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The Construction of Everyday Sacrifice in Asian Americans and European Americans: The Roles of Ethnicity and Acculturation

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This research examines the effects of ethnicity and acculturation on everyday sacrifice behaviors in 63 European American and 131 Asian American college students (mean age = 18.60). Asian Americans were divided into more and less acculturated groups using the Suinn-Lew Asian Self-Identity Acculturation Scale. Participants

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responded to scenarios involving conflict between sacrifice (for parents, siblings, and friends) and the realization of personal goals in three domains (money, dating, and schoolwork). In most domains, Asian Americans were, as predicted, significantly more likely to say they would sacrifice than were the European Americans. Whereas less acculturated Asian Americans were, as predicted, significantly more likely than European Americans to say that they would sacrifice for their parents, European Americans expressed a significantly greater willingness to sacrifice for siblings than for parents. With acculturation to U.S. society, the level of Asian American sacrifice declined, but its distinctive patterning remained.

The tendency to self-sacrifice (especially toward in-group members) is a highly desirable trait in many collectivistic cultures, such as those found in Asia (Kagitcibasi, 1997; Triandis, McCusker, & Hui, 1990). According to Triandis et al. (1990), "in collectivist cultures, ingroup goals have primacy over individual goals" (p. 1007). For example, in Korea, people speak of the interpersonal trait of *chong*, an affective bond between in-group members that emphasizes unconditionality, shared experience, empathy, and sacrifice (Kim & Choi, 1994). Sacrifice is also valued in Chinese culture, in which a sense of duty or obligation often takes precedence over self-gratification, leading to such common acts as Chinese teenagers' handing over entire paychecks to their parents for family use (Sung, 1985). In the collectivistic worldview, the most important in-group is the family, and as the boundary broadens away from one's family, "the intensity of the interaction and the feeling of 'we-ness' diminishes" (Han & Choe, 1994, pp. 213-214).

Indeed, sacrifice and obligation toward others are central themes in the worldviews of many Asian people. According to Kitayama, Markus, and Matsumoto (1995), people from Asian cultures "believe in the inherent connectedness among different individuals," thus leading to a desire to "adjust to and fit into important relationships, to occupy one's proper space, to engage in appropriate actions and to promote relevant others' goals" (pp. 442-443). Leung and Wu (1990) state that people who are more collectivistic have "the tendency to be more concerned about the consequences of one's behavior on in-group members and to be more willing to sacrifice personal interests for the attainment of collective interest" (p. 222). This tendency to promote the goals of others stems from the collectivistic emphasis on social norms and duty defined

by the group and a readiness to cooperate with in-group members (Kagitcibasi, 1997; Triandis, 1990).

These generalizations do not mean that all Asians are self-sacrificial at all times, however. In fact, great individual variability exists among Asians in the tendency to sacrifice for others, as there would be for any other behavioral or value pattern. In fact, "most cultures include a mixture of individualistic and collectivistic elements, and most individuals include in their cognitive systems both patterns" (Triandis, 1993, p. 159). On the level of values, however, there seems to be an overarching tendency for people in Asian cultures to idealize acts of self-sacrifice.

Such ideology is less common in the West. According to Hui and Triandis (1986), people from individualistic cultures differ in that they are less willing to subordinate their personal goals for a collective, less willing to confront members of their in-groups, and feel a greater degree of separation from their in-group members. Freedom, one of the rights provided to Americans by the Constitution, is described by Bellah, Madsen, Sullivan, Swidler, and Tipton (1985) as a freedom to be untied as much as possible from the demands of conformity to family, friends, and the community in order to pursue individual wants and needs. Indeed, the individual's right to pursue personal happiness is deeply entrenched in North American culture, where "liberal philosophy assumes that individuals are rational and able to use reason to make personal choices, and as such they should be given individual rights to choose freely and to define their own goals" (Kim, Triandis, Kagitcibasi, Choi, & Yoon, 1994, p. 7). Rather than being socialized for duty to the in-group, those from individualistic societies are socialized for self-reliance and independence (Kagitcibasi, 1997; Triandis et al., 1990). The relatively high value placed on achieving personal goals and the relatively low value placed on self-sacrifice is reflected in norms for behavior in the United States. For example, the normative use of a U.S. teenager's paycheck is for personal goals: to buy discretionary items that parents cannot or will not provide (Greenberger & Steinberg, 1986). This finding is in sharp contrast to Sung's (1985) observation that Chinese teens often hand over their paychecks for family use.

Rather than being a behavior expected in everyday life, in the United States, self-sacrifice is valued mainly in extreme situations. For example, Miller, Bersoff, and Harwood (1990) conducted a study in which a person was depicted as failing to help someone that was in either life-threatening, moderately serious, or minor

need. Whereas East Indian participants felt that helping was a moral issue in all three situations, American participants felt that failure to help was a moral issue only in life-threatening circumstances (Miller et al., 1990). In fact, when parents in the United States try to socialize children to place the needs of the family over the personal goals of the child, the parent's behavior can be portrayed as inappropriate and even pathological (Greenfield & Suzuki, 1998).

In the dominant culture of United States, obligations and commitments are explicitly laid out (Miller, 1994; Miyamoto, 1986-1987) and "laws, rules and regulations are institutionalized to protect individual rights, with everyone being able to assert his or her rights" (Kim et al., 1994). Such contractual transactions "minimize future obligation" between people (Cushman & Kincaid, 1987, p. 15). In contrast, in East Asia, "favours are done and obligations are created in order to increase interdependence" (Cushman & Kincaid, 1987, p. 15). This sentiment is common throughout Asia.

In addition to values, cultural differences in participants' feelings regarding self-sacrifice were of interest. Stipek, Weiner, and Li (1989) conclude that European Americans cite "violating a law or moral principle" as being the most frequently mentioned cause of guilt whereas Chinese people cite "hurting others psychologically" most frequently. One might then expect that Asian Americans would feel more guilty than European Americans when choosing not to act in sacrificial ways toward others.

There are, however, various degrees and domains of sacrifice. Rather than focusing on extreme sacrifices, such as giving up one's life, our interest centered on mild sacrifices relevant to everyday decision making. Our study explored differences in the norms of mild sacrifice between European American and Asian American college students. We hypothesized that these norms would be related to the philosophical ideals present in each culture.

VALUE CONFLICT IN A DIVERSE SOCIETY

Given these differences in the value of sacrifice between the individualistic culture in the United States and the collectivistic culture in Asia, a question still remains: What happens to the construction of values when people are exposed to diverse cultural beliefs? That is, what happens when an immigrant or minority group member, raised with particular cultural values at home, is

exposed to a larger society with different cultural values (Greenfield & Suzuki, 1998)? This exposure is particularly significant when many students start college and no longer live at home. Therefore, how different or similar would Asian American and European American college students be in their attitudes toward everyday sacrifice? This is a central question of our study.

DOMAINS OF INTEREST IN THE STUDY OF SACRIFICE

Because sacrificial values may be domain specific, we wanted to explore decision making concerning mild, everyday sacrifice in a variety of domains. Therefore, three domains that were highly salient to our college population were selected for investigation: money, a prospective date, and schoolwork.

Schoolwork is very important to our sample of college students who have recently begun their higher education. Also during this period, "the development of intimacy is the primary psychosocial task of the young adult" (Berk, 1996, p. 286). Thus, our sample of students just starting college should be in the prime of their dating years. Finally, money is salient during the college years because students take increasing responsibility for their finances.

SACRIFICE FOR WHOM?

Whom one is sacrificing for may affect how much one is willing to sacrifice and may vary across cultures. Therefore, recipient of sacrifice was another variable in our study. Our study compared three categories of recipient: parent, sibling, and friend. Of particular interest was the parent category. According to Ho (1994), under the precepts of Confucianism in Asian culture, "the guiding principle governing socialization is embodied in the ethic of filial piety" (p. 287).

In fact, a study by Cooper, Baker, Polichar, and Welsh (1993) revealed that Chinese American, Filipino American, and Vietnamese American participants were significantly more likely than their European American peers to more strongly endorse the statement "Much of what a son or daughter does in life should be done to please the parents," a strong statement in favor of filial piety. Cooper et al. (1993) also revealed a significantly greater tendency for the Asian American groups to more strongly endorse the statement "Older siblings should help directly support other family

members economically," indicating that sacrifice is desirable not only for parents but also for other family members.

Given this specific emphasis on filial piety and the general emphasis on familial relationships, there may be culturally based patterns in the tendency to sacrifice. For example, Asian Americans would probably be most likely to sacrifice for their parents and least likely to sacrifice for their friends, with siblings falling in between. This emphasis on familial sacrifice is supported by Ma's (1992) study of altruistic behaviors in Chinese participants. According to this study, Chinese participants had a hierarchical order concerning for whom they would perform acts (e.g., sacrificing oneself to save someone from a sinking boat). Predictably, these individuals were most likely to say that they would first save kin and close relatives, followed by best friends or intimates, and then strangers. Would acts of everyday sacrifice follow a similar pattern for Asian Americans?

In contrast, peer relationships are of prime importance during young adulthood in U.S. society (Brown, 1990; Csikszentmihalyi & Larson, 1984). We therefore expected a relatively higher priority for friendship sacrifice in European American, compared with Asian American, participants. Finally, egalitarian relationships are more culturally central in the United States, whereas hierarchical relationships are more important in Asia (Ho, 1994; Raeff, 1997). This fact led us to expect that, relative to parents, siblings might also be a more important recipient of sacrifice for European Americans than for Asian Americans.

ACCULTURATION AND BICULTURALISM

Acculturation may also be a factor in determining Asian American values concerning self-sacrifice. For example, a study by Rosenthal and Feldman (1992) revealed a significant association between generation in the United States and feelings of being Chinese among Chinese Americans. First-generation Chinese Americans were more likely than their second-generation peers to identify themselves as being more "Chinese" than "American." In fact, studies have revealed associations between level of acculturation and values in areas such as conflict resolution (Kagan, Zahn, & Geasly, 1977) and educational achievement (Padilla, 1980). Perhaps acculturation may also be a factor in sacrificial values; this question is empirically tested in the present study.

According to Berry (1990), some individuals are able to successfully integrate the cultural aspects of both the ancestral and host country. These individuals have a bicultural orientation. Parke and Buriel (1998) define biculturalism as “the simultaneous adoption of two cultural orientations” (p. 497); they claim that it arises as an adaptive strategy in which the original ethnic culture is adapted to life in the United States. Asian Americans may take a bicultural approach to their sacrifice tendencies, in which the tendencies of both Asia and the United States would be somehow combined in their behavior; this issue is also addressed empirically in the present study.

Hypotheses

The literature reviewed above suggests the following hypotheses:

Hypothesis 1: Across domains, Asian Americans would have a greater tendency to self-sacrifice than would European Americans.

Hypothesis 2: Asian Americans would choose to sacrifice more for family (especially parents) than non-family members. Relative to parents, peers and siblings would be more important recipients of sacrifice for European Americans than for the Asian American groups.

Hypothesis 3: Asian Americans would experience more guilt than European Americans from behaving in a nonsacrificial manner.

Hypothesis 4: Acculturation to dominant U.S. norms would move Asian Americans away from the Asian norms and toward the European American norms described in Hypotheses 1, 2, and 3.

METHOD

PARTICIPANTS

A total of 194 undergraduate students taking an introductory psychology course at the University of California, Los Angeles (UCLA), were recruited to participate in the study. Participants were either European American (with ethnic roots from Europe) or Asian American (with ethnic roots from Asia). When asked to identify their ethnic background, the majority of European Americans wrote “White” or “Caucasian.” They generally did not self-identify according to specific national origins. Unlike the European Americans, most Asian Americans did self-identify with a specific national origin. The predominant origins of the Asian American

sample were China, followed by Korea, with Philippines in third place. African American, Middle Eastern, and Latino/a participants were excluded from our analyses, as were people of mixed race because we were interested in ethnically homogeneous groups.

It was predicted that there would be a difference between Asian Americans that differed in acculturation to U.S. culture. Therefore, twice as many Asian Americans as European Americans were recruited to differentiate between more and less acculturated Asian samples.

The participants consisted of 31 males of European descent, 32 females of European descent, 59 males of Asian descent, and 72 females of Asian descent. The mean ages of the participants were similar across all three groups, with European Americans having a mean age of 18.52 (males = 18.41, females = 18.62), more acculturated Asians having a mean age of 18.46 (males = 18.55, females = 18.37), and less acculturated Asians having a mean of 18.85 (males = 19.12, females = 18.68).

INSTRUMENTS AND PROCEDURES

Acculturation scale and generational status. To assess the extent of their acculturation, Asian Americans were asked to complete the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) at the end of each questionnaire session. The Suinn-Lew scale consists of 21 multiple-choice questions regarding participants' ethnic identification and involvement in Asian-related activities (for examples of questions used in the Suinn-Lew scale, see Appendix A). Analyses of test reliability revealed an alpha coefficient of .88, indicating an acceptable level of stability for the instrument (Suinn et al., 1987). Testing the validity of the scale as a measure of acculturation, Suinn et al. (1987) also found a significant difference in participants' scores when comparing participants of different generation levels and lengths of residence in the United States. These reliability and validity measures were conducted on undergraduates at the University of Colorado and at UCLA, a sample very similar to that of this study. None of the questions on the Suinn-Lew measure pertained to issues directly related to the hypotheses of this study.

Through the administration of multiple-choice questions, the Suinn-Lew Asian Self-Identity Acculturation Scale allows the

categorization of Asian Americans by acculturation on a scale of 1 to 5. The Asian American participants in this study had a mean score of 2.99 ($SD = 1.46$). Participants scoring greater than 3.00 were categorized as "more acculturated Asian Americans" and those scoring less than or equal to 3.00 were categorized as "less acculturated Asian Americans."

The Suinn-Lew scale is usually used to differentiate between more and less acculturated people using scores of 1-2 as Asian identified and scores of 4-5 as Western identified. We interpret scores near 3 as bicultural. We conducted supplementary analyses to see what difference, if any, the use of only the more extreme groups would have made to the results. Analyses revealed no differences in the pattern of results between participants grouped in the extreme sample and participants grouped in the split-mean sample. We therefore chose to use the split-mean sample to utilize all participants and have a more representative sample of this population, many of whom are bicultural.

Based on Suinn-Lew results, the 194 participants were thus divided into 31 European American males, 32 European American females, 33 more acculturated Asian American males, 30 more acculturated Asian American females, 26 less acculturated males, and 41 less acculturated females. (One Asian American female failed to complete the acculturation measure and was excluded in analyses utilizing ethnicity as a measure.)

Participants were also asked to report the generation in which they or their families came to the United States in the demographics section of the questionnaire (first generation = if you were born in another country; second generation = if you were born in the United States and both of your parents were born in another country; 2.5 generation = if you were born in the United States, one parent was born in another country, and the other parent was born in the United States; third generation or more = if you and your parents were born in the United States. The modal European American participant was third generation or more; the modal more acculturated Asian American participant was second generation; and the modal less acculturated Asian American participant was a first-generation immigrant.

Using these categories of generational status, chi-square analyses showed that the families of more acculturated Asian Americans had immigrated significantly earlier than those of less acculturated Asian Americans, chi-square (3) = 27.11, $p < .001$. A chi-square test also showed that the families of European American

participants immigrated significantly earlier than those of even the more acculturated Asian American participants, chi-square (3) = 85.97, $p < .001$.

Dilemma scenarios. Participants were provided with six hypothetical dilemma scenarios. In each of the dilemmas, a conflict was presented between a personal goal and the goals of others. Participants were asked to read the scenarios and give a free-written response as to what they would do in each situation and why. A free-response format was used to capture the diversity of and reasoning behind participants' responses and constructions of meaning. Responses were assumed to reflect some mixture of actual and ideal behaviors in these situations.

The dilemma situations referred to three different domains of sacrifice: money, dating, and schoolwork. Two different scenarios were created for each of the three domains for a total of six scenarios presented to each participant. An example of a money scenario is as follows:

A week ago, you had gone shopping with your (recipient), and at the register, she had realized that she was short \$10. You lent her the money, and after a week, she gives no indication of remembering the loan. What would you do? Why?

"Recipient" was replaced by "mother" for one third of the participants, "sister" for another third of the participants, and "friend" for the last third of the participants. Likewise, the other five scenarios were identical for all of the participants except for recipient.

Each recipient appeared twice in a given questionnaire. For example, a participant might receive two different money scenarios (one with parent as recipient, the other with sibling), two date scenarios (one with sibling, the other with friend), and two schoolwork scenarios (one with friend, the other with parent). For the parent and sibling scenarios, three out of six scenarios referred to the general group of parents or siblings, two out of six scenarios referred to fathers or brothers, and one out of six scenarios referred to mothers or sisters as the recipient of sacrifice behaviors.

A total of six different forms of the questionnaire were created to accommodate the different variations of each scenario and to counterbalance against scenario order effects and against differences between scenarios within a single domain. The six scenarios were not considered part of a single scale. Instead, they were considered

assessments of the value of self-sacrifice in three potentially distinct domains.

The construction and choice of dilemma scenarios. The criteria for selecting scenarios were realism and believability. The six scenarios that were selected were developed through a pilot-testing procedure. In this procedure, participants read scenarios generated by the first author as well as by undergraduates and rated them on realism and believability. Scenarios that were chosen had to address an issue of sacrifice and be equally applicable to parents, siblings, and friends.

Testing the ecological validity of the dilemmas. Realism ratings were used to assess the ecological validity of the scenarios. The two scenarios with the highest mean realism ratings in each domain (money, date, schoolwork) were chosen for the final questionnaire. Realism ratings for the chosen scenarios ranged from 3.71 to 4.67 on a 5-point scale with half being experimenter generated and half being student generated. (Further information on the realism ratings is available from the authors.) Thus, the scenarios chosen for this study referred to issues that were judged realistic and were drawn from everyday life. The six scenarios used in this study are provided in Appendix B.

Guilt and sacrifice rating scales. After providing free responses to each of the six scenarios, participants were asked for guilt and sacrifice ratings of one of two hypothetical courses of action (sacrificial or nonsacrificial) for each scenario. A nonsacrificial course of action is one in which an individual goal is acted on, and a self-sacrificial response is one in which the goal of another (parent, sibling, or friend) is acted on. Of the six scenarios provided to each participant, three were associated with a self-sacrificial course of action and the remaining three were associated with a nonsacrificial course of action. These hypothetical courses of action were counter-balanced and randomly distributed across participants for each scenario.

For example, in the money-lending scenario given above, half of the participants were given the sacrificial course of action: "Please imagine that you did not ask for the money." The other half of the participants were given the nonsacrificial course of action: "Please imagine that you asked for the money." The participants were then asked to imagine how they had acted in that given manner (even if

it was not the way that they would have chosen to act) and were asked to rate on a scale of 1 to 5 how guilty they would feel in the given situation (1 = *extremely guilty* and 5 = *not at all guilty*).

The guilt ratings scales were each followed by a sacrifice 1 to 5 rating scale (1 = *extreme sacrifice*, 5 = *not at all a sacrifice*). In this rating, participants were asked to determine on a 1 to 5 scale the extent to which they felt that taking the given course of action would be seen as an issue of sacrifice for them. Because the measures used in this study are new, the rating scales were used to test their construct validity.

Testing the construct validity of the dilemmas: Sacrifice. A MANOVA was conducted for the sacrifice rating scales. An Ethnicity \times Course of Action analysis was conducted with sacrifice (the level of sacrifice reported by the participant in the sacrifice ratings) as the dependent measure. A main effect was found on sacrifice ratings for course of action, $F(1, 190) = 40.55, p < .001$ (mean perceived sacrifice score for course of action categorized by the researchers as sacrifice = 3.19; mean perceived sacrifice score for course of action categorized by the researchers as nonsacrificial = 3.71 on a 5-point scale with 1 = *extreme sacrifice* and 5 = *not at all a sacrifice*, effect size = .18). Although the courses of action defined as sacrificial by the researchers were seen overall as significantly more sacrificial by the participants, there were important differences between the domains. These are explored in the next section.

Unexpected cultural difference in schoolwork scenarios. To determine whether participants were rating each individual type of scenario in the predicted direction (i.e., rating the course of action hypothesized as more sacrificial as in fact being more sacrificial), post hoc analyses were conducted separately on each type of sacrifice. These new analyses revealed surprising results. Whereas the money and date scenarios were rated in the hypothesized direction, the schoolwork scenarios were rated in the opposite direction. That is, an overall effect was found in which giving up being with others to do schoolwork was seen as the greater sacrifice than giving up schoolwork to be with others, $t(1, 194) = 3.33, p = .001$. This reversal of the definition of sacrifice for the schoolwork scenarios will be taken account of in reporting and interpreting statistical results. Further analyses revealed that the reversed definition of sacrifice was concentrated in the European American sample, whose participants were significantly more likely to feel

that giving up interacting with others was a bigger sacrifice than giving up schoolwork, $t(1,62) = 4.53, p < .001$. It therefore appears that European Americans and Asian Americans view the sacrifice of schoolwork differently.

This surprising twist in the definition of sacrifice for schoolwork reveals the rich and complex nature of self-sacrifice. It also hints at a cross-cultural difference in the operational definition of sacrificial behavior. Schoolwork scenarios were thus kept in the study to provide greater depth to the meaning of sacrifice in our study. However, these differences in the schoolwork domain were taken into account in reporting and interpreting results.

Testing the construct validity of the dilemmas: Guilt. An Ethnicity \times Course of Action MANOVA was conducted using guilt (the level of guilt reported by participants for the given course of action) as a dependent measure. Although we predicted that participants would feel more guilty when they did not sacrifice, the opposite trend was found. Analyses revealed a main effect of course of action for the guilt ratings, $F(1, 190) = 48.25, p < .001$ (mean guilt score for course of action categorized by researchers as sacrificial = 2.50; mean guilt score for course of action categorized by researchers as nonsacrificial = 2.96 on a 5-point scale with 1 = *extremely guilty* and 5 = *not all guilty*, effect size = .20).

Due to the fact that sacrificial scores for the schoolwork scenarios were rated in the opposite direction from what was expected, separate analyses for each type of sacrifice were conducted. Analyses revealed that whereas the participants rated the money and date scenarios in the predicted direction (by rating courses of action labeled by the researchers as sacrificial as inducing less guilt than those labeled not sacrificial), once again, the schoolwork scenarios were rated in the opposite direction. That is, the course of action labeled by the researchers as sacrificial (giving up schoolwork to be with others) was seen as *more* guilt inducing than the course of action labeled not sacrificial (giving up going out with others for schoolwork), $t(1, 193) = -7.21, p < .001$. This reversal applied to all three groups. Thus, this result supports the finding in the sacrifice ratings, in which schoolwork scenarios were rated as being sacrificial in a direction opposite to the predicted one.

Demographic information. Participants were asked to provide demographic information at the end of each questionnaire. Information acquired in the demographics sections included ethnicity,

gender, age, generation born in the United States, and parental education level.

RESULTS

ANALYSIS OF DEGREE OF SACRIFICE

Coding free-response answers to the dilemmas. The free-response answers given by the participants ranged broadly from high sacrifice to no sacrifice, with varying levels of compromise in between. Each free-response answer was therefore coded on a 5-point scale: 1 = *no sacrifice*; 2 = *compromise / no sacrifice*; 3 = *compromise*; 4 = *compromise / sacrifice*; 5 = *sacrifice*. The criterion was as follows:

1. No sacrifice: A response that clearly favors one's personal goals over those of others and mentions no other course of action as an option.
2. Compromise/no sacrifice: A response that considers both personal goals and the goals of others but ultimately acts in a way favoring personal goals.
3. Compromise: A response that mentions both personal goals and the goals of others and shows no clear preference for either option.
4. Compromise/sacrifice: A response that mentions both personal goals and the goals of others but ultimately acts in a way favoring the goals of others.
5. Sacrifice: A response that clearly favors the goals of others over personal goals and mentions no other course of action as an option.

Coders based their decisions on participants' responses to the first question, "What would you do?" If the answer was ambiguous, coders were instructed to take participants' answers to the question "Why?" into consideration in making their coding determination.

Interrater reliability. Coding reliability was examined by having two undergraduate coders, one Asian American, one European (a foreign student from England), independently rate responses. Coder agreement was established if both coders rated a free-response answer with the same numerical sacrifice score (1-5) mentioned above. Coders were trained by first discussing, together with the first author, sample responses to scenarios and how they should be coded. Any differences of opinion at this stage were discussed between the coders and the first author to establish the best

code. The coders were then asked to independently rate 20% of the responses. The mean kappa (Cohen, 1960) coefficient across scenarios was 0.79 with kappas in each scenario 0.65 or above. Of all the scenarios, the first dating scenario (regarding going out on New Year's Eve) appeared the easiest to code with just 1 disagreement out of 40 coded scenarios. The other 5 scenarios all had a similar rating reliability (ranging from 5 to 8 disagreements out of 40). Disagreements in this initial coding were discussed between the coders and the first author until a consensus was reached. The two coders then divided and coded the remaining questionnaires between them.

QUANTITATIVE ANALYSES

Repeated-measures ANOVAs were carried out with Domain (money, date, schoolwork) and Recipient (parent, sibling, friend) as within-participant factors. Ethnicity (European American, more acculturated Asian Americans, less acculturated Asian Americans) served as the between-participants factor. To prevent participants from encountering the same scenario twice, Domain and Recipient were not completely crossed within each participant. Therefore, two separate 3×3 analyses were done: Ethnicity \times Domain and Ethnicity \times Recipient. The dependent variable for both analyses was degree of sacrifice as coded on a 5-point scale from each participant's free-written responses.

Ethnicity and Domain. The Ethnicity \times Domain analysis revealed a significant main effect of Domain, $F(2, 380) = 14.36, p < .001$ (effect size = .07). Participants differentiated in their sacrificial ideals depending on whether they were giving up a date, money, or schoolwork. Univariate ANOVAs revealed that people were less likely to say they would give up their schoolwork than their money, $F(1, 190) = 22.33, p < .001$ (effect size = .11) or a potential date, $F(1, 190) = 17.05, p < .001$ (effect size = .08).

There was no main effect of Ethnicity. However, to evaluate the validity of Hypothesis 1, that Asian Americans generally value self-sacrifice more than European Americans, one must look more closely at the interactions. There was a significant interaction between Ethnicity and Domain, $F(4, 380) = 6.41, p < .001$ (effect size = .06). In general, Asian Americans responded as being more

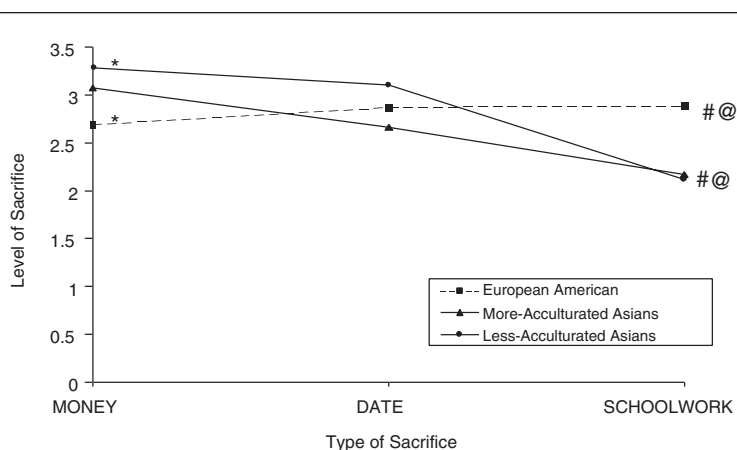


Figure 1: Ethnic Differences in Sacrifice Levels for Different Domains

willing to give up money and less willing to give up schoolwork than were European Americans (see Figure 1).

Analysis of simple effects revealed an effect of Ethnicity on Sacrifice of money, $F(2, 190) = 3.47, p = .03$ (effect size = .04) and on schoolwork, $F(2, 190) = 7.87, p < .001$ (effect size = .08) (see Figure 1). The Tukey Honestly Significant Test revealed that for the money category, European Americans were less willing to sacrifice money than were less acculturated Asian Americans, whereas more acculturated Asian Americans fell in between. In the schoolwork category, European Americans were more likely to give up schoolwork than were their Asian American counterparts. For the date category, ethnic differences did not materialize.

Because of the reversal in what was considered sacrificial in the schoolwork scenarios (as revealed in the sacrifice ratings given above), this interaction is very supportive of Hypothesis 1. By their own definition of sacrifice, European Americans were showing significantly fewer sacrificial values than were Asian Americans in their resolutions of the schoolwork scenarios. That is, they were less likely to give up hiking or skiing for schoolwork than Asian Americans were. In addition, they were significantly less sacrificial in their approaches to the money scenarios. The dating scenario results were neutral; they neither supported nor disconfirmed the hypothesis.

Therefore, the results were consistent with Hypothesis 1, with predicted differences occurring in two out of the three domains

studied. Ethnic differences in self-sacrifice did, however, turn out to be more domain specific than hypothesized. In Figure 1, we see that whereas European Americans were most willing to give up schoolwork (followed by date and money), both Asian American groups were most willing to give up money (followed by date and schoolwork). For the money scenarios, the predicted ordering of increasing sacrifice from European Americans to more acculturated Asian Americans to less acculturated Asian Americans (with a significant difference between the extreme groups) was in accord with the predictions of Hypothesis 4 (Figure 1). Taking the reversed interpretation of what constitutes sacrifice for the schoolwork scenarios (i.e., to sacrifice is to give up hiking or skiing for schoolwork), we found that the European Americans sacrificed less than either group of Asian Americans.

Ethnicity and Recipient. A repeated-measure analysis was also conducted with Recipient as a within-participant factor and Ethnicity as a between-participants factor. This Ethnicity \times Recipient analysis revealed a significant overall effect of Recipient, $F(2, 189) = 3.17, p = .043$ (effect size = .02). Univariate ANOVAs revealed that participants were more likely to give up money, a date, or schoolwork for siblings than for friends, $F(1, 190) = 4.76, p = .030$ (effect size = .02), and participants were also more likely to give up these individual goals for parents than for friends, $F(1, 190) = 4.89, p = .028$ (effect size = .03). (Because our sacrifice ratings had indicated that giving up schoolwork was not seen as sacrificial by European Americans, we speak of giving up individual goals, rather than using the term *sacrifice* in this section.)

A significant interaction of Ethnicity and Recipient was also found, $F(4, 380) = 4.19, p = .002$ (effect size = .04) (see Figure 2). The figure shows that, as predicted, Asian Americans placed the highest value on giving up individual goals for their parents, followed by siblings, followed by friends. In contrast, European Americans placed the highest value on giving up individual goals for siblings and friends, followed by parents. In terms of Hypothesis 4, acculturation moved the Asian Americans toward the European American levels, but not patterns, of response.

Univariate ANOVAs revealed a simple effect of Ethnicity on sacrifice for parent, $F(2, 190) = 5.49, p = .005$ (effect size = .05), as well as a marginally significant effect of Ethnicity on sacrifice for friend, $F(2, 190) = 2.92, p = .056$ (effect size = .03). Analysis of sibling scores revealed no significant differences between ethnic

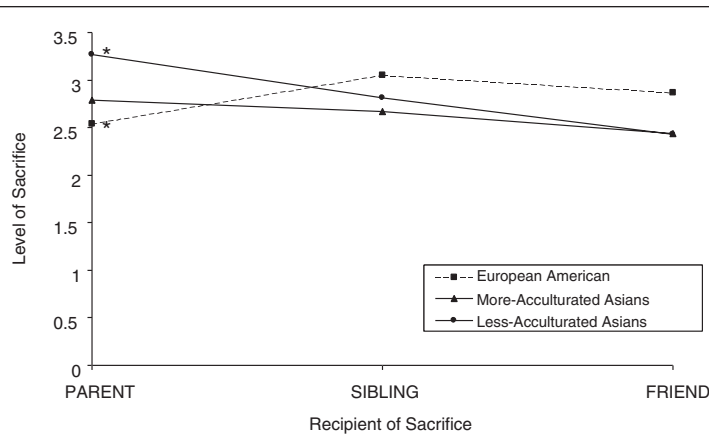


Figure 2: Ethnic Differences in Sacrifice Levels Toward Different Recipients

groups. The Tukey Honestly Significant Test showed that less acculturated Asian Americans were more likely to sacrifice for their parents than were European Americans. In accord with Hypothesis 4, the more acculturated Asians did not differ from European Americans in sacrifice for parents. Also, neither Asian group differed significantly from European Americans in their tendency to sacrifice for siblings or friends.

Hypothesis 2, that Asian Americans would sacrifice more for family, especially parents, whereas European Americans would place a relatively higher priority on siblings and friends in their sacrificial choices, was tested by means of *t* tests within each ethnic group. In accord with Hypothesis 2, these analyses revealed that European Americans placed a higher value on sacrificing for their siblings ($M = 3.05$) than for their parents ($M = 2.54$), $t(1, 62) = -2.54$, $p = .014$. However, they did not differentiate siblings versus friends or parents versus friends in their willingness to sacrifice.

Analysis for the Asian Americans revealed interesting differences between the more and less acculturated groups. According to this analysis, more acculturated Asians did not differentiate between sacrificial tendencies toward parents, siblings, or friends. The less acculturated sample, however, revealed an interesting pattern: They were significantly more likely to report willingness to sacrifice for parents ($M = 3.30$) than for friends ($M = 2.43$), $t(1, 66) = -3.63$, $p = .001$.

Thus, the results were consistent with Hypothesis 2: Whereas less acculturated Asian Americans were more likely than

European Americans to sacrifice for their parents, European Americans were relatively more likely to sacrifice for their siblings and friends (the significant interaction is shown in Figure 2).

ANALYSIS OF ETHNIC GROUP DIFFERENCES IN DISCOURSE ABOUT MILD SELF-SACRIFICE

To better understand the reasoning behind the ethnic differences that were revealed in this study, qualitative analyses of participants' free-response answers were conducted. Scenarios on sacrifice of money for parents were focused on because this was the intersection of the two categories that showed the clearest ethnic difference (i.e., sacrifice of money and sacrifice for parents were revealed as clear differences between European Americans and less acculturated Asian Americans).

We hypothesized that Asian Americans were more likely to use lending, borrowing, and giving as ways of building or maintaining a social network of reciprocation and accumulated indebtedness. This feeling of reciprocity and indebtedness would be heightened by the value of filial piety when referring to the parent as the recipient of sacrifice.

A quantitative analysis was carried out to see whether the qualitative themes of parental obligation, long-term reciprocity, and familial sharing could account for ethnic differences. Participants' responses to the money scenarios with parent as a recipient were coded according to whether or not these themes were mentioned. (Due to counterbalancing effects, not every participant had a money scenario with parent as a recipient, although most participants had one.) Responses to parent money scenarios were coded as (1) no mention of parental obligation, long-term reciprocal relationship, or familial sharing; and (2) mention of parental obligation, long-term reciprocal relationship, and/or familial sharing.

The reliability of the coding procedure was attained by the two authors of this article. Coder agreement was established if both coders rated a free-response answer with the same numerical sacrifice score (1 or 2) mentioned above. The two coders discussed the coding criteria and went over sample responses to see how they should be coded. Any differences of opinion were discussed and resolved by the coders. The coders independently rated 30 questionnaires, and a kappa (Cohen, 1960) of 0.87 was attained. Due to

this high reliability, the first author coded the remaining questionnaires.

Pearson goodness-of-fit analysis showed a significant effect, chi-square (2) = 9.58, $p = .008$. European Americans mentioned parental obligation, long-term reciprocal relationship, and familial sharing 17 times and did not mention it 24 times. In contrast, less acculturated Asian Americans mentioned it 36 times and did not mention it 13 times. Therefore, European Americans were significantly less likely than less acculturated Asians to mention parental obligation, long-term reciprocal relationship, and familial sharing in their discourse about sacrificing money for a parent. This difference may constitute the cultural reasoning behind some of the ethnic differences reported earlier.

GUILT

To determine if, as hypothesized, there were any ethnic differences in level of guilt felt at not sacrificing for the sake of others, ANOVA analyses were conducted comparing participants' feelings of guilt at not sacrificing for the different domains of sacrifice. (Due to the opposite nature of the schoolwork scenarios, guilt ratings for the sacrifice course of action was analyzed). ANOVAs revealed no significant ethnic differences in the guilt felt about not sacrificing. Therefore, contrary to Hypothesis 3, Asian Americans did not feel more guilty than European Americans when choosing not to sacrifice.

SOCIOECONOMIC STATUS (SES)

To rule out the possibility that these ethnic and acculturation differences might be due to differences in SES, separate analyses were conducted to see if SES (as measured by parental education level) correlated with sacrifice scores. Parental education was measured on a 6-point scale (e.g., 4 = *completed some college*, 5 = *completed college*, 6 = *completed master's degree*, 7 = *completed M.D. / J.D. / Ph.D. degree*), in which a mean was taken averaging the educational level of both parents. Parents of European Americans had a mean of 5.56, parents of more acculturated Asians had a mean of 4.42, and parents of less acculturated Asians had a mean of 4.39. Analyses revealed that SES did not significantly correlate with

sacrifice in any domain or for any recipient. Furthermore, when parental education was used as a covariant using MANCOVAs, the results did not change. Acculturation level remained a significant factor, whereas parental education was not significant. Thus, it appears that SES can be ruled out as a possible explanation for the ethnic group differences found in this study.

DISCUSSION

The results of this study showed support for three out of four of our hypotheses:

Hypothesis 1. Across domains, Asian Americans would have a greater tendency to self-sacrifice than would European Americans. This hypothesis was confirmed in two of the three domains studied. In the domain of money, European Americans were significantly less likely to express sacrificial ideals than were less acculturated Asian Americans. In the domain of schoolwork, European Americans were significantly less likely to give up skiing or hiking to do their schoolwork. In fact, European American participants defined giving up skiing/hiking as a *bigger* sacrifice than giving up schoolwork. In contrast, the domain of dating elicited no ethnic differences in self-sacrificial ideals.

Hypothesis 2. Asian Americans would choose to sacrifice more for family (especially parents) than non-family members. Relative to parents, peers and siblings would be more important recipients of sacrifice for European Americans than for the Asian American groups. The significant interaction manifested in Figure 2 showed the predicted pattern. The overall pattern of the interaction was supported by specific differences: (a) European Americans were more willing to give up individual goals for siblings than for parents; (b) European Americans expressed significantly less willingness to give up individual goals for parents than did less acculturated Asian Americans; and (c) less acculturated Asian Americans were significantly more willing to sacrifice for parents than for friends.

Hypothesis 3. Asian Americans would experience more guilt than European Americans from behaving in a nonsacrificial manner. This hypothesis was not confirmed.

Hypothesis 4. Acculturation to dominant U.S. norms would move Asian Americans away from the Asian norms and toward European American norms. This hypothesis was generally confirmed insofar as the more acculturated Asian Americans had weaker sacrificial ideals than the less acculturated Asian Americans; there were fewer ethnic group differences involving this group. However, the pattern of priorities of the more acculturated Asian Americans remained Asian rather than shifting to European American norms.

POSSIBLE REASONS FOR SACRIFICE

Examples of participant responses have been chosen to further elucidate the meaning of the significant ethnic differences reported above. These are particularly clear examples of the points that we wish to illustrate.

Money. As mentioned in the Results section, ethnic differences in feelings of parental obligation, long-term reciprocal relationship, and familial sharing were viewed as a possible explanation for differences found in participants' tendency to sacrifice money for their parents. Perhaps the tendency toward relationship-based sharing is less valued in the dominant culture of the United States, where greater emphasis is placed on independence and self-sufficiency (Hui & Triandis, 1986). For the less acculturated Asian Americans, the unrepaid \$10 loan may not have been seen as self-sacrifice but rather as a contribution to the family, an ongoing reciprocal relationship of sharing between family members.

In fact, analyses of participant discourse in their free responses did reveal a difference between European Americans and less acculturated Asian Americans in their tendency to use familial sharing and parental obligation in their reasoning; here we present some qualitative examples of this ethnic group difference. For instance, in response to the dilemma regarding whether or not to ask one's mother to repay borrowed money, a less acculturated Asian American female responded,

I wouldn't ask for the money back because she's my mom. I would have forgotten about the loan after a week. I wouldn't ask for the money back because my mom has supported me financially until now. Ten dollars is nothing compared to what she has done for me.

In this case, the participant chose to focus on the long-term indebtedness she felt toward her mother rather than on the short-term loan of money. Other themes in our data included sharing within the family and the importance of the parent-child reciprocal relationship.

In contrast, in the following example written by a European American, the debt is seen in the context of a short-term transaction between lender and borrower rather than as part of a long-term, ongoing relationship.

If I needed the money I would remind her to pay me back. I would probably ask, anyway. Because if she lent me some money she would ask me to pay her back, also. That's the way I was raised: to pay back my debts.

Parents. The fact that less acculturated Asian Americans were more willing than European Americans to sacrifice for their parents may be related to the Asian emphasis on filial piety described in the introduction. It is clear that the Asian ideals of obeying and respecting parents still remain to some extent among Asian Americans who reside in the United States. For example, Yau and Smetana's (1993) study of parent-adolescent conflict revealed such a trend. In their study, Yau and Smetana analyzed reasons given by Chinese Americans as to how they would resolve hypothetical parent-adolescent conflicts. Analyses of these reasons revealed a tendency for Chinese Americans to "give greater priority to parental expectations than to their own personal desires in situations in which those concerns conflict" (p. 432). This may be one possible explanation for the less acculturated Asian Americans to be more sacrificial toward their parents than European Americans. The fact that the less acculturated Asians were also more likely to sacrifice for parents than the more acculturated Asians highlights a weakening trend in traditionally strong parent-child relations for the more acculturated Asians.

BICULTURALISM AND ACCULTURATION

It is important to note that, although significant differences were found between the various ethnic groups used in this study, the mean score for even the less acculturated Asian group fell at around 3, indicating an overall tendency to compromise sacrifice and pursue personal goals rather than to sacrifice freely. Most of

the effect sizes in the analyses also fell within a small- to medium-sized range (Cohen, 1977). This tendency may be an indication of the powerful effects of biculturalism and being exposed to various cultural value systems.

That both European Americans and Asian Americans in our sample tended to have an average sacrifice score at the 3 or below range may be partly due to the cultural exchange that takes place between people in multicultural societies. Both Caucasian and Asian are exposed to various cultural belief systems and indeed, for those who attend college, there may even be a shared "college" culture between them. It may also be the case that compromise solutions are more readily used in a society exposed to various cultural values and behavioral options, such as in the case of the United States. These are questions for further research.

APPENDIX A

Examples of Questions Used in the Suinn-Lew Asian Self-Identity Acculturation Scale

What language can you speak?

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

With whom do you now associate within the community?

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

Where were you raised?

1. In Asia only
2. Mostly in Asia, some in United States
3. Equally in Asia and United States
4. Mostly in United States, some in Asia
5. In United States only

What is your food preference at home?

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

4. Mostly American food
 5. Exclusively American food
- How would you rate yourself?
1. Very Asian
 2. Mostly Asian
 3. Bicultural
 4. Mostly Anglicized
 5. Very Anglicized
-

APPENDIX B

Money scenario 1

A week ago, you had gone shopping with your (mother/sister/friend), and at the register, she had realized that she was short \$10. You lent her the money, and after a week, she gives no indication of remembering the loan. What would you do? Why?

Money scenario 2

You and your (father/brother/friend) were playing a card game, and you won a bet with him. After a week or so, your brother has not mentioned the bet and your payment at all. What would you do? Why?

Date scenario 1

It's nearing New Year's Eve, and you are still without a date for the festivities. You therefore decide to spend some quality time with your (parents/siblings/friends), who also aren't doing anything special for that evening, and you ask them out to see a movie. However, today a person who you had thought was attractive asks you out for a party for that night. What would you do? Why?

Date scenario 2

You have planned to go out with your (parents/siblings/friends) for a (family/friends) night out for dinner. That day, however, you received a call from your significant other, saying that he/she has cooked a dinner for you and would like to see you that night. What would you do? Why?

Schoolwork scenario 1

You're home for the weekend, and your (father/brother/friend) asks you to join the family in going on a hiking trip to the nearby hills. This trip will probably take all day. You have a lot of homework this weekend. What would you do? Why?

Schoolwork scenario 2

Your (parents/siblings/friends) ask you to go skiing with them this weekend. Unfortunately, you have a lot of schoolwork to finish this weekend. What would you do? Why?

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