

Cultural Differences in Perception of Family Obligation and Request Compliance in China and the US

Rain Wuyu LIU & Mary J. BRESNAHAN
Michigan State University, USA

Abstract: This study attempts to investigate whether obligation is seen as aversive or benevolent among participants in China ($n = 205$) and in the U.S. ($n = 164$). It is found that compared to Chinese, Americans showed a greater benevolent and less aversive perception as the level of obligation increased. Benevolent obligation perception mediated the impact of gratitude, reciprocity and the degree of obligation on compliance, and gratitude negatively predicted the aversive perception of obligation. Both cultural groups complied with the request in the high obligation condition, but Chinese showed more compliance in the low obligation condition compared to Americans. The results suggest that obligation is not seen as universally aversive. More testing of obligation perception and request compliance across cultures needs to be conducted to see whether results of this study find replication and support.

Keywords: Cross-cultural perceptions of obligation, aversive obligation, benevolent obligation, gratitude, compliance, family obligation

The current study examines how varying degrees of obligation are perceived and addressed by respondents in China and in the United States. Earlier studies claimed that obligations are universally perceived as an “aversive psychological tension” (Goei, Lindsey, Boster, Skalski & Bowman, 2003, p.179) which threatens personal freedom with the immediate goal of repayment to reduce obligation (Goei & Boster, 2005). However, other studies have suggested that the aversive perception toward obligation may not be held cross-culturally. Instead, people in collectivistic cultures tend to accept obligation as benevolent and socially desirable, showing smooth social functioning and expected social conformity (Chang & Holt, 1994; Fuligni, Yip & Tseng, 2002; Janoff-Bulman & Leggatt, 2002). Through experimentally manipulating the different levels of obligation to close family with a previous resource exchange, this study systematically investigates how obligation is perceived in the family context by people from different cultures and behavioral manifestations of compliance in response to perceived obligation.

1. Obligation and Norm of Reciprocity

Gouldner's (1960) classic work, focusing on reciprocal interactions in society, claims existence of a universal rule that individuals are obligated to reciprocate favors received previously. He defined this rule as a “norm of reciprocity,” which requires that “(1) people should help those who have helped them, and (2) people should not injure those who have helped them (p. 171).” Based on the norm of reciprocity, a feeling of obligation is formed once an individual receives services from a benefactor.

Obligation is traditionally viewed as unfavorable and burdensome. Greenberg and Shapiro (1971) termed it as “a psychological state of indebtedness,” which is an “aversive psychological and physiological state of tension” with “motivational properties such that the greater its magnitude, the greater will be the efforts to reduce it (p. 290).” They explained the formation of aversive feelings as an outcome of the violation of the sense of “ought” (Heider, 1958) and a perceived inequity (Adams, 1963), as well as a threat to the recipients’ status (Homans, 1961) and power (Blau, 1964). Along these same lines, Goei and Boster (2005) defined obligation as “an uncomfortable state, made aversive by the restriction of behavioral autonomy and the amount of negative social sanctions for choosing not to comply” (p. 285).

However, other studies suggest that this aversive perception of obligation may not always be the case. Janoff-Bulman and Leggatt (2002) argue that obligations, reflecting and reinforcing social relations, may be viewed as socially controlled behaviors, which are regulated by external forces and represent the “shoulds” of a motivational system. By contrast, it is also possible that people perceive obligation based on enjoyment or desirability, which is self-determined and represents the “wants” of a self-regulatory system. They mentioned that “... it is possible that the same social obligations that are viewed as controlled and burdensome by some may nevertheless be regarded as desirable and self-determined by others” (p. 261). The “shoulds” are conceptualized as an aversive perception of obligation, which is consistent with the traditional view of its threatening and autonomy-restraining characteristics, whereas the “wants” are proposed as a new construct, benevolent obligation, which represents a favorable view toward obligation reflecting one’s intrinsic motivations and willingness to reciprocate the benefactor who did a favor to the beneficiary previously. Wants carry the additional function as a way of establishing and reinforcing relationships, not just reciprocal exchange and repayment of resources. This formulation extends previous conceptualizations of obligation.

2. Cultural Differences in Obligation Perceptions

There are many social and cultural factors influencing people’s perceptions of obligation. Early on, Malinowski (1932) opened the discussion of mutual obligation by describing the principle of reciprocity as “mutual dependence and reciprocal service” (p. 55). Malinowski, from his perspective as a cultural anthropologist, saw that in non-western societies reciprocity was not just about repayment in kind, but also served as a badge of membership in that community. People in tightly bound communities, e.g., collectivistic culture, entered willingly into obligation networks with ingroup members as part of interpersonal relations and resource sharing. Gouldner (1960) extended Malinowski’s theme of mutual dependence and went on to say that in some social systems reciprocity functioned as a mechanism to maintain social stability where social indebtedness did not signal discomfort. Repayment and termination of obligation may not be desirable or possible in such contexts. Instead a person who maintains obligation is likely to be seen as a properly compliant, respectful, and observant ingroup member. Failure to observe obligation to people in a tight social network is a cause for shame and social sanctioning in contexts where obligation and social indebtedness are the norm (Gouldner, 1960).

Several empirical studies have described that the perception of negative indebtedness,

i.e., aversive obligation perception, is a western concept and may not work the same way in other cultures or ethnic groups (e.g., Chang & Holt, 1994; Fuligni et al., 2002; Janoff-Bulman & Leggatt, 2002). For example, in a comparison of Latinos to Anglo-Americans, several studies found that Latinos showed a stronger sense of duty to others as well as a positive desire to fulfill social obligations to friends and family members whereas Anglos viewed obligation more negatively as a threat to personal freedom (Janoff-Bulman & Leggatt, 2002; Miller, Bersoff & Harwood, 1990; Oyserman, Sakamoto & Lauffer, 1998; Schwartz, 1990; Yin, 2003). As further evidence of a potential difference in cultural views toward obligation, Latinos showed an association between fulfillment of obligation and life satisfaction while no such association was found for Anglos (Janoff-Bulman & Leggatt, 2002). They concluded that “people in individualist cultures seem less apt to want to engage in obligation, whereas people in collectivist cultures appear more to want to do what they believe they should do” (p. 269). These results triggered an empirical investigation regarding perceptions toward obligation, reciprocity, and repayment, among Americans and Chinese, which represent two very different national cultures (Hofstede, 1984; Oyserman, Coon & Kemmelmeier, 2002).

In the United States, if someone loans you some money, you are likely to be grateful for their willingness to help you out in a time of financial need. When you repay the loan, you are likely to believe that your obligation to them is over (Goei & Boster, 2005; Greenberg & Shapiro, 1971). Ho, Fu and Ng (2004), in their discussion of reciprocal face, described a similar phenomenon for Chinese: “A person in an inferior position has to show modesty; for him, it is a necessity. But a person in a superior position gains greater face for himself when he acts in a modest manner” (p. 69). How this reciprocal obligation to the in-group translates into the 21st century is an empirical question that will be investigated in this study.

Among various types of social obligation, this study specifically focuses on the domain of family obligation, which is expected to be the most common and unavoidable obligation one would face in life. Stein (1992) defines family obligation as “rights and duties that accompany kin roles” and describes it as “the glue that connects generations” (p. 525). She mentions that it is reasonable to expect that there would be obligations to family and close friends including behaviors such as providing tangible and social support as needed, avoiding interpersonal conflict, protecting family members/close friends from harm, maintaining honest and open lines of communication with important others, sharing important information with family, and being able to count on one’s family and friends in times of need.

To specify the situation in Chinese society, Hwang (1987) described the Chinese rule of family, according to which, “every member should do his best for the family, and the family will in turn supply him the resources necessary for living” (p. 950). Scollon and Scollon (1994) claimed “whereas Westerners believe we communicate primarily to exchange information, Chinese believe we communicate first to ratify our inherited social relationships, and within those relationships to transmit the knowledge of preceding generations” (p. 141). Domenici and Littlejohn (2006) in their discussion of cultural differences in facework said that, “in individualist cultures, putting your best foot forward is considered important. In collectivist cultures, honor is achieved by fulfilling roles and expectations within the larger group” (p. 152). In several studies, Oyserman et al. (2002, 1998) found that groups that were more collectivistic showed greater social obligation especially toward members of the salient in-group (family

members in our case). Fuligni et al. (2002) found that family obligation took precedence over personal independence for Chinese, and in a second study, Fuligni, Tseng and Lam (1999) found that Chinese American adolescents showed more obligations to family compared to Anglo-American adolescents.

In addition, Stein (1992) described that compared to working adults living apart from their families, college students are likely to be more emotionally and financially dependent on family as they have fewer ways to reciprocate. Thus, the current study is designed to examine how the varying degrees of family obligations are perceived and addressed among Chinese and U.S. American college students. Based on previous studies which have been described in this discussion, it is reasonable to predict cultural differences in perception of family obligations as in the hypotheses proposed below:

H1: Mainland Chinese participants are likely to show greater perception of obligation as benevolent compared to Americans.

H2: Americans participants are likely to show greater perception of obligation as aversive compared to Chinese.

3. The Role of Gratitude and Obligation on Compliance

Gratitude is defined as “the positive affective response to receiving a benefit from another” (Goei & Boster, 2005, p. 285). The experience of gratitude suggests that a beneficiary should feel positively about the benefit and the benefactor. Within the principles of norm of reciprocity, Gouldner (1960) pointed out the important role of gratitude in compliance gaining by stating that “the sentiment of gratitude joins forces with the sentiment of rectitude and adds a safety-margin in the motivation to conformity” (p. 174) and in that case, reciprocity should be a pattern of “mutually contingent exchange of gratifications” (p. 168). From empirical studies, gratitude has been shown to increase the conformity level to a request asked based on a previous favor provided to the requester.

For example, Goei and Boster (2005) tested the mediating effect of gratitude on favor cost and compliance, and found that pre-giving intended to elicit gratitude resulted in greater compliance with the request to return a favor. Other studies have arrived at similar conclusions (Cai, Fink & Xie, 2011; Goei, Roberto, Meyer & Carlyle, 2007). However, another mediator, obligation, predicted by Goei and Boster (2005) did not result in a compliance action with the request. Based on our previous arguments, the possible reason for this failed path may be due to the confounded effects from the two distinct perceptions of obligation. Gratitude, along with the effects of norm of reciprocity, may first elicit a positive feeling about the benefit and the benefactor, i.e., developing a benevolent perception toward the obligation to be fulfilled, which in turn would result in a compliance behavior with the request from the beneficiary. On the other hand, beneficiaries who hold less gratitude and care less about the norm of reciprocity would form an aversive perception toward the obligation to repay the benefactors’ previous favor. This may cause a resistance to comply with benefactors’ requests to reinstate behavioral freedom by showing they are not bound by normative demands (Tsang, 2006). Therefore, the following hypotheses are proposed:

H3a: For both American and Chinese participants, feeling of gratitude and perceived norm of reciprocity positively predict a perception of obligation as benevolent, which would in turn result in a compliance with the request from the benefactor.

H3b: For both American and Chinese participants, feeling of gratitude and perceived norm of reciprocity negatively predict a perception of obligation as aversive, which would in turn result in a noncompliance with the request from the benefactor.

In order to successfully induce a sense of family obligation among participants, we developed three scenarios that differentiate the degree of obligation embedded. The scenarios were developed based on two important criteria: (1) They must be able to induce a sense of obligation, rather than reciprocity, which are conceptually different constructs; (2) obligation needs to be formed based on pre-existing exchanges. Gouldner (1960) clearly indicates that based on the norm of reciprocity, to fulfill an obligation, individual B's services to individual A must be contingent upon the services provided by A. Thus, in the control condition, we intentionally did not include an exchange, in which the request is expected to be refused easily by everyone. The scenarios are listed below:

Control Condition: Your uncle (your mother's brother) is the manager of a family-run hotel. He asks for you to take a semester off from school to help him. What would you say to your uncle?

Low Obligation Condition: Your uncle (your mother's brother) is the manager of a family-run hotel.

Last semester, your uncle offered you a short-term loan of \$2000 dollars to help you pay your college tuition. You repaid the full amount of \$2000 back to him as soon as you could in the middle of the semester. You just got a phone call from your uncle asking you to take next semester off from school to help take care of a sick relative. What would you say to your uncle?

High Obligation Condition: Your uncle (your mother's brother) is the manager of a family-run hotel.

Last semester, your uncle paid your college tuition when your parents were having a hard time. He does not expect or want you to repay any of the money. You just got a phone call from him asking you to take next semester off from school to help take care of your grandfather who has mild Alzheimer's. Your grandfather would feel reassured if a family member was with him while your uncle is working at the hotel. What would you say to your uncle?

By varying the degree of obligation embedded in the scenarios, we expect different perceptions of obligation would be formed, which would in turn result in different responses to the request asked. Gouldner (1960) indicates that one important reason for noncompliance

behaviors could result from “the implications of differences in the degree of mutuality or in the symmetry of reciprocity” (p. 168). When the favor received previously is perceived as smaller than what is requested now, or is viewed as trivial in terms of its importance or benefits to the beneficiary, the “mutually gratifying pattern of exchanging goods and services” will be broken, resulting in a negative and discomfort feeling toward the benefactor and the obligation to be fulfilled. On the other hand, when the favor received is perceived as greater than what is asked now, or has been done at a critical moment when there was a desperate need from the beneficiary, it is very likely that the beneficiary would form a positive feeling toward this request and will be very willing to repay the benefactor anytime. Empirical studies (e.g., Goei & Boster, 2005; Goei et al., 2003) provide the evidence for the effect of varying degree of obligation on compliance. Based on these arguments, the following hypotheses are proposed:

H4a: Higher obligation is likely to result in a benevolent perception of obligation, and this perception in turn would be more likely to result in compliance with the request from the beneficiary.

H4b: Lower obligation is likely to result in an aversive perception of obligation, and this perception in turn would be more likely to result in noncompliance with the request from the beneficiary.

4. Cultural Differences in Request Compliance

Even though it is logical and reasonable to predict that varying degrees of obligation would be associated with different levels of request compliance, it is important to assess whether culture has an impact. In describing Chinese interpersonal relationships, Gao (1996) writes that “A (Chinese) person can never separate himself/herself from obligation to others” (p. 82). This connection with others that is made in honoring obligations is a central part of the definition of the Chinese self in Gao’s view. Obligation has a positive character of showing honor for indebtedness to other people and fulfillment in carrying out social-relational roles (Chen, Bond & Tang, 2007).

Many previous studies have provided empirical evidence that obligation to family is highly emphasized in Chinese societies (Ho, 1996; Hwang, 1999; Yang, 1989). Children are indebted to their parents for giving them life and for exerting efforts in raising them. The expectation is that they should be willing to make sacrifices for the sake of the family (Ho, 1996; Yang, 1989). This tradition is rooted in the Confucius concept of harmony and a system of clan, as well as the long agricultural history in China (Hwang, 1999). Fuligni et al., (2002) argued that Chinese were socialized to respect, support, and assist family members.

In addition, Hwang (1987) points out the social expectation of conformity in Chinese society. He describes that the “Chinese national character (is based on) social conformity, in offensive strategy, and submission to social expectations and authority” (p. 959). He indicates that ‘*renqing*’ (obligation) for Chinese is based not only on reciprocal exchange of goods and services but includes an element of affection and closeness between people (expressive tie). He then explains that this expressive tie is why debts can never be repaid to others for whom one feels affection. Obligation secures and reinforces the relationship. Even though several

studies of Chinese adolescents reported trends toward increased individualism and weakening of obligation to family (e.g., Cai et al., 2011; Fuligni & Zhang, 2004), the meta-analysis on individualism-collectivism conducted by Oyserman et al. (2002) showed that among several Asians, only Chinese showed large effects in being more collectivistic in terms of their relatedness with others and less individualistic than Americans. Thus, it is still reasonable to predict that Chinese are likely to show more obligation to comply with a request from a family member compared to Americans, which leads to the following hypotheses:

H5: The effect of varying obligation degrees on request compliance will be moderated by different national cultures, such that in the low obligation condition, Chinese respondents will be more likely to comply with the request compared to American respondents, while in the high obligation condition, respondents from both national cultures would comply with the request (i.e., no significant difference in request compliance).

To test hypotheses H3 to H5, a Parallel Obligation Dual-Perception Model was presented and tested in this study (Figure 1). It illustrates the mechanism of different obligation perceptions on request compliance and the moderation effect from different national cultures.

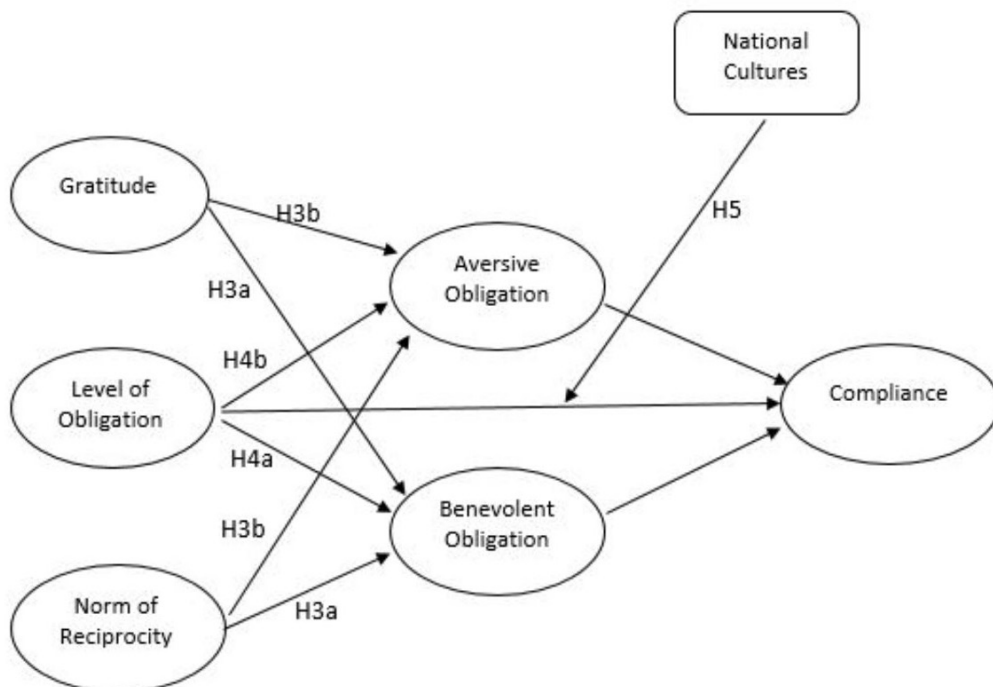


Figure 1. A Parallel Obligation Dual-perception Model

5. Method

5.1. Participants and Procedures

A total of three hundred and sixty-nine undergraduates in Mainland China and the U.S. participated in this study. There were one hundred and sixty-four participants from the U.S. (90 males, 72 females, and 3 others) and two hundred and five participants from China (59 males, 145 females). The average age of U.S. participants was 19.52 ($SD = 1.6$), ranging from 18 to 27. The average age of Chinese participants was 20.43 ($SD = 1.5$), ranging from 18 to 28. The majority of American participants were Caucasian (73.2%) and the majority of the participants from China were Han people (99.8%).

This study was based on a 3 x 2 (condition by country) between-subjects factorial design. Hypothetical scenarios were used to avoid retrospective recall biases, measuring participants' immediate and direct response to the event of interest, and providing control over the specific situation that participants considered (Knobloch & Solomon, 2002). An earlier pretest developed and tested the research manipulations resulting in two scenarios that varied in the amount of obligation compared to a neutral control condition that did not describe obligation. Participants were randomly assigned to one of the three conditions. There were 123 participants in the control scenario (55 Americans, 68 Chinese), 122 in the low obligation scenario (52 Americans and 70 Chinese), and 124 in the high obligation scenario (57 Americans and 67 Chinese).

5.2. Measures

The study included three independent variables including the feeling of gratitude, the perception of reciprocity, and the level of obligation. American participants completed the questionnaire in English and Chinese participants completed a questionnaire in Chinese. As the survey should be equivalent in transferring the meanings of questionnaires, a professional English-Chinese translator who was not involved in this research first translated the original English questionnaires into Chinese. Then, one of the authors fluent in both English and Chinese back translated the questionnaire from Chinese into English. Both English and Chinese versions of questionnaires were carefully checked and compared (Brislin, 1970).

The scenarios were developed based on the results from several pretests. A member from the family, the "uncle," was selected to make the request of fulfilling a family obligation. Previous literature (e.g., Hwang, 1999; Stein, 1992) suggests that family obligation is salient in both cultures, but may be varied in the degree of obligation perceived by the family members who received previous help. As a representative of the moderate family bond, "uncle" was selected to avoid the intrinsic strong and imposing sense of obligation when the request is from a direct family member (e.g., parents or siblings) or the situation of minimum obligation when the request is from a distant relative. In addition, in the low and high obligation situations, the uncle was portrayed as a rich businessman such that he would be assumed to have a social obligation of providing financial help to a family member who is in need.

Feeling of gratitude was measured with three items adapted from Goei and Boster (2005)

with an alpha reliability of .92 (U.S. $\alpha = .94$; China $\alpha = .87$). Sample items are “I feel thankful toward my uncle” and “I feel grateful for my uncle’s help.”

Perception of reciprocity was measured with three items taken from Perugini and Gallucci (2001) with an alpha reliability of .74 (U.S. $\alpha = .81$; China $\alpha = .67$). Sample items include “When someone helps me, I feel thankful and ready to reciprocate” and “I go out of my way to help somebody who has been kind to me.”

The study included three dependent variables — whether or not respondents would comply with their uncle’s request, perception of obligation as aversive, and perception of obligation as benevolent.

Compliance with the request was measured with an open-ended item which was then coded by 4 coders according to 5 categories: 1) direct refusal 2) refusal with excuse or explanation 3) uncertain response 4) some limited agreement 5) full agreement. The two coders of the U.S. data had a kappa of .83 and the two coders of the Chinese data had a kappa of .86. The coders met together and resolved any disagreement for how items were coded. This is treated as a continuous variable in the analysis where direct refusal equates with strongly disagree and full agreement equates with strongly agree.

Perception of obligation as aversive was measured with four items developed and pretested by the authors with an alpha reliability of .81 (U.S. $\alpha = .81$; China $\alpha = .81$). Sample items include “This request makes me feel unpleasant and “Having obligation imposes on my freedom.”

Perception of obligation as benevolent was measured with three items developed and pretested by the authors with an alpha reliability of .68 (U.S. $\alpha = .75$; China $\alpha = .64$). Sample items include “I feel an obligation to do what I can to help my uncle, and “It is important to be willing to make sacrifices to help your extended family.”

6. Results

6.1. Manipulation Checks

A one-sample t-test revealed that perceived reality ($M = 4.87$, $SD = 1.60$) was higher than the mid-point of the scale [$t(368) = 10.51$, $p < .001$], indicating the scenarios were plausible. Two manipulation check items assessed whether participants understood the messages accurately (i.e., this message describes that your uncle asked you to take next semester off from school/ to take next semester off from school to take care of a sick relative/ to take next semester off from school to take care of your grandfather; this message says that your uncle loaned you \$2000 for tuition that you repaid him/ your uncle paid your full tuition last semester and does not expect repayment from you). One-sample t-tests compared scores with the mid-point of the response scale. Results showed that participants accurately understood the messages in all the conditions (all t -values > 11.89 , all probabilities $< .001$).

Hypotheses were tested with a series of two-way Analysis of Variance (ANOVAs) using SPSS v.23 and Structural Equation Modeling (SEM) using Mplus v.7.4 (Muthén & Muthén, 1998-2012). Zero-order correlations, means, and standard deviations are reported in Table 1.

Table 1. Correlations, Means, and Standard Deviations of Variables Concerning Individual's Perception of Obligation

	Benevolent Obligation	Aversive Obligation	Gratitude	Reciprocity	Compliance
AversiveObligation	-.52**				
Gratitude	.34**	-.26**			
Reciprocity	.28**	-.11*	.19**		
Compliance	.47**	-.36**	.14**	.17**	
Total <i>M</i>	4.23	4.31	5.38	5.45	2.77
<i>SD</i>	(1.02)	(1.28)	(1.05)	(0.87)	(1.36)

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

H1 was tested with a 2×3 ANOVA with benevolent obligation as the dependent variable. A main effect for level of obligation was found, $F(2, 361) = 12.63, p < .001, \eta^2 = .07$. Post-hoc analysis using Tukey HSD showed that high obligation ($M = 4.54_b, SD = 0.98$) significantly differed from the low ($M = 4.21_a, SD = 0.94$) and the control conditions ($M = 3.94_a, SD = 1.05$). The analysis also showed a significant main effect for country, $F(1, 361) = 9.77, p < .01, \eta^2 = .02$. American participants ($M = 4.42, SD = 1.07$) were higher in the perception of obligation as benevolent compared to Chinese ($M = 4.09, SD = 0.96$). The interaction effect between country and obligation conditions was statistically significant, $F(2, 361) = 4.74, p < .05, \eta^2 = .03$. When simple effects of country were examined at each level of the obligation conditions, the analyses showed that country difference was significant for both the low, $F(1, 361) = 4.58, p < .05$, partial $\eta^2 = .01$, and the high obligation condition, $F(1, 361) = 14.54, p < .001$, partial $\eta^2 = .04$, but not for the control condition (Figure 2). Contrary to H1, Americans showed greater perception of obligation as benevolent in the high obligation condition.

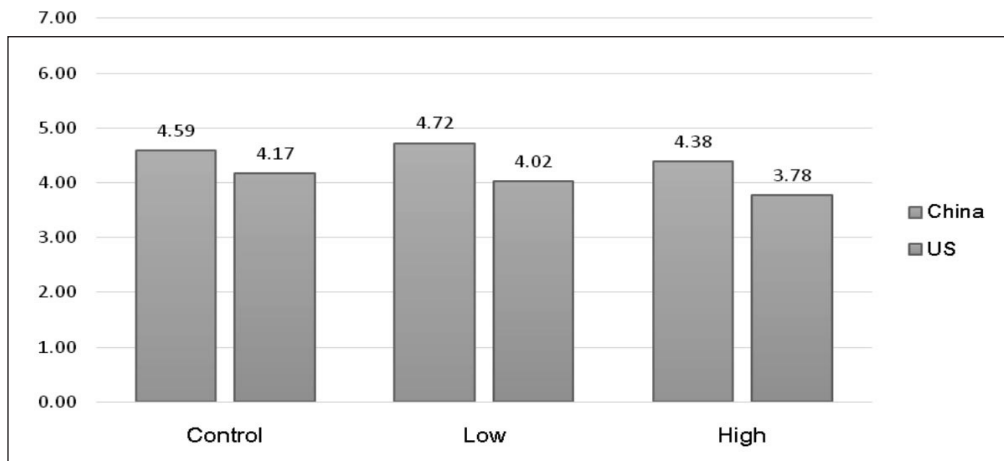


Figure 2. Mean Differences of Aversive Obligation for Each Condition. No Significant Differences were Found in the Control Condition.

H2 was tested with a 2×3 ANOVA as well. The analysis showed a significant main effect for country, $F(1, 363) = 19.38, p < .001, \eta^2 = .05$. Chinese participants ($M = 4.57, SD = 1.19$) were higher in the perception of obligation as aversive than Americans ($M = 3.99, SD = 1.32$). The main effect for obligation conditions, $F(2, 363) = 2.29, p > .05$, and the interaction effect between country and condition, $F(2, 363) = 0.39, p > .05$, was not significant. When simple effects for country were examined at each level of the obligation conditions, analyses showed that country effect was significant for the two experimental conditions, low obligation, $F(1, 363) = 9.34, p < .01$, partial $\eta^2 = .03$, and high obligation, $F(1, 363) = 7.33, p < .01$, partial $\eta^2 = .02$. However, country was not significant in the control condition, $F(1, 363) = 3.45, p = .06$ (see Figure 3 for means). Contrary to H2, Americans showed significantly less perception of obligation as aversive across the experimental conditions compared to Chinese.

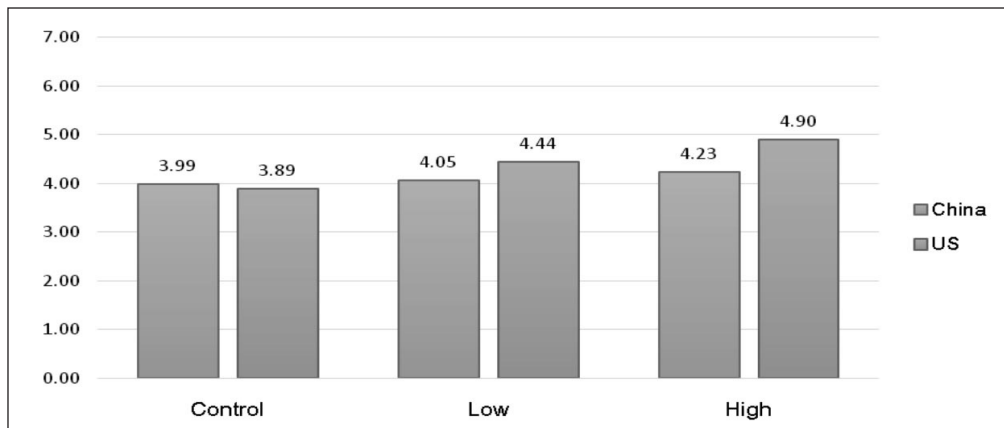


Figure 3. Mean Differences of Benevolent Obligation for Each Condition. No Significant Differences were Found in the Control Condition.

To test H 3 and H4, structural equation modeling analysis (SEM) was conducted using the software package Mplus v.7.4 (Muthén & Muthén, 1988-2012). One advantage of SEM over regression analysis is that measurement errors can be separated from the true latent variables, so that the estimated structural links between latent variables are more accurate. Also, in SEM, all the structural links are estimated simultaneously and it is possible to check the fit of the model by looking at the fit indices (Gefen, Straub & Boudreau, 2000). The SEM model was tested¹ with the maximum likelihood estimation method as proposed by Jöreskog (1970), which is the most widely used estimation method.

The model as a whole yielded a good fit: CFI = .97, RMSEA = .05, SRMR = .04, χ^2 (96, $N = 369$) = 56.36, $p < .001$. However, as Myers, Calantone, Page and Taylor (2000) suggested, in cross-national research, measurement equivalence across samples is critical in evaluating responses regarding latent variables. Hence, a multiple-group structural equation modeling was conducted to determine measurement equivalence across the two national samples following procedures suggested by Myers et al. (2000). The results were reported in Table 2. In Model 1, no constraints were imposed across the groups for configural invariance. Model 2 examined factor invariance by constraining the correlations among the factors to be equal. Model 3 tested metric invariance through constraining the factor loadings to be equal across the two groups. Next, both the factor correlations and the factor loadings were constrained to be equal in Model 4 to test if factor structure was consistent across countries and whether latent constructs were composed differently with respect to measured variables constrained to be equal. Finally, Model 5 examined the invariance of the measurement error variances by additionally constraining the error variances to be equal across the groups. The results showed that no significant different changes occurred to Chi-squares across the five models, indicating a good measurement equivalence across the two countries.

Table 2. Measurement Equivalence Tests through a CFA Constrained at Several Levels

Model	χ^2	p	CFI	RMSEA	SRMR
1. Two groups—unconstrained	112.73	.001	.967	.054	.042
2. Two groups— ϕ constrained	112.73	.001	.970	.049	.042
3. Two groups— λ constrained	112.73	.001	.973	.046	.042
4. Two groups— ϕ , λ constrained	112.73	.001	.976	.041	.042
5. Two groups— ϕ , λ , θ_{ϵ} constrained	112.73	.014	.983	.032	.042

¹ Three fit measures were used that were recommended by several authors: (a) the root mean square error of approximation (RMSEA; Byrne, 2013), (b) the comparative fit index (CFI; Marsh, Balla & McDonald, 1988), and (c) the standardized root mean square residual (SRMR; Hu & Bentler, 1999). RMSEA is an indicator for approximate fit assessment. Ideally the values should be less than or equal to .05, but between .05 and .08 are acceptable for a fair fit (Kaplan, 2009, pp. 115-116). For CFI, values above .95 are considered as a good fit (Kaplan, 2009, p. 111), and should not be lower than .90 (Kline, 2010, p. 131). For SRMA, Hu and Bentler (1999) suggested that for a sample greater than 250, researchers may need to combine SRMR with RMSEA (Browne & Cudeck, 1993), and preferably, the SRMR should be close to .09 and the RMSEA close to .06 or less.

With a confidence in the equivalence of the measurements across the two countries, a full SEM was performed. Both the feeling of gratitude ($B = 0.21$, $\beta = 0.24$, $p < .01$) and the perceived norm of reciprocity ($B = 0.38$, $\beta = 0.32$, $p < .001$) significantly predicted the benevolent perception of obligation, indicating that participants perceived obligation as more benevolent as the feeling of gratitude and the perceived norm of reciprocity increased, which in turn significantly predicted compliance with the request ($B = 0.92$, $\beta = 0.92$, $p < .001$). Consistent with hypothesis 5a, the indirect effect on compliance tested using bootstrapped standard errors was significant for both gratitude ($B = 0.19$, $\beta = 0.14$, $p < .01$) and reciprocity ($B = 0.35$, $\beta = 0.18$, $p < .001$).

On the other hand, only the feeling of gratitude ($B = -0.34$, $\beta = -0.26$, $p < .001$) significantly predicted the aversive perception of obligation, which was not a significant predictor for noncompliance with the request ($B = 0.02$, $\beta = 0.02$, ns). As would be expected from these results, a bias-corrected bootstrap analysis found no significant indirect effect of gratitude and reciprocity on compliance, mediated by aversive obligation perception. This indicated that participants perceived obligation as more benevolent as the feeling of gratitude and the perceived norm of reciprocity increased, and thus were more likely to comply with the request from the benefactor, whereas the aversive perception of obligation did not predict noncompliance. Therefore, H3a was fully supported and H3b was not supported.

To test the effects of the varying degrees of obligation on obligation perceptions and request compliance, one variable named "Treatment" was created to represent the three manipulated levels of obligation, in which control condition was coded as "0," low obligation was coded as "1," and high obligation was coded as "2." The results showed that the degree of obligation significantly predicted the benevolent perception of obligation ($B = 0.26$, $\beta = 0.25$, $p < .001$), indicating that participants perceived obligation as more benevolent as the level of obligation increased, which in turn significantly predicted compliance with the request ($B = 0.92$, $\beta = 0.92$, $p < .001$). In addition, the indirect effect mediated by benevolent obligation was also significant ($B = 0.24$, $\beta = 0.15$, $p < .01$). On the other hand, the degree of obligation did not predict aversive perception of obligation ($B = -0.10$, $\beta = -0.06$, ns), and there was also no significant indirect effect of level of obligation on compliance, mediated by aversive obligation perception. Thus, H4a was supported and H4b was not supported.

H5 was tested using a 2×3 ANOVA with request compliance as the dependent variable. There was a main effect for country, $F(1, 360) = 7.55$, $p < .01$, $\eta^2 = .02$. Chinese participants ($M = 2.93$, $SD = 1.29$) were significantly higher in compliance than Americans ($M = 2.56$, $SD = 1.43$). For the level of obligation, a main effect was observed, $F(2, 360) = 6.11$, $p < .01$, $\eta^2 = .03$. Post-hoc analysis using Tukey HSD showed that compliance in the high obligation condition ($M = 3.08$, $SD = 1.44$) significantly differed from compliance in the low obligation ($M = 2.60$, $SD = 1.31$) and the control conditions ($M = 2.61$, $SD = 1.27$). The interaction effect between country and condition was not significant, $F(2, 360) = 2.60$, $p > .05$. When simple effects for country were examined at each level of the obligation conditions, analyses showed that the country effect was significant only in the low obligation condition, $F(1, 360) = 9.6$, $p < .01$, partial $\eta^2 = .03$ (Figure 4). Chinese showed more compliance with the uncle's request in the low obligation condition compared to Americans, and both Americans and Chinese showed the most compliance in the high obligation condition as predicted. Hence, H5 was fully supported.

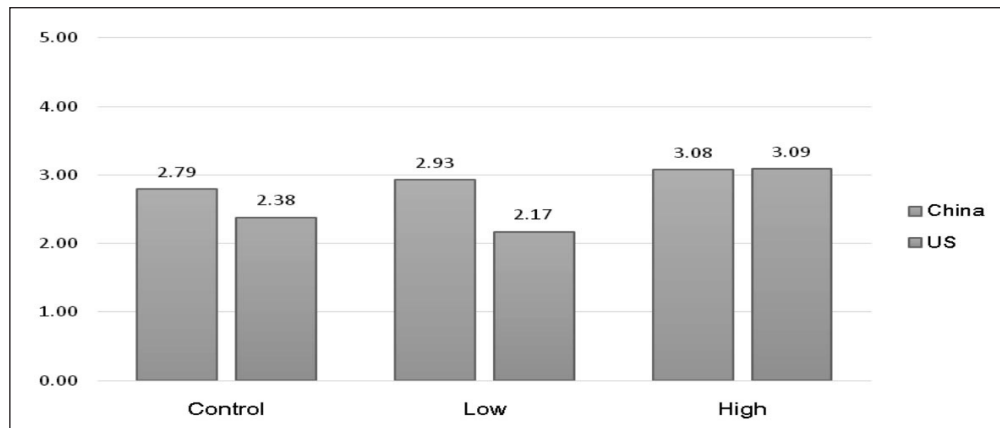


Figure 4. Mean Differences of Compliance for Each Condition. No Significant Differences were Found in the Control and High Conditions.

7. Discussion and Implications

One interesting finding is that contrary to predictions made in this study and findings claimed in the existing literature, in both experimental conditions, Chinese perceived family obligation to an uncle as more aversive, while Americans perceived it as more benevolent. One possible explanation for these findings could be related to the hypothetical scenarios used in this study, which revealed a conflict between one's family obligation of taking care of a sick relative and the academic motivation to finish school and get the degree as other peers do. A possible limitation of these scenarios is the relative difficulty of gaining university admission to proportionately fewer places in higher education in China compared to university admissions in the US (Ministry of Education of the People's Republic of China, 2011; U.S. Department of Education, 2011). It is possible that Chinese participants may be more reluctant to take a semester off from school compared to Americans as they fear this would cause them to lose their place in the university to someone else who is eager to be admitted. In addition, the very rigid curriculum in Chinese universities makes it risky and less flexible to take off a semester since most core courses are offered once a year only. Therefore, in order to reconcile these two opposing cognitions, Chinese participants may have perceived the obligation of helping out the uncle as more aversive since they may hold the belief that finishing their education at this point is much more important than fulfilling a family obligation.

Another possibility of this contradictory finding could be a result of the negative emotional responses toward the request from the uncle. The research induction elicited the knowledge of what is expected in this situation regarding the behavioral reactions from the cultural perspective; however, it is possible that the induction also triggered negative feelings from the participants, who may be irritated and annoyed because the request interfered with their current life schedule.

In addition, the results of the current study suggest that the explanation for compliance linked with how people think about obligation in previous studies (i.e., aversive = noncompliance;

benevolence = compliance) may be overly simplistic (e.g., Goei & Boster, 2005; Tsang, 2006). Chinese participants showed more compliance compared to Americans in the low obligation condition, while high obligation prompted compliance regardless of culture. This finding may be explained by the salient social norms of compliance and preserving family harmony which are likely to vary by culture.

In the two experimental conditions, participants were described as having received a favor from their uncle and are expected to repay this favor by taking care of a sick relative. For Chinese participants it is not just about the current request but the family's entire social network, *guanxi*, which must be taken into consideration when making the decision. In our case, the resource allocator, the uncle, is on the high power end of the *guanxi* network, but it is not just about resource exchange. He has generously helped out when there was a need, so when there is a request from him, the niece or nephew has to carefully consider the loss and gain in accepting or refusing the uncle's request, not just for the self but for the family's face and harmony.

Given that noncompliance indicates a behavior which is not socially approved and desirable, in a highly norm-focused situation (i.e., interaction between intense norms of reciprocity and *guanxi* in the society), the perceived social sanction "forced" Chinese participants to comply with the request even if they think of obligation as aversive and undesirable. Americans may see the uncle's request in this scenario as benevolent because they know they can refuse it; whereas, Chinese clearly understand that whether or not they want to go along with the uncle's request is not an option for them. It is expected that they will comply with a request from a close family member even if it inconveniences them and holds up their graduation date. Therefore, it is possible that the injunctive norms in Chinese society moderated participants' attitudes toward this obligation and their behavioral intentions to comply with this request. Even so, it was a surprise to learn that Chinese participants in this study thought of obligation as aversive.

The current results, coupled with previous research findings, provide several implications for theory advancement in the area of norm of reciprocity and request compliance within a cross-cultural communication context. First, previous studies (e.g., Goei & Boster, 2005; Greenberg & Shapiro, 1971) have argued the universally negative and unfavorable view toward obligation. However, findings from the current study indicate that this claim about pancultural aversion for obligation does not completely capture the full richness of reciprocity and compliance behaviors in some cultures including Anglo-American culture. Unique structural conditions and a special set of cultural categories provide individuals with additional ways of considering their interpersonal relations and social networks. Individuals approach social relations differently across cultures, and these differences fade but slowly, even in the face of rapid industrialization, urbanization, education, and communication (Hwang, 1987).

Second, this study serves as an initial attempt in exploring the different perceptions of obligation within a cross-cultural context. Most previous studies in this area either did not specify perceptions of obligation or put the default value of obligation as "aversive" (e.g., Cooper & Jayatilaka, 2006; Shumaker & Jackson, 1979). The benevolent perception of obligation has always been confounded with gratitude, liking and some other variables (e.g., Goei & Boster, 2005; Tsang, 2006), which ignored the mediation role of benevolent obligation on the impact of gratitude and reciprocity on compliance. The current study explicates the

conceptual distinction between the aversive and the benevolent perception of obligation, as well as proposes three predictors for these perceptions. The model proposed was firstly tested following strict measurement equivalence procedures, and yielded a good fit. This made us confident to conclude that the model was significant in accounting for variance in these two distinct perceptions of obligation.

One limitation of this research is that the measures need further development. As an initial probe, the authors developed the scales according to the previous literature to measure the perceptions of aversive and benevolent obligation. Some scales did not yield an ideal reliability, especially with Chinese participants. Thus, there is a need for further development of measures and better data collection skills in future cross cultural studies. Another limitation is that only one hypothetical scenario was involved in the current study. There is a possibility that Chinese participants showed more aversive perception of obligation due to the content of this specific scenario. Therefore, multiple scenarios are needed in follow-up replication studies to test if results are consistent across different situations. In addition, in future studies, social norms should be measured and the speculated moderation effects should be tested to better explicate the underlying mechanisms of how different perceptions of obligation influence request compliance, especially the mechanism of aversive obligation perception. Finally, emotional responses after being exposed to the experimental induction need to be measured to obtain a better understanding toward the underlying mechanism of the aversions toward the obligation.

8. Conclusion

Obligation plays a critical role in our social lives. Results from the current study have showed that obligation can be perceived as either aversive or benevolent, which departs from the previous common belief that obligation is aversive by nature. The perception of obligation as benevolent has been completely overlooked in the past obligation-compliance literature. This study has found that both Chinese and American participants behaved in culturally consistent ways but that the Americans reported perceiving obligation as benevolent and the Chinese reported perceiving obligation as aversive.

Some previous studies claimed that the aversive perception toward obligation was a universal phenomenon. Nonetheless, the current study made an important contribution by showing that unique structural conditions and a special set of cultural categories provided individuals with additional ways of considering their interpersonal relations and reciprocity behaviors. The generalizability of the obligation-compliance relationship derived from gratitude and the norm of reciprocity is questioned by the proposed moderation effect of social norms between the perception of obligation and request compliance behaviors. Further efforts must be made to test the existence of the speculated moderators and replicate the current study within different situations.

Finally, it is observed that Chinese participants in this study appear to resent obligation because they really do not have the option to say no and need to retain face whereas Americans perceive obligation as benevolent as they know they have the choice to refuse or to comply. The social context seem to provide more restrictions with face threat for the Chinese but more degrees of freedom for the Americans.

References

- Adams, Stacy J. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, 67, 422-436. <http://doi.org/10.1037/h0040968>
- Blau, Peter M. (1964). *Exchange and power in social life*. New Brunswick, NJ: Transaction Publishers.
- Brislin, Richard W. (1970). Back-translation for cross-cultural research. *Journal of Cross-cultural Psychology*, 1, 185-216. <http://doi.org/10.1177/135910457000100301>
- Browne, Michael W. & Cudeck, Robert. (1993). Alternative ways of assessing model fit. In Kenneth A. Bollen & J. Scott Long (Eds.), *Testing structural equation models* (pp. 136-162). Thousand Oaks, CA: SAGE.
- Byrne, Barbara M. (2013). *Structural equation modeling with Lisrel, Prelis, and Simplis: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cai, Deborah A., Fink, Edward L. & Xie, Xiaoying. (2011). "Brother, can you spare some time, or a dime?" Time and money obligations in the United States and China. *Journal of Cross-Cultural Psychology*, 43(4), 592-613. <http://doi.org/10.1177/0022022111401394>
- Chang, Hui-Ching & Holt, Richard G. (1994). Debt-repaying mechanism in Chinese relationships: An exploration of the folk concepts of pao and human emotional debt. *Research on Language and Social Interaction*, 27, 351-387. http://doi.org/10.1207/s15327973rlsi2704_3
- Chen, Sylvia Xiaohua; Bond, Michael Harris & Tang, Donghui. (2007). Decomposing filial piety into filial attitudes and filial enactments. *Asian Journal of Social Psychology*, 10, 213-223. <http://doi.org/10.1111/j.1467-839X.2007.00230.x>
- Cooper, Randolph B. & Jayatilaka, Bandula. (2006). Group creativity: the effects of extrinsic, intrinsic, and obligation motivations. *Creativity Research Journal*, 18, 153-172. http://doi.org/10.1207/s15326934crj1802_3
- Domenici, Kathy & Littlejohn, Stephen W. (2006). *Facework: Bridging theory and practice*. Thousand Oaks, CA: SAGE.
- Fuligni, Andrew J.; Tseng, Vivian & Lam, May. (1999). Attitudes toward family obligations among American adolescents from Asian, Latin American, and European backgrounds. *Child Development*, 70, 1030-1044. <http://doi.org/10.1111/1467-8624.00075>
- Fuligni, Andrew J.; Yip, Tiffany & Tseng, Vivian. (2002). The impact of family obligation on the daily activities and psychological well-being of Chinese American adolescents. *Child Development*, 73, 302-314. <http://doi.org/10.1111/1467-8624.00407>
- Fuligni, Andrew J. & Zhang, Wenxin. (2004). Attitudes toward family obligation among adolescents in contemporary urban and rural China. *Child Development*, 75, 180-192. <http://doi.org/10.1111/j.1467-8624.2004.00662.x>
- Gao, Ge. (1996). Self and other: A Chinese perspective on interpersonal relationships. In William B. Gudykunst, Stella Ting-Toomey & Tsukasa Nishida (Eds.), *Communication in personal relationships across cultures* (pp. 81-101). Thousand Oaks, CA: SAGE.
- Gefen, David; Straub, Detmar & Boudreau, Marie-Claude. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4, 1-77.

- Goei, Ryan & Boster, Franklin J. (2005). The roles of obligation and gratitude in explaining the efforts of favors on compliance. *Communication Monographs*, 72, 284-300. <http://doi.org/10.1080/03637750500206524>
- Goei, Ryan; Lindsey, Lisa L. Massi.; Boster, Franklin J.; Skalski, Paul D. & Bowman, Jonathan M. (2003). The mediating roles of liking and obligation on the relationship between favors and compliance. *Communication Research*, 30, 178-197. <http://doi.org/10.1177/0093650202250877>
- Goei, R.; Roberto, Anthony; Meyer, Gary & Carlyle, Kellie. (2007). The effects of favor and apology on compliance. *Communication Research*, 34, 575-595. <http://doi.org/10.1177/0093650207307896>
- Gouldner, Alvin W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178. <http://doi.org/10.2307/2092623>
- Greenberg, Martin S. & Shapiro, Solomon P. (1971). Indebtedness: An adverse aspect of asking for and receiving help. *Sociometry*, 34, 290-301. <http://doi.org/10.2307/2786418>
- Heider, Fritz. (1958). *The psychology of interpersonal relations*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ho, David Yau-Fai. (1996). Filial piety and its psychological consequences. In Michael Harris Bond (Ed.), *The handbook of Chinese psychology* (pp. 155-165). New York, NY: Oxford University Press.
- Ho, David Yau-Fai; Fu, Wai & Ng, Siu Man. (2004). Guilt, shame and embarrassment: Revelations of face and self. *Culture & Psychology*, 10, 64-84. <http://doi.org/10.1177/1354067X04044166>
- Hofstede, Geert. (1984). The cultural relativity of the quality of life concept. *Academy of Management Review*, 9, 389-398. <http://doi.org/10.5465/AMR.1984.4279653>
- Homans, George Caspar. (1961). *Social behavior: Its elementary forms*. Oxford, England: Harcourt, Brace.
- Hu, Li-tze & Bentler, Peter M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55. <http://doi.org/10.1080/10705519909540118>
- Hwang, Kwang-Kuo. (1987). Face and favor: The Chinese power game. *American Journal of Sociology*, 4, 944-974.
- Hwang, Kwang-Kuo. (1999). Filial piety and loyalty: Two types of social identification in Confucianism. *Asian Journal of Social Psychology*, 2, 163-183. <http://doi.org/10.1111/1467-839X.00031>
- Janoff-Bulman, Ronnie & Leggatt, Hallie K. (2002). Culture and social obligation: When "shoulds" are perceived as "wants." *Journal of Research in Personality*, 36, 260-270. <http://doi.org/10.1006/jrpe.2001.2345>
- Jöreskog, Karl G. (1970). A general method for estimating a linear structural equation system. *ETS Research Bulletin Series*, 1970(2), i-41. <http://doi.org/10.1002/j.2333-8504.1970.tb00783.x>
- Kaplan, David. (2009). *Structural equation modeling: Foundations and extensions*. Thousand Oaks, CA: SAGE.
- Kline, Rex B. (2010). *Methodology in the social sciences: Principles and practice of structural*

- equation modeling (3rd Edition)*. New York, NY: Guilford Press. Retrieved from <http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10406869>
- Knobloch, Leanne K. & Solomon, Denise Haunani. (2002). Information seeking beyond initial interaction. *Human Communication Research*, 28, 243-257. <http://doi.org/10.1111/j.1468-2958.2002.tb00806.x>
- Malinowski, Bronislaw C. (1932). *Crime and custom in savage society*. London, England: Paul, Trench, Trubner.
- Marsh, Herbert W.; Balla, John R. & McDonald, Roderick P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, 103, 391-410. <http://doi.org/10.1037/0033-2909.103.3.391>
- Miller, Joan G.; Bersoff, David M. & Harwood, Robin L. (1990). Perceptions of social responsibilities in India and in the United States: Moral imperatives or personal decisions? *Journal of Personality and Social Psychology*, 58, 33-47. <http://doi.org/10.1037/0022-3514.58.1.33>
- Ministry of Education of the People's Republic of China. (2011). *Educational statistics in 2010*. Retrieved from <http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s6200/201201/129518.html>
- Muthén, Linda K. & Muthén, Bengt O. (2012). *Mplus user's guide*. (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Myers, Matthew B.; Calantone, Roger J.; Page, Thomas J. & Taylor, Charles R. (2000). An application of multiple-group causal models in assessing cross-cultural measurement equivalence. *Journal of International Marketing*, 8, 108-121. <http://doi.org/10.1509/jimk.8.4.108.19790>
- Oyserman, Daphna; Coon, Heather M. & Kemmelmeier, Markus. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3-72. <http://doi.org/10.1037/0033-2909.128.1.3>
- Oyserman, Daphna; Sakamoto, Izumi & Lauffer, Armand. (1998). Cultural accommodation: Hybridity and the framing of social obligation. *Journal of Personality and Social Psychology*, 74, 1606-1618. <http://doi.org/10.1037/0022-3514.74.6.1606>
- Perugini, Marco & Gallucci, Marcello. (2001). Individual differences and social norms: The distinction between reciprocators and prosocials. *European Journal of Personality*, 15(S1), S19-S35. <http://doi.org/10.1002/per.419>
- Schwartz, Shalom H. (1990). Individualism-collectivism critique and proposed refinements. *Journal of Cross-Cultural Psychology*, 21, 139-157. <http://doi.org/10.1177/0022022190212001>
- Scollon, Ron & Scollon, Suzanne Wong. (1994). Face parameters in East-West discourse. In Stella Ting-Toomey (Ed.), *The challenge of facework: Cross-cultural and interpersonal issues* (pp. 133-157). Albany, NY: State University of New York Press.
- Shumaker, Sally Ann & Jackson, James S. (1979). The aversive effects of nonreciprocated benefits. *Social Psychology Quarterly*, 42, 148-158. <http://doi.org/10.2307/3033695>
- Stein, Catherine H. (1992). Ties that bind: Three studies of obligation in adult relationships with family. *Journal of Social and Personal Relationships*, 9, 525-547. <http://doi.org/10.1177/0265407592094004>

- Tsang, Jo-Ann. (2006). Brief report gratitude and prosocial behaviour: An experimental test of gratitude. *Cognition & Emotion*, 20, 138-148. <http://doi.org/10.1080/02699930500172341>
- U.S. Department of Education. (2011). *Digest of education statistics, 2010 (NCES 2012-001), Chapter 3*. National Center for Education Statistics. Retrieved from http://nces.ed.gov/programs/digest/d11/ch_3.asp
- Yang, Kuo-Shu. (1989). Conceptual analysis of the Chinese filial piety. In G. S. Yang (Ed.), *The psychology of Chinese* (pp. 39-73). Taipei, Taiwan: Guiguan Press.
- Yin, Lee Cheuk. (2003). Do traditional values still exist in modern Chinese societies? *Asia Europe Journal*, 1, 43-59. <http://doi.org/10.1007/s103080200001>

Author Note

Rain Wuyu Liu is a fourth year doctoral student in the Department of Communication at Michigan State University. She received her M.A. in Public Relations at the University of Miami in 2012. She has been working as a Research Assistant on a National Science Foundation project since 2013. Her research interest spans the areas of interpersonal communication, intercultural communication and social influence.

Dr. Mary Bresnahan is a Professor in the Department of Communication at Michigan State University. She received her Ph.D. from the University of Michigan. Her research interest includes cross-cultural and intercultural communication, health and stigma research.