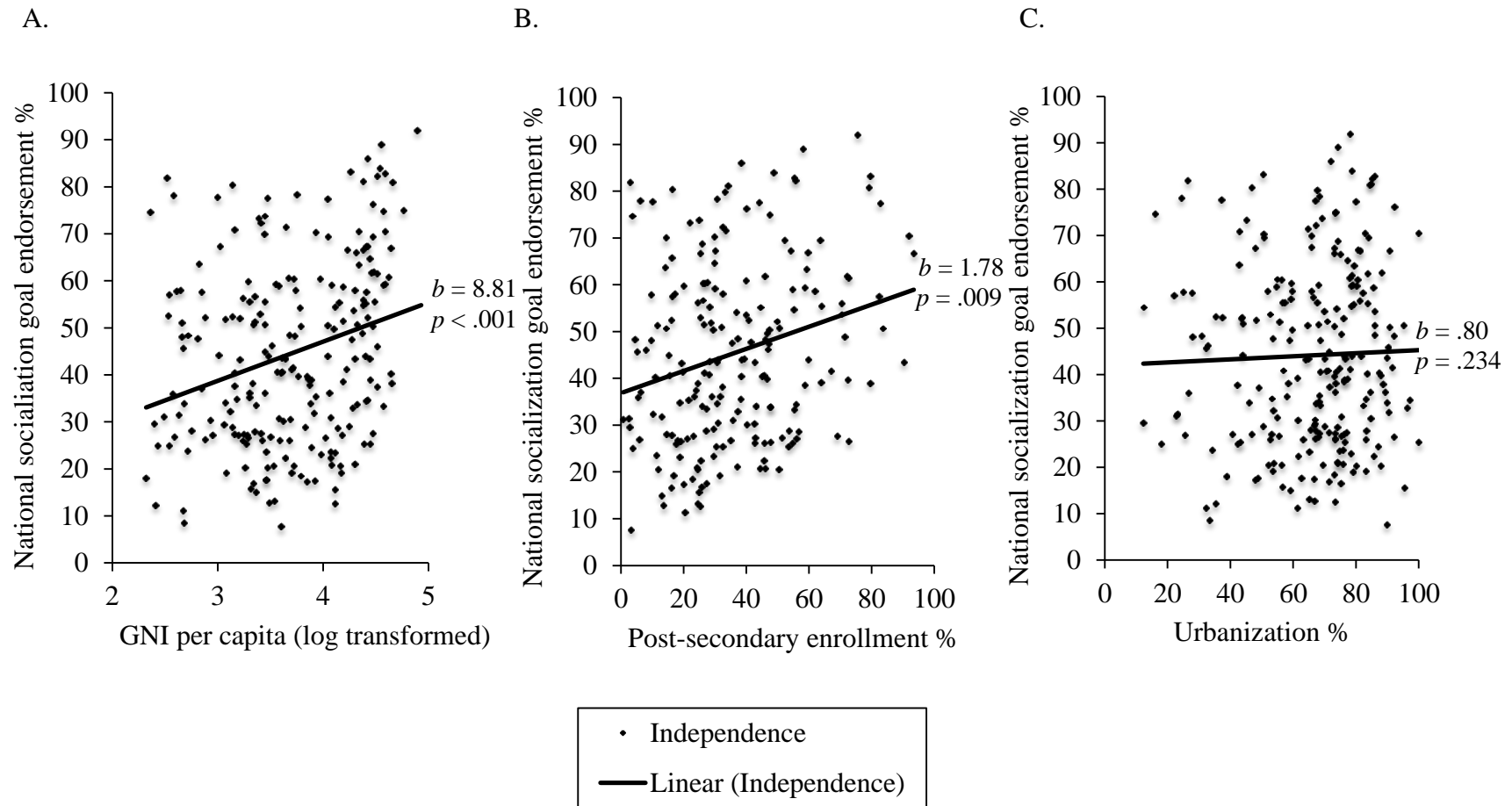
*Multilevel Mixed-Effects Logistic Regression Showing that Study Wave and National Socioeconomic Indicators Interacted to Predict Parental Goal Endorsement of Child Independence and Obedience*

	Independence		Obedience	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
National wealth				
Wave	1.08***	(.12)	.78***	(.11)
GNI per capita	.83***	(.12)	.80***	(.13)
Wave X GNI per capita	-.22***	(.03)	-.20***	(.03)
National education standing				
Wave	.36***	(.05)	.13***	(.03)
% post-secondary school enrollment	.21***	(.02)	.00	(.02)
Wave X % post-secondary school enrollment	-.04***	(.01)	-.02**	(.01)
National urbanization level				
Wave	.46***	(.12)	.27**	(.09)
% urban population	.47***	(.09)	-.07	(.05)
Wave X % urban population	-.03	(.02)	-.03*	(.01)

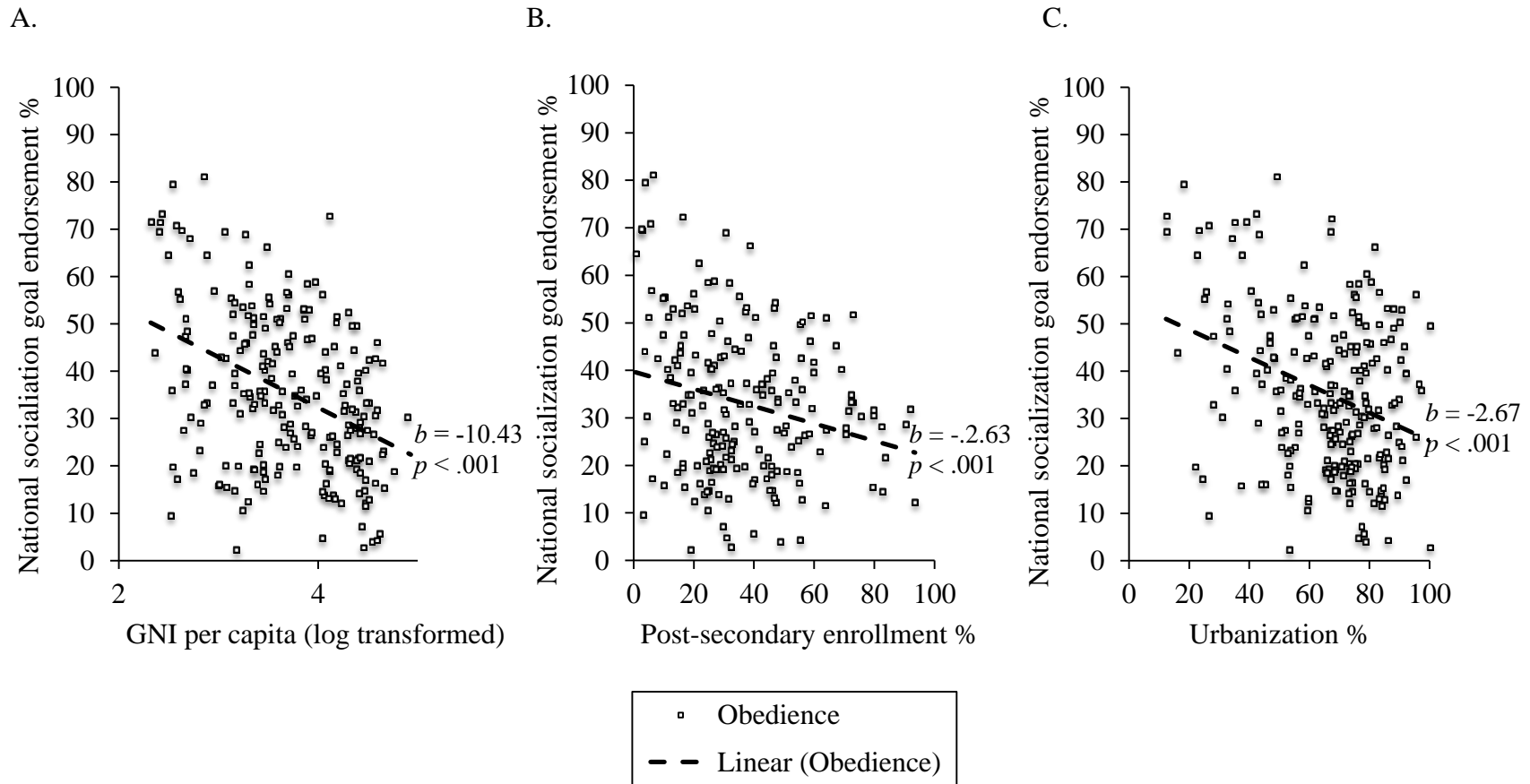
*Note:* GNI per capita was log-transformed, such that an increment of one unit represented a tenfold increase (e.g., from \$100 to \$1,000). % post-secondary school enrollment and % urban population values were entered such that an increment of one unit represented a 10% increase.

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



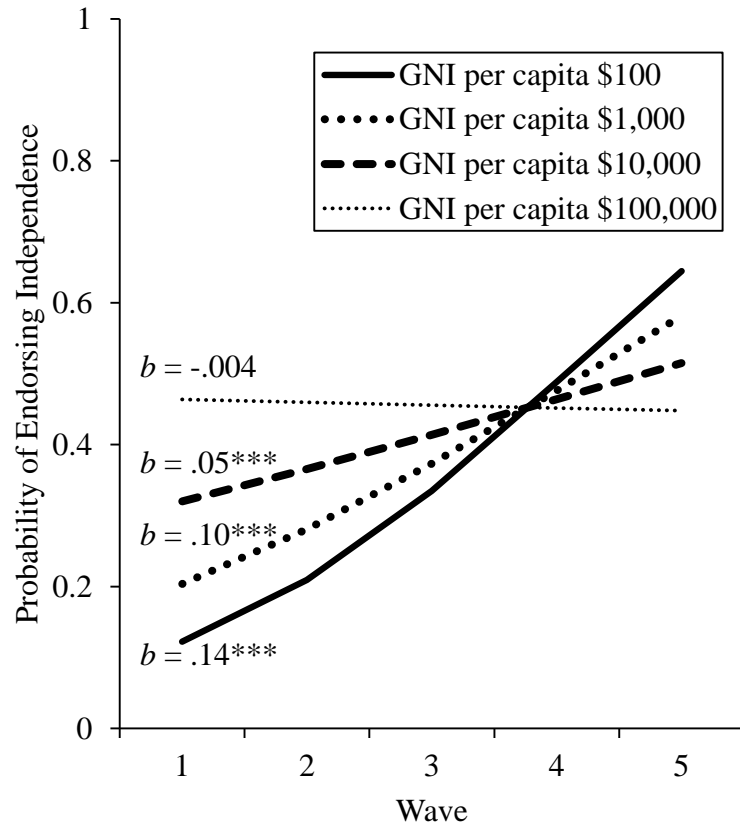


*Figure 2.1.* Association between national endorsement % of child independence and national socioeconomic characteristics around the world: (A) GNI per capita, (B) % post-secondary school enrollment, and (C) % urban population. Each data point represents a nation at a given wave. Data from all 90 nations across five study waves are plotted. Linear slope and significance values are based on analyses in which study wave was controlled for.



*Figure 2.2.* Association between national endorsement % of child obedience and national socioeconomic characteristics around the world: (A) GNI per capita, (B) % post-secondary school enrollment, and (C) % urban population. Each data point represents a nation at a given wave. Data from all 90 nations across five study waves are plotted. Linear slope and significance values are based on analyses in which study wave was controlled for.

A.



B.

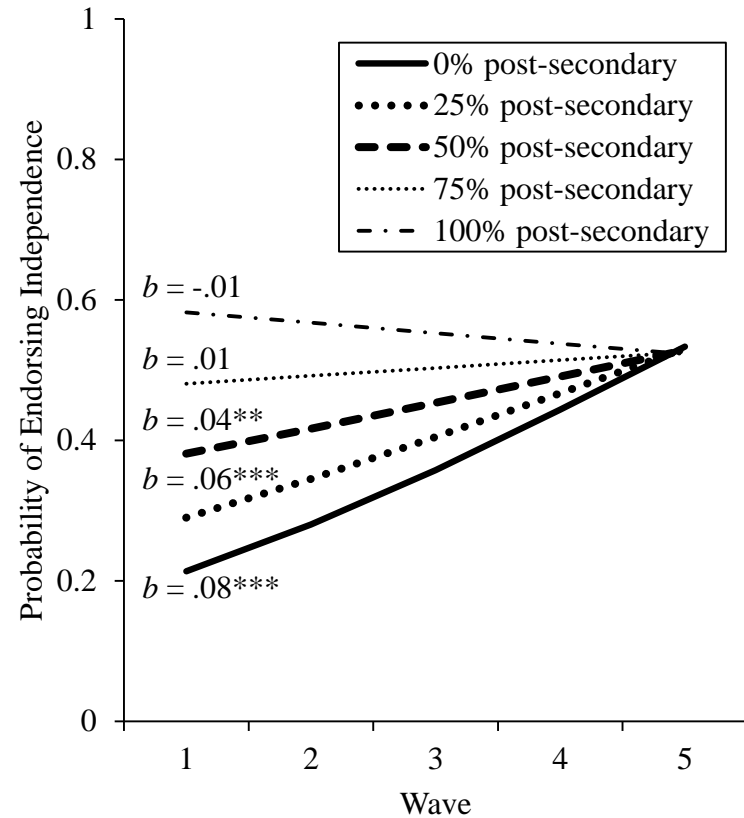


Figure 2.3. The effect of time on the probability of endorsing independence as a function of (A) Gross National Income (GNI) per capita and (B) national % post-secondary school enrollment. Across time, independence gains more popularity among parents in nations with less GNI per capita and lower % post-secondary school enrollment.

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

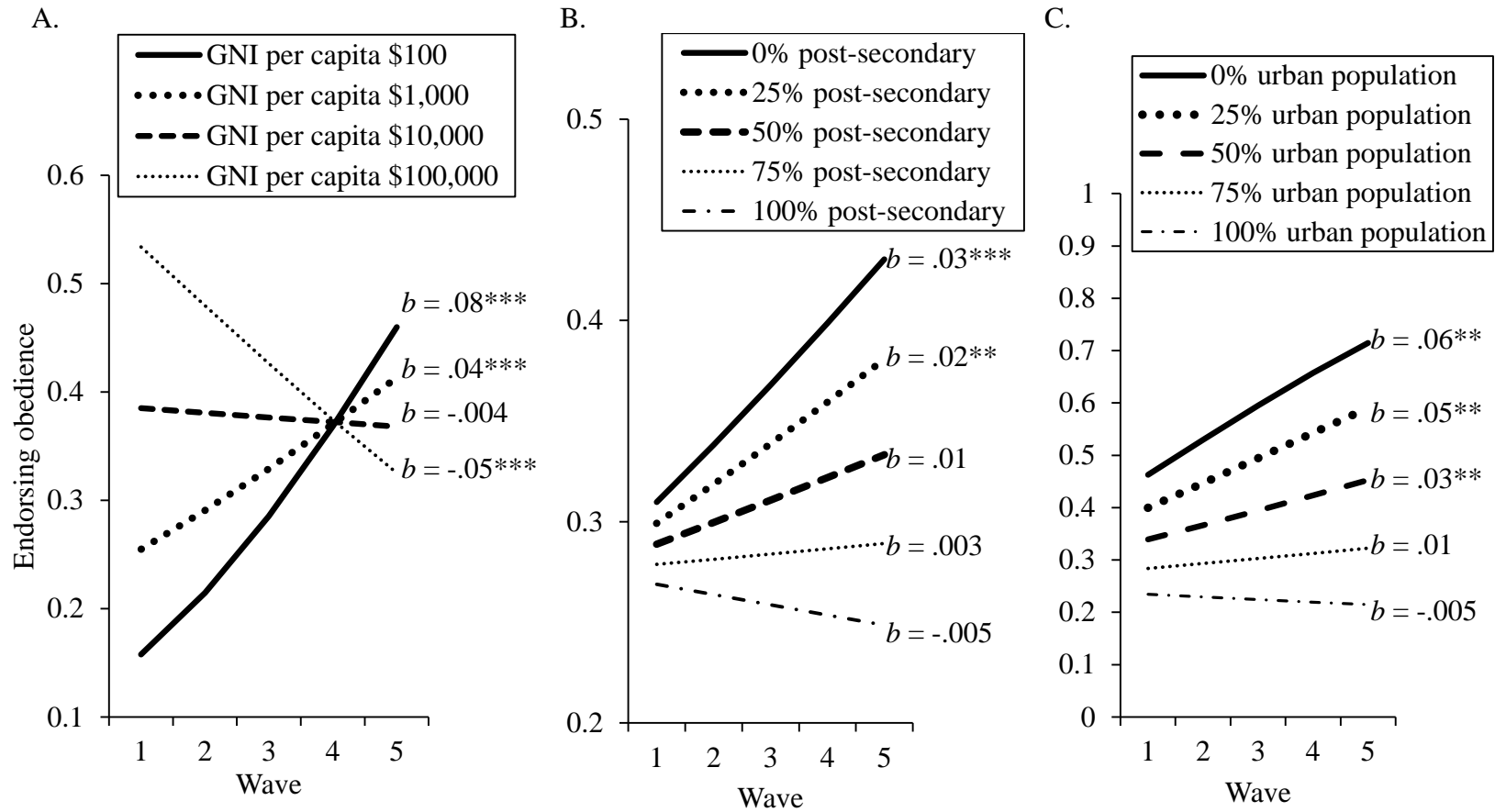


Figure 2.4. The effect of time on the probability of endorsing obedience as a function of (A) Gross National Income (GNI) per capita, (B) national % post-secondary school enrollment, and (C) national % urban population. Across time, obedience gains more popularity among parents in nations with less GNI per capita, lower % post-secondary school enrollment, and lower % urban population.

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

### **Study 3: Cultural Values and Family Experiences of Vietnamese Adolescents in Rural Vietnam, Urban Vietnam, and the U.S.**

Familism is a restrictive and exclusive type of collectivism (Burgess, Locke, & Thomes, 1963; Greenfield & Quiroz, 2013) that is emphasized through the notion of filial piety and family obligation (e.g., Triandis et al., 1990; Fuligni, Tseng & Lam, 1999; Hardway & Fuligni, 2006). Family obligation in particular refers to a collection of attitudes related to the provision of support, assistance, and respect to family members (Fuligni & Zhang, 2004). Asian families are commonly viewed as reinforcing a strong sense of family obligation (e.g., Kağıtçıbaşı, 1990; Fuligni & Zhang, 2004).

However, this widespread view has largely emerged based on East-West cross-national comparisons or contrasts between ethnic majority and minority groups in North America. These contrasts, while informative and generative, do not isolate cultural heritage as the determinant of observed differences and risk perpetuating stereotypes. Nation-states and ethnic groups differ on a range of contextual factors including economical conditions, social mobility, ethnic minority status, and immigration history, which may all shape family orientation. Research should unpack how contextual factors shape patterns of family orientation in isolation of ethnic culture.

In the current study, we examined adolescents' sense of family obligation, daily time use, and relationship with parents in three learning ecologies: rural Vietnam, urban Vietnam, and Vietnamese immigrant communities in urban U.S. To study how economically developed learning ecology shapes family orientation, urban Vietnam was contrasted with rural Vietnam. To understand the learning ecology of immigrants, urban Vietnam was contrasted with Vietnamese immigrant communities in urban U.S. That is, immigrant-sending versus

immigrant-receiving learning ecologies were compared, while holding constant urban residence within the nation.

### **How Does Learning Ecology Shape Family Obligation Values?**

Learning ecologies are rapidly transforming around the world, with global economic development and urbanization. Related sociodemographic shifts include reduced family size, greater financial resources, and formal schooling (Greenfield, 2009). Scholars have asserted that the transformation of formerly rural ecologies to urban ecologies and accompanying sociodemographic shifts may be resulting in the erosion of cultural values and norms concerning family obligation (e.g., Greenfield, 2009; Greenfield & Quiroz, 2013).

A major theoretical notion supporting this assertion is that human values and behaviors are malleable and adapt to ecological conditions (Greenfield, 2009; Kağıtçıbaşı, 2005, 2013; Markus & Kitayama, 2011). Greenfield (2009) contends that group and family solidarity is favored within a small rural community characterized by subsistence economy, face-to-face interactions within homogenous networks, and less formal education. In this type of learning ecology, individuals' needs are often met communally, and obligation towards in-groups fulfills the communal needs. By contrast, in an urban society characterized by formal schooling, commercial economy, more fleeting interactions within larger heterogeneous social networks, personal independence and achievement are prioritized as individuals compete in educational and economic realms. As societies become more urbanized and commercialized, social interactions are theorized to become less obligatory or communal, reducing the centrality of family obligations.

Yet, family is one's most immediate and proximal environment (Bronfenbrenner, 1986) and provides the first form of social identity and relationship (Newman & Newman, 2001). Thus,

alternatively, a sense of family obligation may be resistant to change when there is a shift towards urbanized, commercialized, and schooling learning ecologies. Specifically, Kağıtçıbaşı (2005, 2013) asserts that intergenerational psychological interdependency remains although personal autonomy increases and the behavioral need for material interdependency decreases when traditionally collectivistic societies experience economically driven social change.

To date, there is limited literature on the contextual influences on family obligation in previously rural Asia where urban centers have rapidly emerged. Extant research mostly focuses on China, and mixed results suggest both erosion and maintenance of familism. Supporting Greenfield's (2009) theory, urban Chinese male youth reported weaker intention to support the family in the future compared to urban Chinese female and rural Chinese counterparts (Fuligni & Zhang, 2004). Furthermore, higher parental education was related to adolescents' lower sense of future family support. However, Cheung and Kwan (2009) found empirical evidence that educated adults in urban China were less likely to reduce their valuation of filial piety and intention to financially support parents. The authors speculated that Chinese socialist moral education may shield educated Chinese from the effect of modernization on family obligation values. This supports the notion that a sense of family obligation does not easily reduce in the case of movement towards higher education (Kağıtçıbaşı, 2005 2013), perhaps through conscious effort to maintain traditional values. Nevertheless, participants in the study were older adults educated over three decades ago, and it is unclear whether the traditional moral education persists to shield family values in 21<sup>st</sup> century China. It is also unclear whether and to what extent similar findings should be expected in other Asian nations undergoing social change, such as Vietnam.

Vietnam is a nation that shows clear signs of economically driven social change. In the past few decades, the national economy has continued to grow (e.g., gross national income [GNI] per capita \$130 in 1990, \$400 in 2000, \$1,550 in 2012) and attainment of formal education has likely risen (e.g., post-secondary school enrollment 3% in 1990, 10% in 2000, 25% in 2012). Therefore, rural versus urban regions within Vietnam provide an ideal case to study the relevance of economically driven social change for adolescent development. Rural-urban distinctions are not as clear in developed East Asian nations (e.g., South Korea, China, Japan) (Park, Greenfield, Joo, & Quiroz, 2014). According to Greenfield (2009), we would expect urban Vietnamese adolescents to hold lower sense of family obligation than rural Vietnamese adolescents. According to Kağıtçıbaşı (2005, 2013), there may be no rural-urban difference in Vietnamese adolescents' family obligation values even as the pursuit of autonomy increases.

Comparisons between immigrant-sending and immigrant-receiving nations add to the understanding of how learning ecology shapes patterns of family orientation in isolation of ethnic culture. At the same time, it is important to consider specific contexts of immigration and unique immigration experience in the host society. In immigrant families, offspring are exposed to processes of both enculturation to the heritage cultural values, norms and expectations as well as acculturation to the host culture's values, norms and expectations (Gonzales, Knight, Birman, & Sirolli, 2004; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Supporting enculturation and the retention of traditional values such as family obligation, immigrants often settle in communities that are enclaved and heavily co-ethnic (Wilson & Portes, 1980; Logan, Zhang, & Alba, 2002; Park et al, 2014). Immigrant parents may strongly socialize traditional values and practices due to perception that the vitality of their ethnic culture is threatened in North America (Suárez-Orozco & Suárez-Orozco, 2009). The immigrant experience encompasses multiple



processes that can be better understood by examining the contexts of immigrant-sending and receiving countries (e.g., Macias, 2009).

Asian American adolescents' family obligations have been frequently examined, but comparisons have been almost exclusively made with European American counterparts. From this, the conclusion has been drawn that the traditional Asian cultural value of family obligation prevails in Asian American and immigrant families (e.g., Fuligni et al., 1999; Hardway & Fuligni, 2006). Nevertheless, without understanding the situation in the home country, it can be misleading to interpret a strong sense of family obligation in Asian American and immigrant families as a reflection of home cultural values. For example, a sense of family obligation among adolescents in China was stronger compared to that of Chinese American adolescents in the U.S. (Fuligni, Tseng, & Lam, 1999; Fuligni and Zhang, 2004). However, also posited was the possibility for eventual declines in family obligation values in the course of long-term exposure to market economy (Fuligni & Zhang, 2004; Lee, Parish, & Willis, 1994). Indeed, Park et al. (2014) showed a trend of stronger familism in Korean immigrant families compared to their counterparts in highly urbanized South Korea.

Focusing on Vietnamese American adolescents in immigrant families, one may suspect loss of interdependent cultural values as a function of immigration from Vietnam to the U.S. for two reasons. First, acculturation toward North American norms of early independence and expectations for autonomy may erode familistic values held by teens (Greenfield, Raeff, & Quiroz, 1998). Second, increased financial and human capital among immigrants to North America may lead to a reduction of material burdens regarding family support and may thus erode familism over time (Kağıtçıbaşı, 2005, 2013; Tung, 1997; Ng et al., 2002).

However, Vietnamese American communities tend to reside in disadvantaged ethnic enclaves that may yet lack of resources at the individual, community and institutional levels (Tseng, 2006). Moreover, immigration and ethnic minority experiences introduce new challenges associated with acculturation, and immigrant parents often rely on children for language and cultural brokering, which may result in greater enculturation (Orellana, 2009). Furthermore, Asian American children may be motivated to achieve as a way to repay their sense of owing to parents (e.g., Salili, 1996). Thus, it is possible that family obligation values are retained or even reinforced upon immigration, and remain a strong socializing influence on youth. To test the question of cultural retention versus erosion of familistic values in immigrant families, we compared Vietnamese adolescents in urban Vietnam and urban U.S., thus controlling for urban residence in the immigrant-sending and immigrant-receiving countries.

### **How Does Family Obligation Values Shape Time Use and Relationship with Parents as a Function of Learning Ecology?**

It is important to understand how the learning ecology shapes a sense of family obligation, because values and attitudes serve as a guiding principle in behaviors (Schwartz, 1994). Indeed, having a strong sense of family obligation appears to influence decision-making of children who are socialized to take on roles and responsibilities that align with the needs and wishes of the family (Fuligni & Zhang, 2004). A sense of family obligation is also found to be associated with positive parent-child relationship quality in Chinese adolescents (Fuligni & Zhang, 2004) and reduce negative mental health outcomes in Asian and Hispanic American adolescents who experience intergenerational conflicts in immigrant households (Li, 2013). Nevertheless, the ways in which adolescents' sense of family obligation shape daily behaviors and relationship with parents may differ across learning ecologies because the meaning of family obligation and

parental expectations may vary by context. We examine how adolescents' daily time use and parent-child relationship characteristics differ across rural Vietnam, urban Vietnam, and Vietnamese immigrant communities in urban U.S. Furthermore, we investigate whether adolescents' sense of family obligation is linked to time use and relationship with parents as a function of learning ecology.

**Time use on family assistance, work outside home, and study.** Adolescence is a period of increasing demands to balance life within and outside the family, marking it a particularly interesting developmental period to investigate how a sense of family obligation may relate to everyday behaviors. Given the traditional cultural values of family obligation, Vietnamese adolescents may be required to attend to family assistant responsibilities, for example household chores or sibling care. Such behavioral family assistance may be even higher in relatively rural compared to urban contexts (Kağıtçıbaşı, 2005, 2013) because of smaller community settings and greater needs for sharing common resources in rural areas (Greenfield, 2009). According to both Greenfield's (2009) and Kağıtçıbaşı's (2005, 2013) models, Vietnamese adolescents' time spent on family assistance is expected to decrease as Vietnam shifts from rural to urban ecology.

Behavioral assistance to family in immigrant households encompasses multiple layers, because the experience of being a child in an immigrant family and a member of an ethnic minority group contribute in varied ways to the formation of experiences in youth. For instance, despite frequent motivation for immigration to gain greater financial stability, immigrant families often experience downward socioeconomic mobility and reduction in resources following migration (Nicklett & Burgard, 2009; Redstone Akresh, 2006). Much of the family assistance in immigrant households centers on the unique and practical needs of immigrant families, such as

children translating for their monolingual immigrant parents (e.g., Dorner, Orellana, & Jimenez, 2008). Although ethnic minority adolescents often report more time helping around the house and the family compared to their European American counterparts, it remains unclear whether the cultural difference is due to heritage cultural differences or immigrant and ethnic minority experiences. Comparisons between Vietnamese in Vietnam and Vietnamese Americans in the U.S. help to answer the question. Again, we match urban residence in carrying out this comparison (i.e., urban Vietnam and urban U.S.).

Adolescents may extend their work to outside home and participate in various paid job opportunities (Larson & Verma, 1999). According to Greenfield (2009), participation in commerce is an activity that is highlighted in urban and commercialized settings where more opportunities exist. Therefore, adolescents' time use working at paid jobs would be greater in urban Vietnam than rural Vietnam. This is also in line with Kağıtçıbaşı's (2005, 2013) notion of increased agency and material independence. However, working at a job may interfere with participation in schooling, which also gains importance in urban ecology. Thus, alternatively, working outside home may be more relevant in rural Vietnam than urban Vietnam.

In the U.S., adolescents often work at part-time positions (Greenberger, Steinberg, Vaux & McAuliffe, 1980), but majority of their time is still spent on school-related activities (Fuligni & Stevenson, 1995; Larson & Verma, 1999). Therefore, compared to their counterparts in urban Vietnam, Vietnamese American adolescents may spend less time working at a job outside home. Yet, it is also possible that the activity is more popular in urban U.S. than in urban Vietnam, for the reason of relatively greater commercialization in the U.S.

Given that schooling is a key feature of shifting learning ecology (Greenfield, 2009), adolescents are expected to spend more time studying in urban Vietnam compared to rural

Vietnam. It is also expected that Vietnamese adolescents would spend more time studying in urban U.S. than urban U.S.

As we examine Vietnamese adolescents' time use on helping around the house, working at a job outside home and studying, we also investigate its link with a sense of family obligation and whether the association varies as a function of learning ecology. This approach may help to clarify divergent views on whether socioecological shifts towards urbanization erode adolescents' sense of obligation to the family (Greenfield, 2009) or cause retention of family obligation values (Kağıtçıbaşı, 2005, 2013). It is possible that the divergent perspectives on erosion versus maintenance represent diverse ways in which social change may be shaping values and behaviors, rather than suggest two different views in competition. One process of change may be through redefining traditional cultural values in nontraditional everyday behaviors. That is, how family obligation values guide adolescent behaviors may change as a function of socioecologies shift. We examined whether the valuation of family obligation would result in different behavioral manifestations in rural Vietnam, urban Vietnam, and urban U.S.

**Relationship with parents.** Adolescents also face the task of maintaining relationships with parents while also striving for increased independence and autonomy as they prepare for the transition into adulthood (Arnett, 1998; Smetana, 1995; Smetana & Asquith, 1994). In addition to the hypothesized contextual influences on a sense of family obligation and time use, Vietnamese adolescents in diverse learning ecologies may have distinctive ways of relating to their parents. Does adolescents' relationship characteristics with parents differ between rural Vietnam vs. urban Vietnam, and between urban Vietnam vs. Vietnamese immigrant communities in urban U.S.? What role does a sense of family obligation play in parent-child relationship in these learning ecologies?

Traditional Asian cultural traditions emphasize parental socialization goals for their children that foster the development of relational self, obedience, self-constraint, and filial piety (e.g., Chao, 1995; Chao & Tseng, 2002; Qin, Chang, Han, & Chee, 2012). By contrast, Western ethnotheories of child development emphasize independent decision-making, self-assertion, and explicit communication, which may run counter to socialization goals traditional Asian parenting (Qin et al., 2012). In the U.S., Asian American adolescents have been described as being at risk of having poor relationship quality with parents due to adolescent-parent discrepancies in values that stem from dissonant acculturation (e.g., Lee et al., 2000). Such acculturation-based conflicts in Asian immigrant families are based on the idea that children grow up to be influenced by Western culture and desire more autonomy especially during adolescence, whereas parents demand more parental authority and foster interdependence (Juang et al., 2012; Qin et al., 2012).

Yet, disrupted family relationships and poor well-being should not be assumed to follow conditions of dissonant child-parent acculturation or value discrepancies (Lau, McCabe, Yeh, Garland, & Wood, 2005; Telzer, 2010). In fact, immigrant families are often able to resolve tensions resulting from value conflicts, just as generational differences in held values are managed in families across heritage backgrounds (Qin et al., 2012). Nevertheless, the process may be challenging in nature and successful conflict resolution is less likely if immigrant parents are unwilling to tolerate adaptation toward new values that children endorse (Qin et al., 2008). However, conflicts concerning adolescent conduct may be less likely in families where adolescents retain heritage values concerning family obligation, specifically. In immigrant and ethnic minority families, adolescents' feelings of obligation toward the family may act to diffuse perceived tensions with parents that may stem from a range of value discrepancies and differences of opinion about lifestyle choices.

Although parent-child conflicts arising from value discrepancies in Asian families have centered on the discussion of immigrant families in the U.S., it is a pressing matter to examine whether such conflicts are manifested in urban Asia undergoing rapid social change. Immigrant parents in the U.S. often refer to “obedient children in the home country” in their child-rearing practices as they rely on their recollection of the time in the home country (Qin, 2006), but children in urban Asia may no longer be socialized within traditional developmental pathways marked by age veneration, deference and limited self-expression. Instead, social change theory suggests movements toward assertion of autonomy and independence can be expected in rapidly developing Asian contemporary societies. In societies undergoing economically driven social change, cultural values of the young generations growing up in the rapidly changing social environments may dramatically differ from those held by parental generations (Greenfield, 2009), leading to increased intergenerational gaps and challenges in negotiations of old and new values (Manago, 2012; Manago & Greenfield, 2011).

### **The Current Study**

The guiding premise of the current study was that learning ecology impacts family orientation and diversify everyday behaviors in developing youths despite their shared ethnic culture. Vietnamese high school students in rural Vietnam, urban Vietnam, and urban U.S. were surveyed about a sense of family obligation, time use on assisting family, working at a job outside home and studying, and parent-child relationship characteristics. A sense of family obligation was an indicator of cultural values and social orientation intimately associated with Asian culture. Adolescents’ time use on family assistance and study allowed us to test the social change theories (Greenfield, 2009; Kağıtçıbaşı, 2005, 2013), which would suggest decreased relevance of behavioral family assistance and increased participations in schooling as

socioecology shifts from relatively rural to urban. We also explored the time spent on work outside the home. To examine the question of heightened conflicts between adolescents and parents in the contexts of urbanization and immigration, we inventoried levels of tensions with parents as reported by adolescents on a range of types: overtly expressed conflicts, unexpressed tensions about intergenerational value discrepancies, and adolescents' perceptions of parental lack of support and responsiveness.

## **Method**

### **Participants and Procedure**

Participants came from the larger ongoing Adolescents Coping with Everyday Stress (ACES) project, which is a multi-site, multi-wave, and multi-cohort study recruiting a normative population of 10<sup>th</sup> and 11<sup>th</sup> grade Vietnamese and European American adolescents. The main objectives of the project are to investigate how social and cultural factors influence adolescents' coping with stress and to identify the kinds of problems they experience when coping is not successful. The current study focus was on investigating family obligations, time use, and adolescent-parent conflict among Vietnamese adolescents residing in various learning ecologies. Thus, participants in the current study were 872 Vietnamese adolescents from rural Vietnam ( $n = 256$ , 55% female,  $M_{age} = 15.76$  years), urban Vietnam ( $n = 316$ , 50% female,  $M_{age} = 15.74$  years), and urban U.S. ( $n = 300$ , 58% female,  $M_{age} = 15.55$  years). They came from the available first wave of the first cohort data.

Participant recruitment took place in a total of nine high schools in three regions (two rural Vietnam, three urban Vietnam, and four urban U.S.). The rural Vietnam sample was recruited from two high schools in rural regions in Vietnam, one of which located near mountains and the other located near the coastal fishing villages. These rural schools served



communities with low income and education levels. The urban Vietnam sample was recruited from three high schools located in city centers in Ho-Chi-Min City and Da-Nang, serving students of largely middle-class family backgrounds. The urban U.S. sample came from four culturally diverse high schools in urban areas of Southern and Northern California. Asian and Latin American students represented the majority of student body; on average, approximately 13.8% students were of European American ethnicity. California is home to the largest proportion (38%) of people who identify themselves as Vietnamese (U.S. Census Bureau, 2010). Adolescents in these communities come from immigrant households, who came during the second or third waves of Vietnam immigration, but not the first refugee wave. The schools were in both lower- and middle-income communities.

At participating schools, research personnel made five-minute announcements in 10<sup>th</sup> and 11<sup>th</sup> grade classrooms to describe the study and distributed a packet including consent forms and a demographic questionnaire. Research assistants returned to schools to collect forms and randomly provided small non-monetary incentives for some of those who returned the forms. Students who provided consents were invited to participate in an online survey that took on average 1-1.5 hour. Participants completed the survey over the Internet at school computer labs during afterschool hours, or on Saturdays where schools permitted. Participants in the U.S. received \$20 gift cards for filling out the survey. In Vietnam, participants were compensated approximately \$16.20.

Among a range of measures administered in the survey, we examined measures assessing sociodemographic information, family obligation, parental academic expectation, adolescents' daily time use, and tensions with parents. To ensure compatibility across three regions, teams of researchers in Vietnam and the U.S. underwent extensive discussion and piloting to develop and

modify the measures, and translate from English into Vietnamese. The research team had 10 years of experience adapting measures for Vietnam including the use of Likert scales and anchors. Some items were slightly modified between Vietnam and the U.S. For instance, the financial hardship questionnaire was revised to reflect situations and common conditions in Vietnam, given that words such as bills and rent had little relevance in Vietnam. Likewise, certain questions from Asian American Family Conflict Scale (Lee et al., 2010) were revised in Vietnam given the irrelevance of items specific to ethnic minority status. Specific descriptions on the modified items are described in the measures section.

## **Measures**

### **Sociodemographic variables.**

***Parental education level.*** Participants were asked to choose one of six options to indicate the highest level of education their father and mother each received (1 = *11<sup>th</sup> grade or below*; 2 = *high school graduate*; 3 = *some college or vocational school*; 4 = *graduated from college or vocational school*; 5 = *graduate/professional degree*; 6 = *don't know or this question does not apply to me*). “6 = *don't know or this question does not apply to me*” was treated as a missing response, so higher score indicated higher level of education for father and mother.

***Number of siblings.*** Participants were asked to report the total number of siblings in their family.

***Financial hardship.*** Participants read eight statements (seven in Vietnam) concerning family financial circumstances (e.g., “My family didn’t have enough money for the foods I like to eat” “My family cant afford the kind of housing that we really need”). One question was dropped in Vietnam given that concepts such as bills and rent are not common in Vietnam. Participants were then asked to rate how true the statement had been in the past three months, on

a 5-point scale (0 = *don't know*, 1 = *not true*, 2 = *a little true*, 3 = *somewhat true*; 4 = *very true*). “0 = *don't know*” was coded as a missing response, and rest of the items were averaged to produce a single financial hardship mean score. Thus, the score ranged from 1 to 4, where 4 indicated the highest level of family financial hardship. Item reliability was demonstrated across rural Vietnam ( $\alpha = .83$ ), urban Vietnam ( $\alpha = .85$ ), and urban U.S. ( $\alpha = .90$ ) samples.

**Family obligation.** Adolescents' sense of familism is measured using the Family Obligation scale that includes three subscales assessing one's sense of obligation to support, assist, and respect family (Fuligni, Tseng, & Lam, 1999). The scales were originally created on the basis of focus group and literature review on familism and kin collectivism, and the three scales have been found to tap three overlapping aspects of family obligation. The reliability and validity of the scales have been demonstrated across different ethnic groups (Fuligni et al., 1999; Fuligni & Pedersen, 2002). The current study included six items for the “*current assistance*” subscale, which assesses one's expectations for the frequency of engagement in household task assistance and spending time with family various activities (e.g., “run errands that the family needs done”) on a 5-point scale (1 = *almost never*; 5 = *almost always*). There are seven items for the “*respect for family*” subscale that measures one's beliefs about the importance of considering the needs, opinions, and wishes of the family (e.g., “make sacrifices for your family” and “respect your older brothers and sisters”) on a 5-point scale (1 = *not important at all*; 5 = *very important*). Finally, the “*future support*” subscale includes five items assessing one's beliefs about the obligations to support and be near family in the future (e.g., “help your parents financially in the future” and “live or go to college near your parents.”) on a 5-point scale (1 = *not important at all*; 5 = *very important*). Item reliability was demonstrated across rural Vietnam ( $\alpha = .94$ ), urban Vietnam ( $\alpha = .92$ ), and urban U.S. ( $\alpha = .83$ ) samples.

**Time Use.** Adolescents were asked to report how much time they spent studying on the weekday and weekend day. Daily study time was averaged between weekday and weekend day reports. Adolescents also reported, on a weekly basis, how much time they spent on chores/helping around the house and working at a paid job outside house.

**Tension with parents.** Adolescents' relationship quality with parents was captured by assessing adolescent-parent tensions through Adolescent Life Events Questionnaire (Hankin & Abramson, 2002) and Asian American Family Conflict Scale (Lee et al., 2000).

*Adolescent Life Events Questionnaire (ALEQ; Hankin & Abramson, 2002).* On the ALEQ, participants were asked to indicate whether certain negative events have happened to them in the past three months of period at the time of assessment (0 = *No*; 1 = *Yes*). ALEQ consists of multiple sections, including family and parent, romantic relationships, and school and classes sections. We focused on the family and parent section. Within this section, we selected items that captured adolescents' personal tensions with parents (e.g., your parents forced you to try to achieve things you don't want) and excluded negative events irrelevant to adolescents' direct tensions or conflicts with parents (e.g., your parents got divorced or separated).

A total of nine items were examined in our study. Confirmatory factor analyses (CFA) of the nine items revealed three constructs: overt conflict (e.g., You fought with your parents about personal issues, or over your goals, desires, or choice of friends), parental unresponsiveness (e.g., Your parents did something that made you feel like they did not respect or love you, or they weren't interested in you), and tensions arising from unmet expectations (e.g., Your parents were upset with you because you hadn't lived up to their standards). These factors had been derived in another study focusing on measurement validation across Vietnamese and European American samples (Lau, Park et al, in preparation). In the current study, CFA yielded good model fit

across rural Vietnam ( $\chi^2(36) = 310.18, p < .001, CFI = .937, RMSEA = .055, SRMR = .048$ ), urban Vietnam ( $\chi^2(36) = 353.71, p < .001, CFI = .920, RMSEA = .059, SRMR = .044$ ), and urban U.S. ( $\chi^2(36) = 524.23, p < .001, CFI = .946, RMSEA = .062, SRMR = .045$ ) samples. We further validated the three factors by confirming high correlations between the factors and another family conflict measures in this study, Asian American Family Conflict Scale ( $r = .31, p < .001$  for overt conflict;  $r = .40, p < .001$  for parental unresponsiveness;  $r = .44, p < .001$  unmet parental expectations).

*Asian American Family Conflict Scale (AAFCS, Lee et al., 2000).* The scale was created to capture the likelihood of parent-child conflicts arising from acculturation gap-based value discrepancies. As such, items from AAFCS were more value-laden than those in ALEQ. It includes 10 items that tap various life domains including decision making and academic (e.g., Your parents tell you that a social life is not important at this age, but you think that it is; You want to state your opinion, but your parents consider it to be disrespectful to talk back). Participants were presented with the items and asked to rate on a five-point scale (1 = *almost never*; 5 = *almost always*) how likely each type of situation is to occur in their family. Item reliability was demonstrated across rural Vietnam ( $\alpha = .86$ ), urban Vietnam ( $\alpha = .85$ ), and urban U.S. ( $\alpha = .88$ ) samples.

## Results

### Descriptive Statistics and Group Differences across Variables of Interest

Table 3.1 shows range, mean, and standard deviation of each variable by learning ecology. T-tests were conducted to examine two sets of group mean differences: 1) rural Vietnam vs. urban Vietnam and 2) urban Vietnam vs. urban U.S. Looking at sociodemographic variables, we found that adolescents in urban Vietnam reported higher parental education level

( $M = 4.09$ ,  $SD = 1.67$ ), lower number of siblings ( $M = 1.28$ ,  $SD = .88$ ), and less financial hardship ( $M = 1.40$ ,  $SD = .63$ ) compared to adolescents in rural Vietnam ( $M = 3.26$ ,  $SD = 1.84$ ;  $M = 1.90$ ,  $SD = 1.30$ ;  $M = 1.77$ ,  $SD = 1.25$ ;  $ps < .001$ ). This confirmed the rural vs. urban distinction in our Vietnam sample. For Vietnam-U.S. contrast, however, Vietnamese American adolescents in urban U.S. had parents with lower education level ( $M = 3.60$ ,  $SD = 1.57$ ;  $p = .001$ ), more siblings ( $M = 1.77$ ,  $SD = 1.25$ ;  $p < .001$ ), and more financial hardship ( $M = 1.59$ ,  $SD = .67$ ;  $p = .017$ ) compared to adolescents in urban Vietnam.

Keeping in mind the group mean differences in sociodemographic characteristics, we examined group mean differences concerning adolescents' family obligation values, time use on family assistance, work at a paid job and study, and relationship characteristics with parents. Unexpectedly, the value of family obligation was higher in urban Vietnam ( $M = 3.61$ ,  $SD = .73$ ) than in rural Vietnam ( $M = 3.43$ ,  $SD = .82$ ;  $p = .007$ ). Compared to urban Vietnam, Vietnamese American adolescents also reported lower sense of family obligation ( $M = 3.38$ ,  $SD = .59$ ;  $p < .001$ ).

For the actual time use on family assistance, adolescents in rural Vietnam spent more time helping around house and on chores per week ( $M = 4.70$ ,  $SD = 5.90$ ) compared to those in urban Vietnam ( $M = 3.21$ ,  $SD = 3.83$ ;  $p < .001$ ). Rural Vietnamese adolescents also spent more time working at a job outside home ( $M = 1.21$ ,  $SD = 2.49$ ) compared to those in urban Vietnam ( $M = .56$ ,  $SD = 2.18$ ,  $p = .006$ ). While time use on study did not differ between rural Vietnam ( $M = 3.84$ ,  $SD = 2.72$ ) and urban Vietnam ( $M = 3.93$ ,  $SD = 2.70$ ), study time was the only time use variable that differed between urban Vietnam and urban U.S. ( $M = 3.07$ ,  $SD = 1.49$ ).

For tensions with parents, adolescents in rural Vietnam and urban Vietnam did not differ in their reported tension with parents, with one exception of unmet parental expectations, which

was higher in urban Vietnam than in rural Vietnam ( $p = .018$ ). Between Vietnam and the U.S., Vietnamese American adolescents in urban U.S., more frequently experienced overt conflict ( $M = 1.10$ ,  $SD = .96$ ), parental unresponsiveness ( $M = 1.34$ ,  $SD = 1.10$ ), and unmet parental expectations ( $M = 1.62$ ,  $SD = 1.17$ ) than adolescents in urban Vietnam ( $M = .83$ ,  $SD = .91$ ;  $M = .71$ ,  $SD = .88$ ;  $M = 1.32$ ,  $SD = 1.05$ ;  $ps = .002$  to  $< .001$ ). Vietnamese American adolescents also scored higher on AAFCS ( $M = 3.29$ ,  $SD = .96$ ) than those in both urban Vietnam ( $M = 2.82$ ,  $SD = .80$ ;  $p < .001$ ).

### **Bivariate Correlations**

Table 3.2 presents bivariate correlations among variables of interest. Age and gender were control variables in the study given their associations with our main variables of interest. Age was positively correlated with more time studying and working at a job, while negatively correlated with parental unresponsiveness and tension arising from unmet parental expectations. Male gender was correlated with higher sense of family obligation, less time spent studying and on chores, and more tension with parents across overt conflict, parental unresponsiveness, unmet expectations, and AAFCS. Three sociodemographic variables in the current study were correlated in the direction of expectation, such that more number of siblings was correlate with more financial hardship and less parent education level, and more financial hardship was correlated with less parent education level. Family obligation value was correlated with more time studying and doing chores, and less time spent working at a job. Moreover, family obligation value was negatively correlated with overt conflict adolescents experienced with parents. All four parent-child tension variables were significantly positively correlated with each other. In addition, financial hardship was negatively correlated with the four tension variables.

## How Does Socializing Context and Family Obligation Shape Vietnamese Adolescents' Time Use and Relationship Characteristics with Parents?

**Main effects of socializing context.** Table 3.3 and Table 3.4 show results from hierarchical multiple regression analyses where control variables (age and gender), learning ecology, and sociodemographic variables were entered in Step 1. Step 1 analyses reveal the main effect of learning ecology on adolescents' time use on family assistance, a paid job outside home, and study (Table 3.3) and adolescents' reported tension with parents concerning overt conflict, parental unresponsiveness, unmet expectations, and value discrepancies (Table 3.4). The analyses also show whether and how sociodemographic variables and family obligation values are associated with time use and parent-child relationship variables.

**Time use.** For adolescents' time use, controlling for age and gender, there were significant main effects of learning ecology on adolescents' time spent on chores, working at a job, and studying (see Table 3.3). Adolescents in rural Vietnam were more likely than those in urban Vietnam to spend time on chores ( $b = 1.28, SE = .41, p = .009$ ) and at a paid job outside home ( $b = .58, SE = .22, p = .002$ ). Vietnamese American adolescents in urban U.S. were less likely to spend time studying than adolescents in urban Vietnam ( $b = -1.00, SE = .26, p < .001$ ). Sociodemographic variables were also associated with adolescents' time use. Having more siblings was associated with spending more time on chores ( $b = .36, SE = .14, p = .007$ ) and higher parental education level was associated with less time spent on chores ( $b = -.24, SE = .09, p = .010$ ). A sense of family obligation was associated with adolescents' time spent on chores ( $b = .78, SE = .33, p < .001$ ) and study ( $b = .42, SE = .11, p < .001$ ).

**Tension with parents.** Step 1 of the results presented in Table 3.4 reveals the main effect of learning ecology on four types of adolescents' tension with parents. Compared to adolescents



in urban Vietnam, Vietnamese American adolescents in urban U.S., reported more frequently experiencing parental unresponsiveness ( $b = .51, SE = .11, p < .001$ ) and scored higher on AAFCS ( $b = .26, SE = .10, p < .001$ ). Among the sociodemographic variables examined in our study, financial hardship was significantly associated with adolescents' tension with parents across overt conflict ( $b = .21, SE = .05, p < .001$ ), unresponsiveness ( $b = .32, SE = .05, p < .001$ ), unmet expectation ( $b = .17, SE = .06, p = .003$ ), and AAFCS ( $b = .20, SE = .04, p < .001$ ). The main effect of family obligation values on adolescent-parent tension was significant only for overt conflict ( $b = -.09, SE = .05, p = .043$ ).

**Association between family obligation values and behavioral measures: moderation by socializing context.** Interaction terms were entered in Step 2 to examine whether the value of family obligation interacted with learning ecology to predict adolescents' time use (Table 3.3) and experienced tension with parents (Table 3.4).

**Time use.** Interaction analyses revealed that the association between family obligation values and time use depended on adolescents' learning ecology (see Table 3.3). Formal tests of interaction confirmed significant interaction by region for the link between adolescents' sense of family obligation and time spent on studying ( $F(2, 807) = 7.43, p < .001$ ) and working at a job ( $F(2, 757) = 4.76, p = .009$ ). Specifically, the slopes for family obligation predicting studying time were significantly different between urban Vietnam and rural Vietnam ( $b = .92, SE = .25, p < .001$ ) and between urban Vietnam and urban U.S. ( $b = .79, SE = .29, p = .006$ ). For time working at a job, slopes were significantly different between rural Vietnam and urban Vietnam ( $b = .65, SE = .27, p = .016$ ).

Each slope was tested to examine whether the slope significantly differed from zero. As depicted in Figure 3.1, a sense of family obligation was associated with time spent studying only

in urban Vietnam ( $b = .97, SE = .18, p < .001$ ), but not in rural Vietnam ( $b = .04, SE = .04, p = .813$ ) or for Vietnamese Americans in urban U.S. ( $b = .18, SE = .22, p = .423$ ). That is, high family obligation predicted more time studying, but only in urban Vietnam. Furthermore, a sense of family obligation was associated with time spent working at a job in rural Vietnam ( $b = -.56, SE = .19, p = .003$ ). In rural Vietnam, adolescents with lower sense of family obligation spent more time working at a paid job outside home. Learning ecology did not significantly moderate the link between family obligation and time spent on chores ( $F(2, 771) = .20, p = .816$ ); higher family obligation was associated with more time use on chores in rural and urban Vietnam, and the same trend was shown for Vietnamese American adolescents.

***Tension with parents.*** The link between family obligation values and adolescent-parent tension was moderated by learning ecology in two out of four types of tension with parents: parental unresponsiveness and unmet parental expectation. Formal interaction tests revealed a significant interaction by region for unmet expectations ( $F(2, 807) = 3.42, p = .033$ ) and a marginally significant interaction for parental unresponsiveness ( $F(2, 807) = 2.45, p = .087$ ). Specifically, the slopes for family obligation predicting tension arising from unmet expectations were significantly different between urban Vietnam and rural Vietnam ( $b = -.27, SE = .12, p = .027$ ).

Again, simple slope was tested for each region to examine whether the slope significantly differed from zero. As shown in Figure 3.2, Vietnamese American adolescents' higher sense of family obligation was significantly associated with less adolescent-parent tension concerning overt conflict ( $b = -.19, SE = .09, p = .033$ ) and unresponsiveness ( $b = -.25, SE = .10, p = .009$ ), while marginally associated with tension relating to unmet expectation ( $b = -.19, SE = .11, p = .085$ ). The buffering effect of family obligation values in relationship with parents did not

exist for rural Vietnam and urban Vietnam adolescents. However, adolescents in urban Vietnam showed a trend, such that there was a marginally significant association between higher sense of family obligation and less overt conflict ( $b = -.13$ ,  $SE = .07$ ,  $p = .080$ ) and unmet expectation ( $b = -.15$ ,  $SE = .09$ ,  $p = .091$ ).

## **Discussion**

Members of Asian families are generally viewed as holding a strong sense of obligation towards one's family. In this study, we challenged the widespread and stereotypical notion by implementing a study design to look at Vietnamese adolescents residing in rural vs. urban Vietnam, and urban Vietnam vs. urban U.S. Greenfield's (2009) and Kağıtçıbaşı's (2005, 2013) theoretical perspectives informed our research questions concerning adolescents' family obligation values, daily time use on family assistance, work at a paid job outside home and study, and relationship characteristics with parents.

In general, we expected to observe reduction in family obligation values and time used assisting family in urban Vietnam compared to rural Vietnam. Given immigrant experiences that add layers to the formation of values and daily experiences, urban Vietnam vs. urban U.S. contrast concerning family obligation was exploratory rather than had specific directional hypotheses. In addition, we hypothesized that time use on study and parent-child conflicts to be greater in urban Vietnam compared to rural Vietnam, and greater in urban U.S. compared to urban Vietnam. Our predictions were partially supported. Findings show that learning ecology may be modifying the definition of family obligation in adolescents' everyday time use, particularly in regard to studying, in urban Vietnam. It also highlights family obligation as a potential mechanism through which Vietnamese American adolescents in immigrant families

may be protected from experiencing tensions with parents, tensions that possibly arise from value discrepancies and acculturation gaps.

We found that adolescents from urban Vietnam reported less number of siblings, less family financial strain, and higher parental education levels, than did rural Vietnam participants. This validates our recruitment of rural and urban sites in Vietnam, and confirms the notion that economically driven social change within a nation shifts learning ecology in which children are raised (Greenfield, 2009; Kağıtçıbaşı, 2005, 2013). However, Vietnamese American adolescents in urban U.S. may not have been socioeconomically more well off than those in urban Vietnam according to some indices in our study. Given that Vietnamese American adolescents in our study came from California that is home for the largest population of Vietnamese in the U.S., this pattern may reflect norms of Vietnamese immigrant and refugee families in the U.S. Regardless of whether the counterintuitive sociodemographic trends between immigrant-sending (urban Vietnam) and immigrant-receiving countries (urban U.S.) patterns reflect the selection from native populations who choose to immigrate to the U.S. or downward socioeconomic mobility following immigration, our study adds to the literature by highlighting that immigrant families in the U.S. may have socioeconomic resources that are more limited compared to families who reside in economically developed regions in the home country.

With the sociodemographic information in mind, several main effects of learning ecology were found across our variables of interest. We found that family obligation was more strongly endorsed in urban Vietnam compared to rural Vietnam, contrary to Greenfield's (2009) notion of reduction in family obligation as socioecologies shift towards urbanization and commercialization. Although the strong sense of family obligation in urban Vietnam more closely align with Kağıtçıbaşı's (2005, 2013) notion of the retention of traditional values, her

model does not fully account for the *higher* family obligation values found in urban compared to rural Vietnam, either. Our findings suggest that families in urban Vietnam may not be merely maintaining the traditional cultural value of family obligation. Rather, they may be responding and reacting to rapid changes in socioecologies in Vietnam, through increased emphasis and promotion of traditional values that may otherwise be easily lost in the process of social change.

We also hypothesized main effect of learning ecology on adolescents' everyday time use. As expected, Vietnamese adolescents' time spent on family assistance behaviors through chores was higher in rural Vietnam compared to both urban Vietnam, supporting Greenfield's (2009) and Kağıtçıbaşı's (2005) reasoning. However, adolescents in rural Vietnam and urban Vietnam were not different from each other on how many hours per day they spent on study, whereas urban Vietnamese adolescents reported more study time than Vietnamese American adolescents in urban U.S. Perhaps, adolescents in the U.S. are presented with more daily activity options such as participating in sports and clubs. Such activities likely take up portions of time for Vietnamese adolescents, causing reduction in their time spent on study. In Vietnam, smaller selection of activity options may exist for teens.

Working at a job outside home was an activity in which Vietnamese adolescents more frequently participated in rural Vietnam than urban Vietnam. While this finding contrasts Greenfield's (2009) and Kağıtçıbaşı's (2005) notions of increased agency and participation in autonomy-promoting activities in urbanized and commercialized settings, more time spent on job in rural Vietnam makes sense in the context of adolescent development. Adolescents in rural Vietnam may spend more time at a job compared to those in urban Vietnam due to less emphasis on schooling in rural socioecology (Greenfield, 2009; Larson & Verma, 1999). It should be

noted that adolescents across three learning ecologies spent little time working at a job outside home, relative to time spent on chores or study.

We predicted that more conflictual parent-child relations would be observed in urban U.S. than urban Vietnam, and more in urban Vietnam than rural Vietnam. Compared to rural Vietnam, greater parent-child tension was observed in the realm of unmet expectation and cultural value discrepancies. This suggests that urbanization may be heightening adolescents' conflicts with parents in domains specifically related to economically driven social change. For example, tensions concerning unmet expectation may arise as parents increasingly emphasize academic achievement in urban environment. Urbanization is also thought to shift cultural values (Greenfield, 2009), thus discrepancies in cultural values may increase, leading to more frequent conflicts arising from cultural values.

There was a clear pattern that Vietnamese American adolescents more frequently perceived or experienced tensions with parents compared to adolescents in Vietnam. The literature on acculturation in immigrant families points to different rates of acculturation between child and parents where the child quickly adopts to the mainstream culture while parents do not, and suggests that acculturation gap causes family conflicts (e.g., Portes & Rumbaut, 2006). Our study suggests that adolescents in immigrant families may be particularly encountering challenges in communicating with parents. Compared to adolescents in urban Vietnam, Vietnamese American adolescents in urban U.S. reported higher tension with parents concerning parental unresponsiveness and value discrepancies, but not in the realm of over conflicts and unmet expectations when we controlled for age, gender, and sociodemographic variables. Parental unresponsiveness and value discrepancies may commonly encompass a relationship element that is not explicitly stated. That is, to some degree, adolescents are interpreting the

meaning of parental reactions and expectations when considering their interactions with parents. Facets of dissonant acculturation such as differences in spoken language at home and attitudes towards the mainstream U.S. culture may increase the likelihood of adolescents' perception of parental unresponsiveness and expectations among Vietnamese American adolescents, relative to those in Vietnam. It is crucial for future research to identify specific elements that may influence adolescents' perception of parents' intentions in immigrant families, and consider ways to facilitate mutual understanding.

In connecting cultural values of family obligation to daily behaviors, it is worthwhile to note that a sense of family obligation generally was linked to adolescents' time use only in Vietnam but not among Vietnamese Americans in urban U.S. The traditional value of family obligation may reinforce adolescents' daily demands in Vietnam, but it may not be a driving principle in everyday behaviors for adolescents in the U.S. In the U.S. where traditional Eastern cultural values such as family obligations are not readily recognized as a society, adolescents' daily behaviors may be guided by other values more normative in the mainstream U.S. context. For example, personal academic motivation may prompt more time studying and financial needs and career goals may relate to whether and how much adolescents work at a paid job.

In Vietnam, adolescents' sense of family obligation showed behavioral manifestation in the domain of study in urban Vietnam and in the realm of working at a job outside home in rural Vietnam. In urban Vietnam, adolescents spent more time studying if they had higher sense of family obligation. The link between adolescents' family obligation values and time use on study did not exist in rural Vietnam. As Vietnam is moving towards increasing levels of formal education, urbanization, and commercialization, the increased emphasis on education as a society

(Greenfield, 2009; Manago, 2012) may prompt academic achievement as part of important parental socialization of their children.

As such, the valuation of family—in particular, one’s sense of obligation to the family—may remain intact despite the transformation of socioecology (Kağıtçıbaşı, 2010), but its meaning and behavioral manifestation in daily lives of adolescents may transfer into more child-centered activities such as studying. In addition, rural Vietnamese adolescents were more likely to work at a paid job outside home if they held lower, not higher, sense of family obligation. Working at a job may be a way through which adolescents in rural Vietnam behaviorally engage in independent pursuits away from the family, rather than as a way to fulfill their family obligation and contribute to the family.

The valuation of family obligation also acted as a buffer against experiencing and perceiving conflicts with parents, but this was the case only for Vietnamese American adolescents and not those living in Vietnam. This finding has great implications for relationship quality and well-being in immigrant families, especially given that Vietnamese American adolescents consistently reported higher frequencies of tension with parents than adolescents in Vietnam. In the context of immigrant families where acculturation gaps are frequently noted, children’s enculturation into home country’s traditional values such as family obligation reduce tensions arising from misunderstanding or misinterpretations. Understanding of family obligation values may help children in immigrant families to better interpret parental intentions and expressions that are communicated both verbally and nonverbally.

Together, our findings reveal important within-group differences in Vietnamese adolescents and help to better understand the role of socioecology and cultural values in shaping adolescent development. Findings confirm shifting learning ecology towards higher wealth,



more education, and reduced family size within Vietnam, a country undergoing urbanization. At the same time, our findings reveal complexities in urbanization and immigrant experiences. Urbanization may be changing the definition of traditional values, rather than merely reducing or maintaining traditional values such as family obligation. In addition, family obligation values may serve as an important guiding block for adolescents' daily time use, yet this was only true for those living in Vietnam. Similarly, valuation of family obligation may buffer adolescents from experiencing tensions with parents, but this was limited to the contexts of immigrant families and did not apply for those in immigrant-sending home country. Future research should continue to examine various types of values and behaviors that may inform adolescent development in different settings. In addition, implications for well-being should be extended beyond tensions and conflicts with parents to examine various psychological and physical health indicators among adolescents from immigrant backgrounds, as well as in societies undergoing social change. In doing so, research should attend to both the role of sociodemographic factors and heritage cultural factors and add to the comprehensive understanding of adolescent development across diverse sociocultural contexts.

Table 3.1.

*Means, Standard Deviations, and Group Differences across all Variables of Interests*

Variable	Rural Vietnam <i>Mean (SD)</i>	Urban Vietnam <i>Mean (SD)</i>	Urban U.S. <i>Mean (SD)</i>	Significant Mean Difference between Rural Vietnam vs. Urban Vietnam and between Urban Vietnam vs. Urban U.S. (t-test)
Sociodemographic				
Parent education	3.26(1.84)	4.09 (1.67)	3.60 (1.57)	Rural VN < Urban US, Urban US < Urban VN
Number of siblings	1.90(1.30)	1.28 (0.88)	1.77 (1.25)	Rural VN > Urban VN, Urban VN < Urban US
Financial hardship	1.56(0.80)	1.40 (0.63)	1.59 (0.67)	Rural VN > Urban VN, Urban VN < Urban US
Value				
Family obligation	3.43(0.82)	3.61 (0.73)	3.38 (0.59)	Rural VN < Urban VN, Urban VN > Urban US
Daily times use				
Studying	3.84(2.72)	3.93 (2.70)	3.07 (1.49)	Urban VN > Urban US,
Help around house	4.70(5.90)	3.21 (3.83)	2.72 (3.42)	Rural VN > Urban VN
Work at a job	1.21(2.49)	0.56 (2.18)	0.83 (2.82)	Rural VN > Urban VN
Conflict with parents				
Overt conflict	0.80(0.91)	0.83 (0.91)	1.10 (0.96)	Urban VN < Urban US
Unresponsiveness	0.71(0.91)	0.71 (0.88)	1.34 (1.10)	Urban VN < Urban US
Unmet expectation	1.07(1.03)	1.32 (1.05)	1.62 (1.17)	Rural VN < Urban VN, Urban VN < Urban US
AAFCS	2.76(0.70)	2.82 (0.80)	3.29 (0.96)	Urban VN < Urban US

Table 3.2.

*Bivariate Correlations*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age												
2. Gender	-.07 <sup>*</sup>											
3. Number of siblings	.02	.03										
4. Financial hardship	.06	.00	.09 <sup>*</sup>									
5. Parent education	.05	-.02	-.07 <sup>*</sup>	-.15 <sup>***</sup>								
6. Family obligation	-.08 <sup>*</sup>	.11 <sup>**</sup>	-.07 <sup>+</sup>	-.12 <sup>***</sup>	.05							
7. Time studying	.09 <sup>**</sup>	-.08 <sup>*</sup>	-.02	.07 <sup>*</sup>	-.06 <sup>+</sup>	.11 <sup>***</sup>						
8. Time on chores	.03	-.17 <sup>***</sup>	.11 <sup>**</sup>	.05	-.11 <sup>**</sup>	.11 <sup>**</sup>	.18 <sup>***</sup>					
9. Time at a job	.09 <sup>**</sup>	.02	.04	.10 <sup>**</sup>	-.08 <sup>*</sup>	-.07 <sup>*</sup>	.25 <sup>***</sup>	.15 <sup>***</sup>				
10. Overt conflict	-.06	.13 <sup>***</sup>	-.02	.14 <sup>***</sup>	-.02	-.09 <sup>*</sup>	.01	.00	-.06 <sup>+</sup>			
11. Unresponsive	-.07 <sup>*</sup>	.23 <sup>***</sup>	.03	.21 <sup>***</sup>	-.01	-.08	-.03	.01	-.02	.40 <sup>***</sup>		
12. Unmet expectation	-.06 <sup>+</sup>	.14 <sup>***</sup>	-.01	.08 <sup>*</sup>	.02	-.04	-.04	.01	-.09 <sup>*</sup>	.47 <sup>***</sup>	.39 <sup>***</sup>	
13. AAFCS	-.02	.26 <sup>***</sup>	-.02	.15 <sup>***</sup>	-.06 <sup>+</sup>	-.06 <sup>+</sup>	-.01	.03	-.05	.31 <sup>***</sup>	.40 <sup>***</sup>	.44 <sup>***</sup>

Note. + $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Gender was coded such that 0 = female and 1 = male.

Table 3.3.

*Hierarchical Multiple Regression Predicting Adolescents' Time Use from Learning Ecology, Sociodemographic Variables, and Family Obligation*

	Time spent studying				Time spent on chores				Time spent at a job			
	Model a		Model b		Model a		Model b		Model a		Model b	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	3.75***	.17	3.67***	.17	3.75***	.32	3.72***	.33	.58**	.22	.50***	.18
Control variables												
Age	.28*	.12	.26*	.12	.17	.23	.17	.23	.36**	.13	.35**	.13
Gender	.24	.16	.26+	.16	-.95**	.32	-.94**	.32	.12	.17	.11	.17
Learning ecology												
Rural VN	-.04	.21	.01	.21	1.28**	.41	1.29**	.42	.58**	.22	.59**	.22
Urban US	-1.00***	.26	-.98***	.26	.51	.52	.51	.52	.14	.29	.22	.29
Sociodemographic												
Number of siblings	.02	.07	.02	.07	.36**	.14	.36**	.14	.06	.07	.07	.07
Financial hardship	.23+	.12	.22+	.12	.15	.23	.15	.23	.20	.13	.17	.13
Parent education	-.10*	.05	-.11*	.05	-.24**	.09	-.24**	.09	-.10+	.05	-.10+	.05
Value												
Family obligation	.42***	.11	.04	.18	.78***	.33	.71*	.36	-.12	.12	-.56**	.19
Value X region												
Family ob X rural VN			-.92***	.25			-.25	.50			-.65*	.27
Family ob X urban US			-.79**	.29			.33	.57			.24	.32
Model fit	F (8, 809) =		F (10, 818) =		F (8, 773) =		F (10,771) =		F (8, 759) =		F (10,757) =	
	6.68***		6.92***		8.56***		6.87***		4.06***		4.23***	

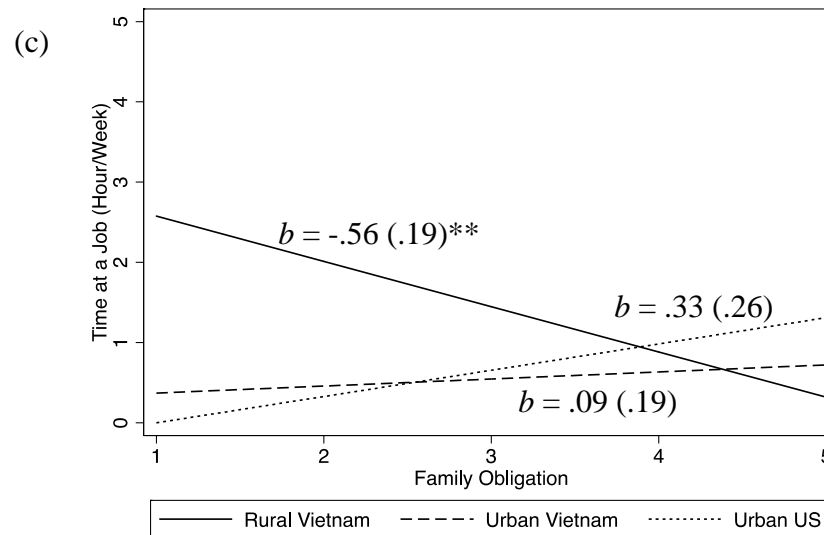
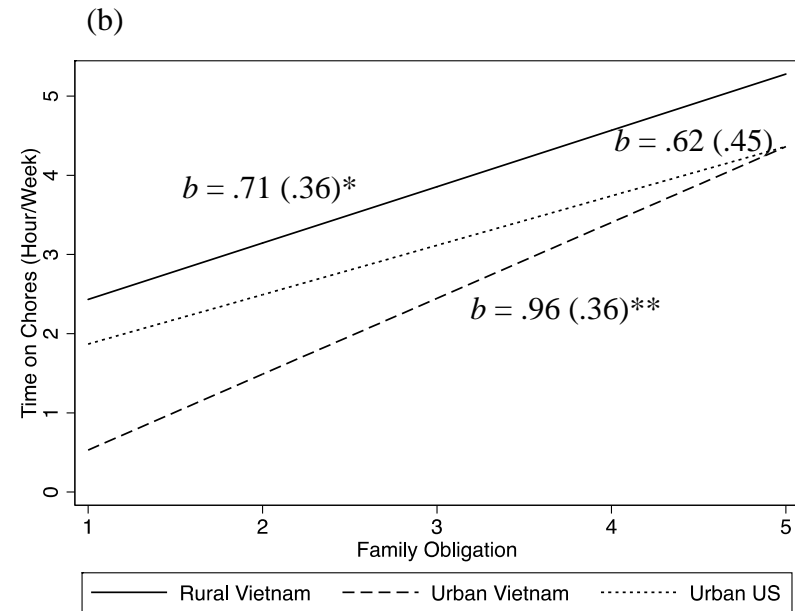
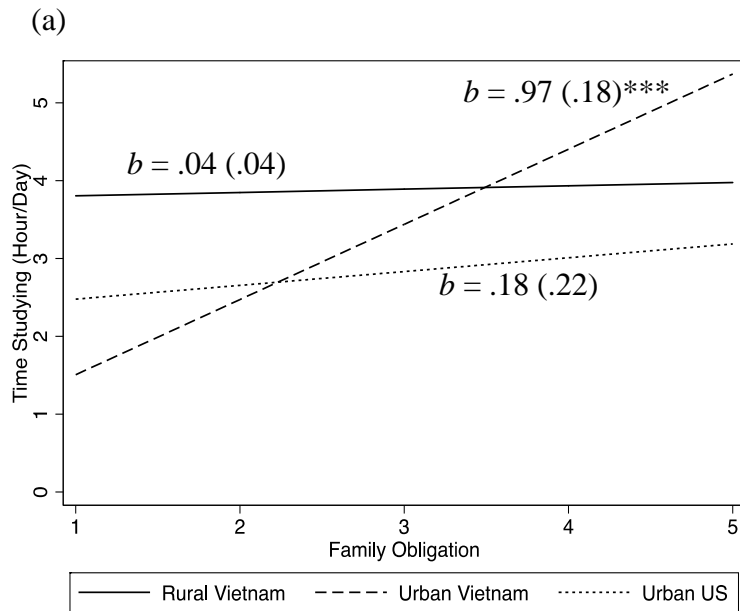
Note. + $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Gender was coded such that 0 = female and 1 = male. Urban Vietnam was the reference group for learning ecology.

Table 3.4.

*Hierarchical Multiple Regression Predicting Adolescents' Relationship Tension with Parents from Learning Ecology, Sociodemographic Variables, and Family Obligation*

	Overt conflict				Unresponsive				Unmet expectation				AAFCS			
	Model a		Model b		Model a		Model b		Model a		Model b		Model a		Model b	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	.85***	.06	.85***	.06	.76***	.07	.75***	.07	1.32***	.14	1.33***	.08	2.79***	.06	2.80***	.06
Control variables																
Age	-.08+	.05	-.08+	.05	-.08	.05	-.08+	.05	-.11*	.06	-.11+	.06	.01	.04	.01	.04
Gender	.09	.06	.10	.07	.04	.07	.05	.07	.07	.08	.07	.08	.15**	.06	.15**	.06
Region																
Rural VN	-.10	.09	-.10	.11	-.09	.09	-.09	.09	-.26*	.10	-.26**	.10	-.17*	.08	-.18*	.08
Urban US	.08	.11	.06	.11	.51***	.11	.48***	.11	.18	.13	.15	.13	.26**	.10	.25*	.10
Sociodemographic																
Number of siblings	-.03	.03	-.03	.03	-.01	.03	-.01	.03	-.01	.03	-.01	.03	-.02	.02	-.03	.03
Financial hardship	.21***	.05	.21***	.05	.32***	.05	.32***	.05	.17**	.06	.18**	.06	.20***	.04	.20***	.04
Parent education	.00	.02	.00	.02	.02	.02	.02	.02	.02	.02	.02	.02	-.02	.02	-.02	.02
Value																
Family obligation	-.09*	.05	-.19*	.09	-.07	.05	-.25**	.10	-.06	.05	-.19+	.11	-.02	.04	-.03	.08
Value X region																
Family ob X rural VN			.14	.10			.06	.11			.27*	.12			.12	.09
Family ob X urban US			-.06	.12			-.21+	.12			-.04	.14			.05	.11
Model fit	F (8,809)		F (10,807)		F (8,809)		F (10,807)		F (8,809)		F (10,807)		F (8,804)		F (10,807)	
	=5.61***		=4.86***		=15.76***		=13.15***		=5.57***		=5.17***		=4.00***		=11.06***	

Note. + $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Gender was coded such that 0 = female and 1 = male. Urban Vietnam was the reference group for learning ecology.



*Figure 3.1.* Association between adolescents' family obligation value and their time spent on (a) studying, (b) chores, and (c) working at a job by learning ecology.

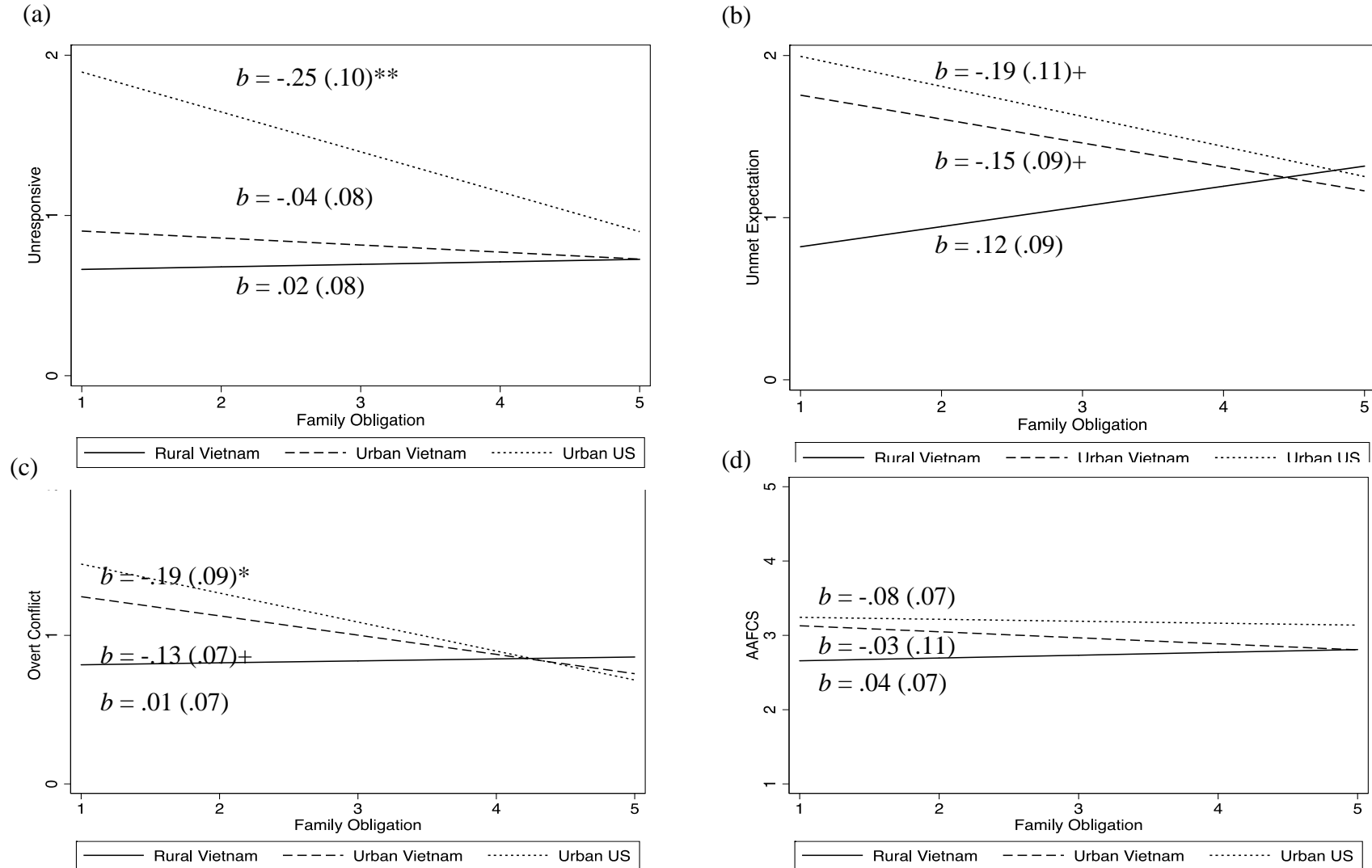


Figure 3.2. Association between adolescents' family obligation value and reported tension with parents. (a) parental unresponsiveness, (b) unmet expectations, (c) overt conflict and (d) Asian American Family Conflict Scale.



## **General Discussion**

In my dissertation, I conducted three interrelated studies to investigate how social change may shape cultural values (Study 1, 2, 3), daily behaviors (Study 3), and parent-child relationship characteristics (Study 3). In forming my hypotheses and interpreting findings, I considered the two major theoretical perspectives leading the field of cultural psychology and social change. Going from relative rural to urban socioecologies, Greenfield's (2009) perspective suggests uniform shift towards decreased family obligation and increased independence, particularly through participations in commerce and formal schooling. Kagitcibasi's (2005) perspective contends that autonomy indeed increases, but the psychological interdependency among family members remain. The two perspectives are informative and important, given that the majority of psychological studies on culture carry the underlying assumption that culture is stable, unfortunately discounting the dynamic nature of culture and its shaping of human values and experiences.

Across three studies, schooling consistently and robustly predicted less familistic or collectivistic values and greater individualistic values. This was the case looking at mother's education level (Study 1), parents' own education level (Study 2), national indicators on educated population percentages (Study 2), and parental academic expectations (Study 3). In addition, findings across my three studies reveal patterns of both erosion and retention of family obligation values. As for supporting evidence for reduced family obligation values, in Study 1, urban Korea was not more familistic than urban U.S. This is contrary to the widespread notion that East is collectivistic and West is individualistic, and suggests that urbanization may be reducing East-West differences in cultural values. Maintenance of familistic values was found in Study 3, where adolescents reported a stronger sense of family obligation in urban Vietnam, even

stronger than in rural Vietnam. Adding to existing perspectives on social change and shifting developmental pathways, my dissertation also alludes that at times the traditional value of family obligation may be actively promoted beyond maintenance. The promotion of traditional cultural values may take place in the face of threats to losing one's traditional cultures, for instance in the case of immigration and development of urban centers in recently rural socioecologies. My dissertation also suggests that the meaning and the role of family obligation in daily behaviors and parent-child interactions are largely dependent upon the socializing contexts, even when ethnic culture is shared. Overall, the dissertation contributes to the emerging research on social change that is much needed in today's multicultural and economically developing world.

## Appendices

### Study 3: ALEQ Items and Constructs

Construct	Item
Overt conflict	<ol style="list-style-type: none"><li>1. You fought with your parents about personal issues, or over your goals, desires, or choice of friends.</li><li>2. You got in a fight with your parents over dating.</li><li>3. Your parents grounded or punished you.</li></ol>
Parental unresponsiveness	<ol style="list-style-type: none"><li>1. Your parents did something that made you feel like they did not respect or love you, or they weren't interested in you.</li><li>2. You really needed your parents for something but they couldn't be there or didn't give you what you needed (their time, help with something, etc.).</li><li>3. Your parents wouldn't let you do something you really wanted to do with your friends.</li></ol>
Unmet parental expectations	<ol style="list-style-type: none"><li>1. Your parents were upset with you because you hadn't lived up to their standards.</li><li>2. Your parents criticized you or yelled at you for not doing well in school.</li><li>3. Your parents forced you to try to achieve things you don't want.</li></ol>

Study 3: Asian American Family Conflicts Scale (AAFCS; Lee et al., 2000)

*How likely is this type of situation to occur in your family?*

1 = *almost never*, 2 = *once in a while*, 3 = *sometimes*, 4 = *often or frequently*, 5 = *almost always*

Item
1. Your parents tell you what to do with your life, but you want to make your own decisions.
2. Your parents tell you that a social life is not important at this age, but you think that it is.
3. You have done well in school, but your parents' academic expectations always exceed your performance.
4. Your parents want you to sacrifice personal interests for the sake of the family, but you feel this is unfair.
5. Your parents always compare you to others, but you want them to accept you for being yourself.
6. Your parents argue that they show you love by housing, feeding, and educating you, but you wish they would show more physical and verbal signs of affection.
7. Your parents don't want you to bring shame upon the family, but you feel that your parents are too concerned with saving face.
8. Your parents expect you to behave like a proper Asian male or female, but you feel your parents are being too traditional.
9. You want to state your opinion, but your parents consider it to be disrespectful to talk back.
10. Your parents demand that you always show respect for elders, but you believe in showing respect only if they deserve it.

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