

Social Cognition, Vol. 25, No. 2, 2007, pp. 284-305

REPERCUSSIONS OF SELF-CONSTRUAL FOR SELF-RELEVANT AND OTHER-RELEVANT CHOICE

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In the present investigation, we build on prior research by examining perceptions of choices and their outcomes as a factor of independent and interdependent self-construals, the identity of the chooser, and the recipient of the choice. Results from two experiments suggest that independent selves prefer to be both chooser and choice recipient, whereas interdependent selves are more amenable to choosing for others and having others choose on their behalf. Particularly, results from Study 2 show that participants high in independence are more attentive to their options when choosing for themselves, whereas participants high in interdependence

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The research reported in this article was supported by the grant of the German Academic Exchange Service, allocated to the first author. The third author would like to acknowledge the support of the grant from the Deutsche Forschungsgemeinschaft, and the fourth author would like to acknowledge the grant provided by the National Science Foundation Presidential Early Career Award. The authors would also like to acknowledge Jana Braune, Allison DiBianca, Cassie Mogilner, and Tamar Rudnick, who provided invaluable assistance in the collection and analysis of data as well as throughout the writing process.

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are more attentive when choosing for someone else. Results from both studies further show that independents like choices they make for themselves more than interdependents, but like choices they make for others and choices others make on their behalf less than interdependents. Theoretical and practical implications are discussed.

Choosing for others and having others choose on our behalf are common and perhaps universal aspects of daily life. For example, we may find ourselves called upon to choose a home computer for the family, a gift for a friend, or a project for our colleagues. Likewise, others are often in positions to choose for us. How do we perceive these choices and their outcomes? The answer to this question likely depends on how we perceive ourselves in relation to others. To the extent that we see ourselves as different from others, and focus on developing preferences that are unique, we may perceive choices we make for others and choices others make on our behalf as inconsistent with our personalized tastes and preferences. However, to the extent that we see ourselves as similar to others, and embrace others' preferences as our own, we may perceive choices we make for others and choices others make on our behalf as more consistent with what our own choices would be. Thus, in the present research, we examine how choices involving others are perceived differently depending on the role others play in shaping and defining the self.

Individuals can differ widely in how they construe the self in relation to others, including the extent to which they see themselves as similar to others, the extent to which they focus on learning others' preferences, and the extent to which they use these preferences to infer their own preferences. Independent and interdependent self-construals offer the best contrast in this regard (Markus & Kitayama, 1991). Whereas independent self-construals emphasize autonomy and uniqueness, interdependent self-construals emphasize interpersonal connections and shared characteristics. While independent selves strive to develop and express distinctive values and preferences, interdependent selves, by contrast, strive to express social similarities and cultivate harmonious social relationships. Choice-making situations offer rich opportunities to accomplish these different goals. In particular, choices made on behalf of others, or by others on behalf of the self, can be seen as missed opportunities to satisfy unique preferences, or as new opportunities to facilitate social bonds. We therefore focus our investigation on independent and interdependent self-construals. We hypothesize that these self-construals, which differ in their views of the self in relation to others, will importantly determine perceptions of choices and their outcomes, especially when others act as either choosers or choice recipients.

Preliminary support for the hypothesis that independent and interdependent self-construals influence perceptions of choices for which others act as choosers or choice recipients comes from prior research on cross-cultural differences. Research on gift-giving—a common scenario of choosing for

others—has revealed diverging norms surrounding this practice among members of independent and interdependent cultures (e.g., Green & Alden, 1988; Joy, 2001). As compared to members of independent cultures, members of interdependent cultures report more occasions on which they choose gifts for others, and a broader spectrum of others for whom they choose gifts in an effort to fulfill their social roles and maintain their social relationships (Park, 1998). In one of very few studies to manipulate the identity of the chooser, Iyengar and Lepper (1999) reported differences in independent and interdependent selves' commitment to choice. In particular, compared to interdependent selves, independent selves were both more motivated to engage in tasks they chose for themselves, and less motivated to engage in tasks chosen for them by others. Hoshino-Browne and colleagues have also found that members of interdependent cultures experience more post-decision dissonance and engage in more decision justification after choosing for an ingroup other, whereas members of independent cultures experience more post-decision dissonance and engage in more decision justification after choosing for themselves (Hoshino-Browne et al., 2005). Indeed, there is evidence to suggest that independent and interdependent self-construals even inform our understanding of choices in which the self acts as both chooser and recipient. For example, Kim and Markus (1999) found that members of independent cultures preferred that which deviated from what others chose, whereas members of interdependent cultures preferred that which they believed most others had chosen. Likewise, Aaker and Maheswaran (1997) found that members of interdependent cultures were more likely than members of independent cultures to integrate others' opinions into their own.

Taken together, results from these studies converge to suggest that independent and interdependent self-construals have important implications for how choices and their outcomes are perceived. However, among studies examining choice-making situations in which others are involved as choosers or choice recipients, the cross-cultural research on gift-giving has primarily utilized interviews to investigate the former. And while Iyengar and Lepper (1999) utilized experimental studies, they investigated only the latter, and focused on one particular outcome associated with the choice, (i.e., resulting motivation). To date, no systematic investigation has aimed at understanding how choices and their outcomes are perceived as a factor of self-construal and the involvement of others as either choosers or recipients of the choice. In the present studies we address this issue and extend prior research on this topic by examining the interactions between self-construal, the identity of the chooser, and the recipient of the choice. Specifically, we examine the effects these variables have on participants' liking for the chosen outcome relative to the other possible outcomes that were not chosen, and on the level of attention participants pay to the choice-making task. We hypothesize that the role played by others in guiding the preferences of independent versus interdependent selves leads to: (a) increased liking for

choices made both by the self and for the self for independents as compared to interdependents, and b) increased liking for choices made by others, and for others, for interdependents as compared to independents. Likewise, we hypothesize that interdependents will pay more attention to their options when choosing for someone else as compared to when choosing for themselves, whereas independents will show the reverse pattern.

For independent selves, the process of forming preferences is instigated by looking inward—by looking to attitudes and attributes considered unique and separate from those of others. By contrast, for interdependent selves, the process of forming preferences is instigated by looking outward—by looking to the attitudes and attributes of others as a means of determining one's own. This is supported by evidence that members of independent cultures see themselves as less similar to others than others are to themselves, whereas members of interdependent cultures see themselves as more similar to others than others are to themselves (Markus & Kitayama, 1991). It is further supported by evidence that, compared to independents, interdependents are more attentive to others' preferences, and more likely to use others' preferences to infer their own (e.g., Aaker & Maheswaran, 1997). This is not to say that independent selves are oblivious to those around them, but rather that the role of others for independents is more self-reflective and less self-defining than it is for interdependents. As a consequence, independent selves are less focused on learning others' preferences than are interdependent selves, and view others' preferences as less diagnostic of their own. This analysis suggests that, compared to interdependents, independents will see a choice they make for themselves as far more congruent with their distinct preferences than a choice made for them by someone else. We examine this hypothesis in Study 1 by measuring participants' chronic independent and interdependent self-construals, manipulating the identity of the chooser, and measuring participants' liking for the chosen outcome relative to the nonchosen outcomes. We predict that, compared to interdependent selves, independent selves will like their outcome more relative to the others possible when they choose their outcome for themselves, but will like their outcome less relative to the others possible when their outcome is chosen for them.

In Study 2, we extend our examination of how choices are perceived to conditions in which the self is always choosing, but the recipient of the choice is either the self or someone else. Because interdependent selves are more focused than independent selves on gaining knowledge of others whose values, tastes, and preferences inform their own, we again predict a difference in liking for the chosen outcome relative to the not chosen outcomes. In particular we predict that, compared to interdependent selves, independent selves will report more liking for outcomes they choose for themselves, but less liking for outcomes they choose on behalf of someone else.

In addition, in Study 2, we examine participants' attention to the task of making their choice. The different degrees to which independent and inter-

dependent selves focus on learning the preferences of others, and on maintaining harmonious relationships, also suggest a difference in the degree to which they will concern themselves with choosing on behalf of others. Thus independents should show a greater interest in choosing for themselves, whereas interdependents should show a greater interest in choosing for someone else. We examine this hypothesis in Study 2 by examining how much independents and interdependents scrutinize their options while making their choice. We predict that independents will pay more attention to their options when choosing for themselves as compared to when choosing for someone else, whereas interdependents will pay more attention to their options when choosing on behalf of someone else as compared to when choosing for themselves.

STUDY 1

METHOD

Overview. In Study 1 we examined the interaction between self-construal, (independent versus interdependent), and the identity of the chooser, (self versus other), on participants' liking for the outcome of a choice. As our measure of liking for the outcome, we compared participants' liking for the outcome they received to their liking for the other outcomes that were possible. We predicted that, compared to interdependent selves, independent selves would perceive their outcome as more preferable than the others possible when they chose the outcome for themselves, but less preferable when the outcome was chosen for them.

Participants. Ninety-five students participated in Study 1, 36 from a well-known university in New York City and 59 from a comparably well-known university in Berlin, Germany. The mean age was 22.75 years ($SD = 5.29$). Forty-two percent of participants were men. Participants were compensated with 7 dollars or 6 euros.¹

Procedure. Participants were told they would be taking part in two separate studies. In the "first study," which consisted of a questionnaire, participants completed the Singelis (1994) self-construal scale. The scale included 12 items measuring independence, (e.g., "I am comfortable with being singled out for praise or rewards," $\alpha = .54$), and 12 items measuring interdependence, (e.g., "It is important for me to maintain harmony within my group," $\alpha = .69$). To reduce the accessibility of the concepts invoked by the Singelis scale and reduce any perceived connection between the two portions of the study, a 10-minute break followed participants' completion of the questionnaire, after which they were guided to a different room where the "second study" was administered. For this second portion of the study,

1. The same pattern of results emerged when controlling for gender and study location (U.S. vs. Germany). We therefore exclude these variables from our analyses.

participants were randomly assigned to either the choice or no-choice condition. In both the choice and the no-choice conditions, participants completed a filler task in which they answered 20 trivia-type questions. In the choice condition, participants were told that they could then *choose* a prize in addition to payment for their participation. In the no-choice condition, participants were instead told that they would *receive* a prize in addition to payment for their participation. To ensure that the options were equally favored, a pilot study asked 39 participants to rate the attractiveness of an initial set of 30 prizes. The six prizes chosen for use in this study were rated as equally and highly attractive. These included a notepad, a tube of chap-stick, a toothbrush, a chocolate bar, a bottle of water, and a set of batteries. In the no choice condition, after participants saw the six prizes that were available, the experimenter always presented them with the notepad as their prize.

As a measure of participants' liking for their outcome, (i.e., their prize), we assessed their liking for the chosen item relative to their liking for the five nonchosen items. After receiving their prize, participants indicated their liking for each of the prizes available on a scale from 1 (not at all) to 7 (very much). For each participant, we then averaged liking for all nonchosen prizes and subtracted this score from liking for the chosen prize. The resulting difference score reflected the extent to which participants liked the prize they chose (choice condition) or the prize chosen for them (no-choice condition) more than they liked the nonchosen prizes.

As additional compensation, at the close of the study all participants were allowed to keep their selected prize (choice condition) or to select a prize from among the six available (no choice condition). All scales and instructions were translated from German into English and then translated back into German to maximize conceptual uniformity (Brislin, Lonner, & Thorndike, 1973).

RESULTS

We examined the effects of self-construal on liking for the chosen outcome using two focal analyses. In the first analysis, we conducted a 2 (Self-construal: independent, interdependent) \times 2 (Choice: choice, no-choice) ANOVA on liking for the chosen outcome. For this analysis, we categorized participants as independent or interdependent using a procedure established in prior research (e.g., Hannover, 2002; Hannover, Birkner, & Pöhlmann, 2006; Holland, Roeder, van Baaren, Brandt, & Hannover, 2004). Specifically, we standardized participants' average scores on the Singelis independence and interdependence subscales and subtracted interdependence from independence. We then classified participants with positive scores as independent ($n = 50$), and participants with negative scores as interdependent ($n = 45$). In the second analysis, rather than categorize par-

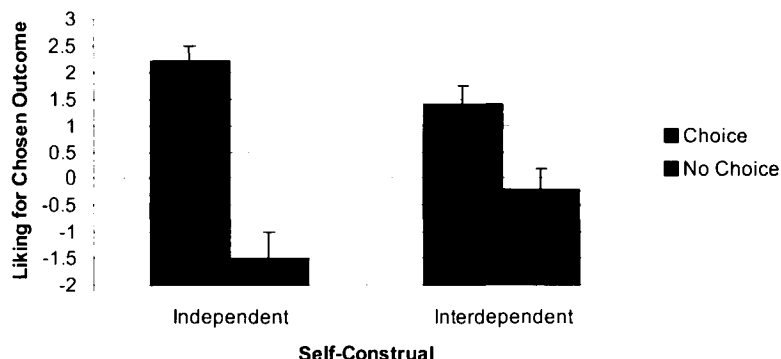


FIGURE 1. Mean liking for the chosen outcome for independent versus interdependent selves in conditions of choice and no choice.

ticipants based on their predominant self-construal, we examined the effect of varying levels of independent and interdependent self-construals by regressing liking for the chosen outcome on choice (no choice = 0, choice = 1), independence, interdependence, and their interactions (e.g., Kurman, 2001; McCall, Reno, Jalbert, & West, 2000).

Liking for the Chosen Outcome. As predicted, compared to interdependent selves, independent selves liked their outcome more when they were permitted to choose for themselves than when their outcome was chosen for them. The 2 (Self-construal: independent, interdependent) \times 2 (Choice: choice, no-choice) ANOVA on liking for the outcome revealed a significant effect of choice, $F(1,91) = 45.18, p < .001$ qualified by the predicted Self-construal \times Choice interaction, $F(1,91) = 7.16, p < .01$. Among participants in the choice condition, independent selves liked their outcome more compared to interdependent selves, $M_s = 2.22$ and 1.40 for independent and interdependent selves respectively, $F(1,91) = 10.89, p < .01$. However, among participants in the no-choice condition, independent selves liked their outcome less compared to interdependent selves, $M_s = -1.53$ and $-.22$ for independent and interdependent selves respectively, $F(1,91) = 27.79, p < .001$. Thus independent selves liked their outcome much more when they chose for themselves as compared to when the outcome was chosen for them, $F(1,91) = 226.58, p < .001$. This difference in liking for the outcome was substantially reduced among interdependent selves, $F(1,91) = 42.01, p < .001$. These results are illustrated in Figure 1.

Results for the regression analysis were consistent. We regressed liking for the chosen outcome on choice, independence, interdependence, and their interactions. As expected, the effect of independent (but not interdependent) self-construals on perceptions of the preferability of the outcome

depended on whether participants could choose for themselves. This analysis yielded a main effect of choice ($B = 2.54$, $SE = .40$, $p < .001$) qualified by the predicted Choice \times Independence interaction ($B = .90$, $SE = .42$, $p < .05$). As shown in Figure 2, increased levels of independent self-construal were associated with increased liking for the outcome among participants who chose their own ($B = .71$, $SE = .23$, $p < .01$), but little change in liking among participants whose outcome was chosen for them ($B = -.19$, $SE = .35$, $p = .59$). By contrast, interdependence did not differentially affect liking for the chosen outcome in the two choice conditions ($B = -.28$, $SE = .45$, $p = .55$ for the Choice \times Interdependence interaction).

DISCUSSION

Results from Study 1 reveal that self-construals predict differences in how the outcomes of choices are perceived. Compared to participants high in interdependence, participants high in independence both liked outcomes they chose for themselves more, and liked outcomes chosen for them by someone else less. Thus, compared to interdependent selves, independent selves showed a more pronounced preference for outcomes of self-made choices. These results are consistent with Iyengar and Lepper's (1999) finding that, compared to interdependent selves, independent selves were both more motivated to engage in self-chosen tasks, and less motivated to engage in a task assigned by others. Yet, results from Study 1 also extend Iyengar and Lepper's (1999) findings in a number of ways.

First, whereas Iyengar and Lepper compared different cultural groups, in the present research we extend their analysis to individuals varying in their relative degrees of independent and interdependent self-construals. While comparing different cultural groups is likely to produce samples of individuals that differ systematically in their self-construals, with members of independent cultures being more independent and members of collectivist cultures being more interdependent, populations that differ in their cultural upbringing are likely to differ systematically along a number of psychological dimensions in addition to independent self-construal. In the present research, we address this issue by employing a measure intended to assess the underlying self-constructs.

In addition, results from Study 1 extend Iyengar and Lepper's analysis to include different dependent variables. Whereas Iyengar and Lepper examined how long participants engaged in a chosen activity, Study 1 examined participants' liking for the chosen outcome relative to the other possible, nonchosen outcomes. This measure of liking generalizes to a much broader category of choice; almost every choice has an outcome that is evaluated, by the chooser or recipient, on dimensions related to liking, whereas length of engagement applies mainly to choices involving effort or activity. Indeed, results from Study 1 suggest that liking for the chosen outcome may underpin the difference in motivation (or length of engagement) reported by

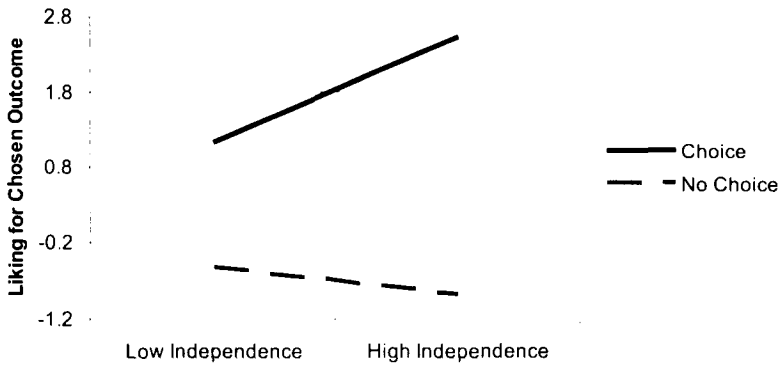


FIGURE 2. Liking for the chosen outcome as a function of independent self-construal in conditions of choice versus no choice. Low and high independence refer to participants scoring one standard deviation below and above the mean for independent self-construal ($M = 3.66$, $SD = .38$). All continuous variables were standardized prior to analysis.

Iyengar and Lepper. Independents' decreased liking for the choices of others would naturally lead to decreased enthusiasm when these choices required motivation or commitment on their behalf. Likewise, interdependents' increased liking for the choices of others would translate into increased enthusiasm. Thus, liking for the outcome of a self-made or other-made choice is likely to be an important factor in determining subsequent motivation.

It is worth noting that except in contrast with independents' pronounced preference for choosing their own outcome, results for Study 1 found little evidence to suggest that interdependents preferred having their outcome chosen for them by somebody else. Although interdependents liked self-chosen outcomes less compared to independents, and liked other-chosen outcomes more compared to independents, interdependents still liked self-chosen outcomes more compared to other-chosen outcomes. In addition, as interdependence increased, we did not see an increase in liking for other-chosen outcomes. On the surface, these results seem contrary to the hypothesis that interdependents rely on others' preferences in order to formulate their own, and thus prefer to have their choices made by others; however, these results are quite consistent with research finding that interdependents are highly attuned to the ingroup or outgroup status of others and particularly value the opinions of others whom they consider to be part of their ingroup (e.g., Iyengar & Lepper, 1999). In Study 1, the chooser was either the self or the experimenter, an outgroup other, rather than in ingroup other, and so it is not surprising that our results showed a difference

between independents and interdependents only in their degree of preference for self- versus other-made choice. Therefore, in Study 2, we build on Study 1 by using an ingroup member (participants' mothers) as the identity of the other.

In addition, Study 2 expands upon the observed findings from Study 1 in two important respects. First, it manipulates the identity of the choice-recipient; second, it supplements the measure of liking for chosen outcomes with a measure of attention paid to the choice-making task. We argue that differences in self-construal, (i.e., differences in the perceived relationship between self and others), will drive differences in perceptions of choices when others are involved. We therefore hypothesize that self-construal will drive differences in perceptions of choices not only as a factor of the self/other identity of the chooser, (as in Study 1), but also as a factor of the self/other identity of the choice recipient. Specifically, because interdependents are more focused than independents on learning the preferences of others, using others' preferences to inform their own, and maintaining strong social ties, we predict that, compared to independents, interdependents will: (a) report less liking for an item they choose for themselves, but more liking for an item they choose for an ingroup other, and (b) be less attentive when choosing an item for themselves, but more attentive when choosing an item for an ingroup other. We measure attention to the choice-making task by measuring participants' memory for their options. Increased memory has been reliably linked to increased attention and motivation at the time of encoding (e.g., Belmore, 1987; Bradley, Greenwald, Petry, & Lang, 1992; Craik, Govoni, Naveh-Benjamin, & Anderson, 1996; Erdfelder & Bredenkamp, 1998; McKelvie, Standing, St. Jean, & Law, 1993; Willoughby, Motz & Wood, 1997). Accordingly, we predict that independents will better remember options after they choose for themselves, whereas interdependents will better remember options after they choose for someone else.

STUDY 2

METHOD

Overview. In Study 2 we examined the interaction between self-construal, (independent versus interdependent), and the identity of the choice recipient, (self versus other), on participants' liking for the chosen outcome and on their attention to the choice-making task. We predicted that, compared to interdependents, independents would like outcomes they chose for themselves more, and outcomes they chose for others less. To measure participants' attention to the decision-making task, we included a surprise recognition test for options presented while participants were making their choice. We predicted that independents would show a recognition advantage for options presented when they chose for themselves, whereas interdependents would show a recognition advantage for options presented when they chose for an ingroup other.

Participants. One hundred and ninety-one students participated in Study 2, 94 from a well-known university in New York City, and 97 from a comparably well-known university in Berlin. Recruiting was limited to female participants due to the nature of the stimulus materials (women's watches). Their mean age was 21.96 years ($SD = 4.41$). Participants were compensated with 7 dollars or 6 euros.²

Stimulus Materials. Participants in Study 2 were asked to choose a watch either for themselves or for their mothers. Watches were chosen as stimuli for this study because of their ability to reflect their owners' tastes and preferences. To ensure that no watch was perceived as the dominant or superior choice, images of a large selection of watches were piloted on 35 American and 33 German students. The 30 watches selected for use in this study were matched on likability and perceived worth, but still represented a range of styles, (e.g., sport, casual, dress), and brands, (e.g., Swatch, Esprit, Omega), and varied widely in color, shape, and overall design.

Procedure. Participants were told they would be taking part in two independent studies. In the first study, they filled out the Singelis (1994) self-construal scale. As in Study 1, we used participants' average scores across the independent items ($\alpha = .62$) and the interdependent items ($\alpha = .73$) as measures of independent and interdependent self-construal.³ After a 10-minute break, participants were brought to a different room where the second study would take place and seated in front of a computer.

2. As in Study 1, the same pattern of results emerged when controlling for study location (U.S. versus Germany). We therefore exclude this variable from our analyses.

3. Reliabilities for the Singelis' self-construal subscales were lower than desired (.54 and .69 for the independence and interdependence subscales in Study 1, and .62 and .73 for the independence and interdependence subscales in Study 2). However, reliabilities obtained in other studies using self-construal scales have also been moderately low (see Levine, et al., 2003, for a review). In addition, the reliabilities reported by Singelis (1994) in his validation of the scale are not much higher (ranging from .69 to .74). Levine et al. (2003) argue that both independent and interdependent self-construals are multidimensional (see also Cross, Bacon, & Morris, 2000; Fiske, 2002; Kashima et al., 1995; Sato & McCann, 1998). Accordingly, Singelis, Triandis, Bhawuk, and Gelfand (1995) argue that the items of the self-construal subscales (Singelis, 1994) tap into different aspects of independence and interdependence, rather than repeated formulations of unidimensional constructs. Singelis et al. (1995) refer to Cronbach's (1990) "bandwidth versus fidelity dilemma" (with bandwidth referring to the amount of information and fidelity to the accuracy or consistency of the information obtained) and conclude that, because independence-interdependence is a broad concept, "several scores with relatively low alphas will give more valid information (covering the whole bandwidth) than fewer scores with high alphas" (Singelis et al., 1995, p. 242). "The difficulty with individualism and collectivism is that because they are broad constructs (e.g., large bandwidth), high alphas have been difficult to obtain" (Singelis et al., 1995, p. 242). Therefore the moderately low levels of reliability we obtain for our self-construal measures in the present research are representative of the reliabilities commonly obtained in research on self-construal and may be due to the fact that such measures attempt to capture multiple dimensions associated with independence and interdependence.

For this portion of the study, participants were randomly assigned to either the self-choice or the other-choice condition. In the self-choice condition, each participant imagined she was shopping for a watch for herself. In the other-choice condition, each participant imagined she was shopping for a watch for her mother. (Mothers have been successfully used as ingroup members in prior research on choice e.g., Iyengar & Lepper, 1999). All participants chose three different times from among three different selections of watches that were presented to them on a computer screen. Participants in the self-choice condition always chose the watch they would prefer, whereas participants in the other-choice condition always chose the watch they thought their mothers would prefer.

After their first choice, and again after their second choice, participants indicated how much they liked each watch for themselves (self-choice) or for their mothers (other-choice) on a scale from 1 (not at all) to 7 (very much). As in Study 1, we calculated liking for the chosen outcome by averaging ratings of liking across all nonchosen watches and subtracting this score from liking for the chosen watch. The resulting difference score reflected the extent to which participants liked the watch they chose more than the other available watches. We calculated this difference score for choice 1 and choice 2. We then averaged these measures of liking across choice 1 and choice 2 to create an overall liking score ($\alpha = .78$). In addition, as a measure of participants' attention to their options, after their third and final choice all participants were given a surprise recognition test. During this test, participants viewed computerized images of 10 randomly ordered watches and indicated, using a key press, whether they recognized each watch as having appeared among their options during the previous portion of the study. Six of the watches had appeared previously. We calculated the proportion of these six watches accurately recognized by participants as a means of assessing the attention they paid to their options.⁴

RESULTS

As in Study 1, we examined the effects of self-construal using two focal analyses. We conducted each analysis for both the dependent measures (liking for the chosen outcome and memory for options in the choice set). In the first analysis, we conducted a 2 (Self-construal: independent, interdependent) \times 2 (Choice Recipient: self, other) ANOVA. For this analysis, as in Study 1, we standardized participants' average scores on the Singelis independence and interdependence subscales and subtracted interdependence from independence. We then classified participants with positive scores as independ-

4. After completing the surprise recognition test, participants were compensated and debriefed. All instructions were translated from German into English and then translated back into German.

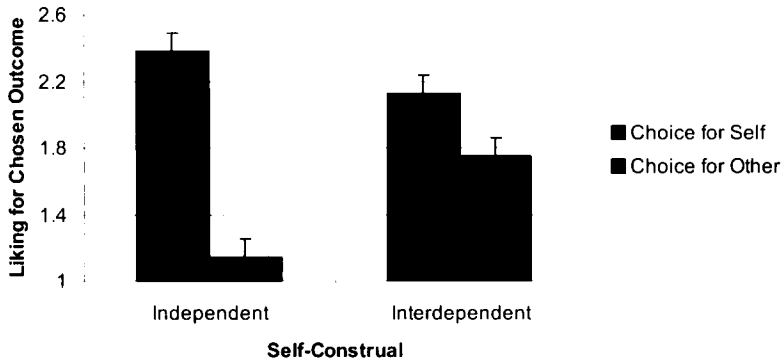


FIGURE 3. Mean liking for the chosen outcome for independent versus interdependent selves when choosing for the self and when choosing for an ingroup other.

ent ($n = 97$), and participants with negative scores as interdependent ($n = 94$). Also as in Study 1, in a second analysis we examined the effect of independent and interdependent self-construals by regressing the dependent variable on choice (choice for self = 0, choice for mother = 1), independence, interdependence, and their interactions.

Liking for the Chosen Outcome. Consistent with our hypotheses, compared to interdependents, independents both liked their chosen outcomes more when choosing for themselves, and liked their chosen outcomes less when choosing for their mothers. The 2×2 ANOVA on liking for the chosen outcome relative to the nonchosen outcomes revealed a significant effect of choice, $F(1,185) = 48.65, p < .001$, qualified by the predicted Self-construal \times Choice interaction, $F(1,185) = 13.56, p < .001$. Among participants choosing for themselves, independent selves liked their choice more compared to interdependent selves, $M_s = 2.37$ and 2.12 for independent and interdependent selves respectively, $F(1,185) = 4.73, p < .05$. However, among participants choosing for their mothers, independent selves liked their choice less compared to interdependent selves, $M_s = 1.15$ and 1.74 for independent and interdependent selves respectively, $F(1,185) = 27.35, p < .001$. Thus independent selves liked their choice for themselves more than they liked their choice for their mothers, $F(1,185) = 114.77, p < .001$, whereas this difference in liking was substantially reduced among interdependent selves, $F(1,185) = 10.95, p < .01$. These results are illustrated in Figure 3.

The results of regressing liking for the chosen outcome on choice, independence, interdependence, and their interactions also revealed that the effects of self-construal on participants' liking for their choice depended on the choice recipient. Most notably, when the recipient of the choice was the participant's mother, increased interdependence predicted increased liking

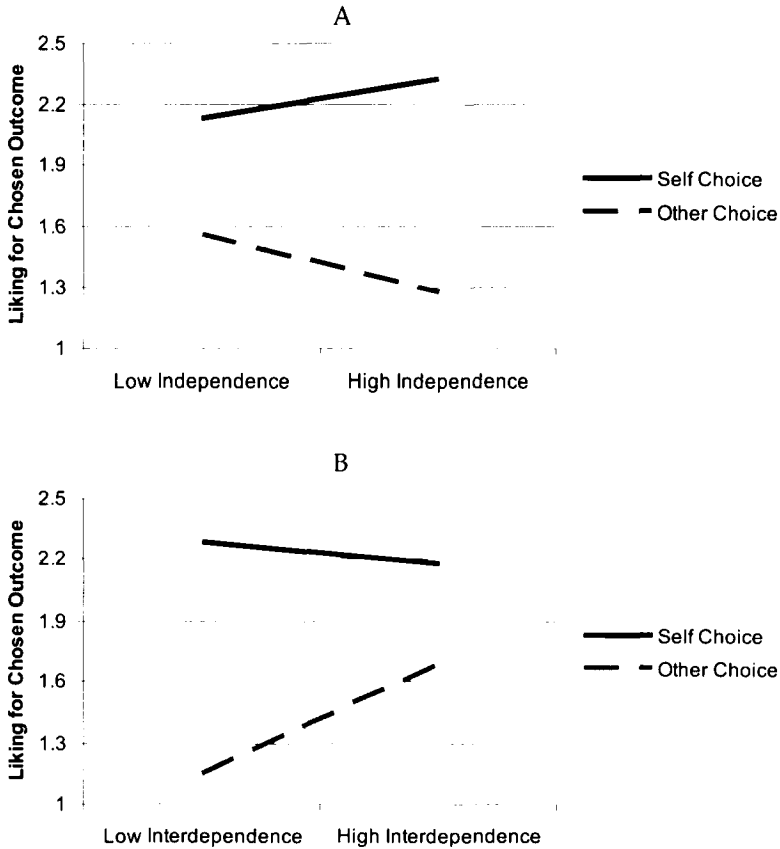


FIGURE 4. Liking for the chosen outcome as a function of independent self-construal (panel A) and interdependent self-construal (panel B) when making a choice for the self and when making a choice for an ingroup other. Low and high independence refer to participants scoring one standard deviation below and above the mean for independent self-construal ($M = 3.60$, $SD = .44$). Likewise, low and high interdependence refer to participants scoring one standard deviation below and above the mean for interdependent self-construal ($M = 3.22$, $SD = .50$). All continuous variables were standardized prior to analysis.

for the chosen outcome, while increased independence predicted decreased liking for the chosen outcome. The regression yielded a main effect of choice ($B = -.82$, $SE = .12$, $p < .001$) qualified by the predicted Choice \times Independence ($B = -.24$, $SE = .12$, $p = .05$) and Choice \times Interdependence interactions ($B = .32$, $SE = .12$, $p < .01$). As shown in Figure 4 panel A, increased levels of independent self-construal predicted a slight increase in liking for chosen outcomes among participants choosing a watch for themselves ($B = .10$, $SE = .08$, $p = .22$), but a slight decrease in liking for chosen outcomes among partici-

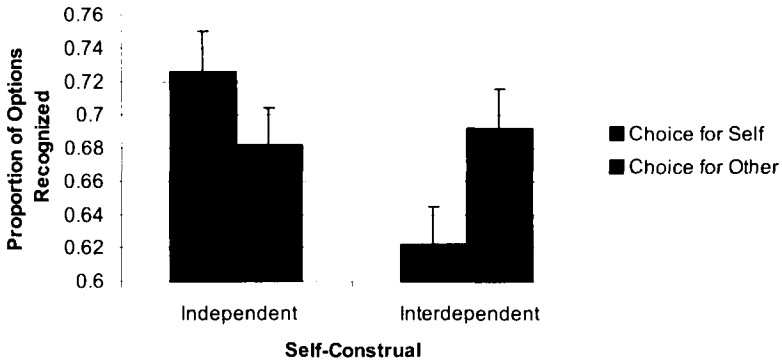


FIGURE 5. Mean proportion of accurately recognized options for independent versus interdependent selves when choosing for the self and when choosing for an ingroup other.

pants choosing a watch for their mothers ($B = -.14$, $SE = .09$, $p = .11$). By contrast, increased levels of interdependent self-construal predicted little change in liking for chosen outcomes among participants choosing for themselves ($B = -.05$, $SE = .08$, $p = .53$), but a pronounced increase in liking for chosen outcomes among participants choosing for their mothers ($B = .27$, $SE = .08$, $p < .01$). The latter interaction is illustrated in Figure 4 panel B. Therefore the ANOVA and regression analyses on outcome liking both suggest that the starkest difference between independent and interdependent selves occurred when they chose on behalf of an ingroup other.

Attention to Options. Also consistent with our hypotheses, participants' memory for options presented among their choice sets revealed that independent and interdependent selves were differentially attentive to their options depending on the recipient of their choice. Whereas independent selves correctly recognized more watches when they had chosen for themselves, interdependent selves correctly recognized more watches when they had chosen for their mothers. The 2 (Self-construal: independent, interdependent) \times 2 (Choice Recipient: self, other) ANOVA on proportion of correctly identified options yielded a significant effect of self-construal, $F(1,187) = 3.96$, $p < .05$) qualified by a Choice \times Self-construal interaction, $F(1,187) = 5.94$, $p < .05$). As shown in Figure 5, independent selves recognized (marginally) more options in the self-choice as compared to the other-choice condition, $M_s = .73$ and $.68$, respectively; $F(1,187) = 3.54$, $p = .06$). By contrast, interdependent selves recognized more options in the other-choice as compared to the self-choice condition, $M_s = .69$ and $.62$, respectively; $F(1,187) = 8.94$, $p < .01$.

Results for the regression analysis additionally support our prediction that attention to the choice set is importantly influenced by the interaction between self-construal and the self-other identity of the choice recipient. Regressing the proportion of correctly remembered options on choice, independence, interdependence, and their interactions yielded significant effects of independence ($B = .034$, $SE = .016$, $p < .05$), interdependence ($B = -.037$, $SE = .017$, $p < .05$), and Independence \times Interdependence ($B = .041$, $SE = .016$, $p < .05$), as well as the predicted effects of Choice \times Independence ($B = -.055$, $SE = .024$, $p < .05$) and Choice \times Interdependence ($B = .045$, $SE = .023$, $p = .05$). We assess our predictions regarding the differential effects of self-construal in the two choice conditions by examining the latter interactions. As shown in Figure 6 panel A, increased independent self-construals predicted increased attention to the options when participants chose for themselves ($B = .034$, $SE = .016$, $p < .05$), but a slight decrease in attention to the options when participants chose for their mothers ($B = -.021$, $SE = .018$, $p = .24$). By contrast, increased interdependent self-construals predicted decreased attention to the options when participants chose for themselves ($B = -.037$, $SE = .017$, $p < .05$), but little change in attention to the options when participants chose for their mothers ($B = .008$, $SE = .016$, $p = .61$). The latter interaction is illustrated in Figure 6 panel B. These results therefore suggest that the largest difference between highly independent and highly interdependent selves, in terms of the attention they paid to their option sets, emerged in the self-choice condition: Whereas increased independence predicted increased attention to the options when choosing for the self, increased interdependence predicted decreased attention to the options when choosing for the self.

GENERAL DISCUSSION

Taken together, results from these studies show that, for choices involving others as choosers or recipients, the construal of the self in relation to others is key to understanding perceptions of these choices and their outcomes. In particular, findings across both studies show that independent self-construals predict increased liking for outcomes chosen by the self, for the self, whereas interdependent self-construals predict increased liking for outcomes chosen by the self on behalf of an ingroup other. Findings from Study 2 also show independents are more attentive to their choice sets when choosing for themselves as compared to when choosing for an ingroup other, whereas interdependents are more attentive to their choice sets when choosing for an ingroup other as compared to when choosing for themselves. Thus, compared to interdependent selves, independent selves revealed a more pronounced preference for choices in which they acted as both chooser and choice recipient. By contrast, interdependent selves proved more amenable to choosing for others and having others choose on their behalf.

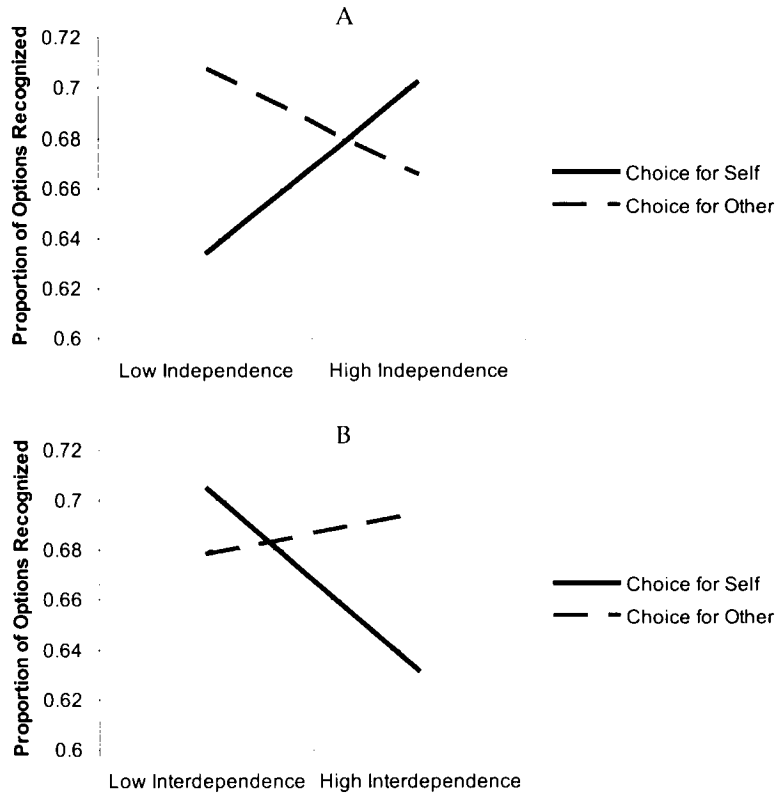


FIGURE 6. Proportion of recognized options as a function of independent self-construal (panel A) and interdependent self-construal (panel B) when making a choice for the self and when making a choice for an ingroup other. Low and high independence refer to participants scoring one standard deviation below and above the mean for independent self-construal ($M = 3.60$, $SD = .44$). Likewise, low and high interdependence refer to participants scoring one standard deviation below and above the mean for interdependent self-construal ($M = 3.22$, $SD = .50$). All continuous variables were standardized prior to analysis.

Results from the current investigation therefore lend support to prior studies reporting that, compared to interdependents, independents favor making their own choices (e.g., Iyengar & Lepper, 1999). Yet results from the current research further suggest that it is not merely making a choice—any choice—that motivates independents. Rather, independent selves prefer making choices that are self-relevant, that is, choices in which they act as both the chooser and the recipient of the chosen outcome. In particular, results for Study 2 found that independents liked their outcome more when they chose the outcome for themselves as compared to when they chose for someone else. Consequently, independents appear to both (a) favor self-relevant choices over choices that are less relevant to their own personal prefer-

ences and (b) favor other-relevant choices to a lesser degree than do interdependents.

Participants' memory for watches presented in Study 2 suggests, further, that these differences in the preference for self-relevant choice coincide with differences in the attention independent and interdependent selves pay to their options. Whereas independents were more attentive to their options when they chose for themselves as compared to when they chose for somebody else, interdependents were less attentive to their options when they chose for themselves as compared to when chose for somebody else. These studies therefore suggest that the act of choosing has both motivational and cognitive consequences for independent and interdependent selves. These findings are consistent with prior research reporting differences in cognition as a factor of differences in self-construal. For example, Hannover and Kühnen (2004) found that independents and interdependents process social information differently due to differences in how much they value and utilize contextual information. In addition, Kühnen, Hannover and Schubert (2001) found that participants primed with interdependence evidence more context-bound patterns of cognition than those primed with independence. Results for the memory test are also consistent with the cross-cultural finding that individuals who value social relationships report spending more effort choosing gifts than individuals whose values are more self-focused (Beatty, Kahle, & Homer, 1991). Our findings complement these prior studies with insight into the memory and attention processes likely to impact the kinds of choices we make on a daily basis.

Although the findings from this investigation are consistent with our hypotheses, several questions of both theoretical and practical relevance have emerged for future research to consider. For instance, the results for outcome liking in Study 2 may have been driven by dissonance and subsequent decision justification. Hoshino-Browne and colleagues have found that members of interdependent cultures engage in more decision justification after choosing for an ingroup other, whereas members of independent cultures engage in more decision justification after choosing for themselves (Hoshino-Browne et al., 2005). If this were the case, independents' comparatively greater liking for outcomes they chose for themselves, and interdependents' comparatively greater liking for outcomes they chose for their mothers would have been driven more directly by corresponding levels of post-decision dissonance and only indirectly by differences in the perceived alignment between personal preferences and the preferences of others. It is less clear how dissonance processes could have influenced the differences in attention paid to the choice-making task. Nevertheless, while the present research has far-reaching implications for the interplay between cognitive choice-making processes and self-construal, it is left to future research to identify the precise mechanisms driving the effects observed in the present studies.

An additional limitation in the present research involves our operationalization of the identity of the other. In Study 1 the identity of the other was

the experimenter, an outgroup other, whereas in Study 2 the identity of the other was each participant's mother, an ingroup other. Therefore, across both studies, the identity of the other was operationalized as anyone outside of the self. However, prior research suggests that while independents conceptualize the self as relatively distinct from others in general, interdependents conceptualize the self as relatively similar to ingroup others in particular, but comparatively less similar to outgroup others. Our results are generally consistent with this prior research. Consistent with the supposition that independents conceptualize themselves as distinct from others in general, results across both studies found a stronger preference for self-made choice on behalf of independents, as compared to interdependents, regardless of the ingroup or outgroup status of the other. In addition, consistent with the supposition that interdependents see themselves as particularly similar to ingroup others, results from Study 2 found that, compared to independents, interdependents saw a watch they thought an ingroup other would like as more congruent with their personal taste in watches. Based on the present results and prior research, we would further expect that introducing an ingroup other as chooser would augment the difference between independents and interdependents in terms of how much they liked the outcomes chosen on their behalf. We would also expect that introducing an outgroup other as choice recipient would diminish the difference between independents and interdependents in terms of how much they liked the outcomes they chose on behalf of others. Future explorations of this topic might usefully employ a fully crossed design by including the self, an ingroup other, and an outgroup other as chooser for the self or choice recipient.

Given interdependents' perceptions of themselves as similar to ingroup members, it seems surprising that, like independents, interdependents in Study 2 showed a preference (albeit a smaller one) for outcomes they chose for themselves over outcomes they chose on behalf of an ingroup other. We might wonder why interdependents did not like outcomes they chose for an ingroup other more than they liked outcomes they chose for themselves. The reason may be that interdependents see their personal liking of a choice they make on behalf of an ingroup other as irrelevant, the central issue being the ingroup other's own liking for the choice. Interdependents may even deem it presumptuous to indicate high personal liking for a choice they were to make with an ingroup other in mind as the choice recipient. Future explorations of this topic might circumvent these kinds of concerns by including implicit measures of liking for chosen outcomes in addition to the kinds of explicit measures used in the present research.

Finally, to what extent can we generalize comparisons of differences between independent and interdependent selves by examining different self types within two cultures that are both regarded as independent? Previous studies have repeatedly shown that, irrespective of whether participants from independent or interdependent cultures are investigated, differences

between independents and interdependents *within* a given culture parallel the ones found *between* members of independent versus interdependent cultures, (e.g., Kleinknecht et al., 1997; Sato & Cameron, 1999). Accordingly, we did not expect additional insights from including Eastern samples into our studies. Had we done so, we would have expected to find the same pattern when comparing independents versus interdependents within that sample as we have found within our Western samples. More specifically, for both Western and Eastern participants with a predominantly independent self-construal, we would have predicted that they would value situations in which they are the recipient of the choice or the choice maker more than Western or Eastern participants with a predominantly interdependent self-construal. Since within-culture designs have the advantage of fewer possible confounds, we refrained from including Eastern samples in our studies.

A typical day for most adults involves making at least one choice on behalf of someone else, whether it be a child, a spouse, a parent, a friend, or a colleague. Our results suggest that, relative to independent selves, interdependent selves may be more motivated to choose for others, and may therefore pay more attention to the available options. This difference could have a number of consequential repercussions. For example, further research might examine whether interdependents are better at managing teams because they choose more carefully whenever they are choosing for others—or make better team members because they are more inclined to embrace the choices others make on their behalf. Further research might also examine differences between independents and interdependents in their receptiveness to persuasive communications—including communications aimed at modifying behaviors, such as political ads, product advertisements, and health prevention programs. Our results suggest that when persuasive messages are not directly self-relevant, independent selves may be less likely to process them systematically, or even to pay attention to them at all. These and other likely repercussions of the differences revealed in this research highlight the importance of self-construals for choice behaviors in our everyday lives, and thus the importance of continued research on this topic.

REFERENCES

- Aaker, J. L., & Maheswaran, D. (1997). The effect of cultural orientation on persuasion. *Journal of Consumer Research*, 24, 315–328.
- Beatty, S. E., Kahle, L. R., & Homer, P. (1991). Personal values and gift-giving behaviors: A study across cultures. *Journal of Business Research*, 22, 149–157.
- Belmore, S. M. (1987). Determinants of attention during impression formation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 13, 480–489.
- Bradley, M. M., Greenwald, M. K., Petry, M. C., & Lang, P. J. (1992). Remembering pictures: Pleasure and arousal in memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18, 379–390.

- Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods*. New York: Wiley.
- Cronbach, L. J. (1990). *Psychological tests and personnel decisions*. Urbana: University of Illinois Press.
- Craik, F. I. M., Govoni, R., Naveh-Benjamin, M., & Anderson, N. D. (1996). The effects of divided attention on encoding and retrieval processes in human memory. *Journal of Experimental Psychology: General*, 125, 159–180.
- Cross, S. E., Bacon, P. L. & Morris, M. L. (2000). The relational–interdependent self–construal and relationships. *Journal of Personality and Social Psychology*, 78, 791–808.
- Erdfelder, E., & Bredenkamp, J. (1998). Recognition of script–typical versus script–atypical information: Effects of cognitive elaboration. *Memory & Cognition*, 26, 922–938.
- Fiske, A. P. (2002). Using individualism and collectivism to compare cultures—A critique of the validity and measurement of the constructs: Comment on Oyserman et al. *Psychological Bulletin*, 128, 78–88.
- Green, R. T., & Alden, D. L. (1988). Functional equivalence in cross-cultural consumer behavior: Gift giving in Japan and the United States. *Psychology & Marketing*, 5, 155–168.
- Hannover, B. (2002). One man's poison ivy is another man's spinach: What self-clarity is in independent self–construal, a lack of context–dependency is in interdependent self–construal. *Revue Internationale De Psychologie Sociale*, 15, 65–88.
- Hannover, B., Birkner, N., & Pöhlmann, C. (2006). Self-discrepancy and self-esteem in people with independent or interdependent self–construal. *European Journal of Experimental Social Psychology*, 36, 119–133.
- Hannover, B., & Kühnen, U. (2004). Culture, context, and cognition. The semantic–procedural–interface model of the self. *European Review of Social Psychology*, 15, 297–333.
- Holland, R. W., Roeder, U.–R., van Baaren, R. B., Brandt, A. C., & Hannover, B. (2004). Don't stand so close to me: The effects of self–construal on interpersonal closeness. *Psychological Science*, 15, 237–242.
- Hoshino-Browne, E., Zanna, A. S., Spencer, S. J., Zanna, M. P., Kitayama, S., & Lackenbauer, S. (2005). On the cultural guises of cognitive dissonance: The case of Easterners and Westerners. *Journal of Personality and Social Psychology*, 89, 294–310.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349–366.
- Joy, A. (2001). Gift giving in Hong Kong and the continuum of social ties. *Journal of Consumer Research*, 28, 239–256.
- Kashima, Y., Yamaguchi, S., Kim, U., Choi, S. C., Gelfand, M., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism–collectivism research. *Journal of Personality and Social Psychology*, 69, 925–937.
- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology*, 77, 785–800.
- Kleinknecht, R. A., Dinnel, D. L., Kleinknecht, E. E., Hiruma, N., & Harada, N. (1997). Cultural factors in social anxiety: A comparison of social phobia and *Taijin Kyofusho*. *Journal of Anxiety Disorders*, 11, 157–177.

- Kühnen, U., Hannover, B., & Schubert, B. (2001). The semantic-procedural interface model of the self: The role of self-knowledge for context-dependent versus context-independent modes of thinking. *Journal of Personality & Social Psychology, 80*, 397-409.
- Kurman, J. (2001). Self-enhancement: Is it restricted to individualistic cultures? *Personality and Social Psychology Bulletin, 27*, 1705-1716.
- Levine, T. R., Bresnahan, M. J., Park, H. S., Lapinski, M. K., Wittenbaum, G. M., & Shearman, S. M. (2003). Self-construal scales lack validity. *Human Communication Research, 29*, 210-252.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.
- McCall, M., Reno, R. R., Jalbert, N., & West, S. G. (2000). Communal orientation and attributions between the self and other. *Basic and Applied Social Psychology, 22*, 301-308.
- McKelvie, S. J., Standing, L., St. Jean, D., & Law, J. (1993). Gender differences in recognition memory for faces and cars: Evidence for the interest hypothesis. *Bulletin of the Psychonomic Society, 31*, 447-448.
- Park, S.-Y. (1998). A comparison of Korean and American gift-giving behaviors. *Psychology & Marketing, 15*, 577-593.
- Sato, T., & Cameron, J. E. (1999). The relationship between collective self-esteem and self-construal in Japan and Canada. *Journal of Social Psychology, 139*, 426-435.
- Sato, T., & McCann, D. (1998). Individual differences in relatedness and individuality: An exploration of two constructs. *Personality and Individual Differences, 24*, 847-859.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin, 20*, 580-591.
- Singelis, T., Triandis, H., Bhawuk, D., & Gelfand, M. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research, 29*, 240-275.
- Willoughby, T., Motz, M., & Wood, E. (1997). The impact of interest and strategy use on memory performance for child, adolescent, and adult learners. *Alberta Journal of Educational Research, 43*, 127-141.