The goals of cultural psychology can be described as both to better understand the rich diversity that is observed across cultures and to continue to seek the psychological human universals that we share as a species (Brown, 1991; Triandis, 1994). In recent years, the burgeoning literature concerning cultural differences in the way the self is understood has exemplified this interplay; across the wide diversity of cultures, there seems to be a limited number of fundamental answers to the question “Who am I?” (see Schweder, Much, Mahapatra, & Park, 1997, for review). One clear distinction that emerges between members of Western and Eastern cultures is the extent to which the self is defined in relation to others. This distinction has been referred to as egocentric versus sociocentric selves (Schweder & Bourne, 1984), individualism versus collectivism (Triandis, 1989), and independence versus interdependence (Markus & Kitayama, 1991), and focuses on the extent to which the self is defined as an autonomous and unique individual or is seen as inextricably and fundamentally embedded within a larger social network.

According to Markus and Kitayama (1991), cultural differences in whether the self is construed as socially embedded or as an autonomous entity reflect the goals of the individuals within the culture (e.g., to maintain connectedness vs. to gain independent success and distinction) and mold cognitive and motivational processes in the service of these goals. It is clear from cross-cultural analyses that these goals are differentially elaborated and encouraged through cultural practices, societal norms, and social institutions (see Markus, Kitayama, & Heiman, 1997, for review). However, to the extent that humans universally share the goals of both autonomy and belonging (e.g., Baumeister & Leary, 1995; Brewer, 1991), all individuals may be expected to flexibly define themselves as relatively more independent or interdependent depending on current motives or the current situation.

Recently, Morris, Podolny, and Ariel (1998) proposed that a comprehensive understanding of cultural differences would require investigation at the level of subjective cognition, as well as at the level of the specific practices and societal structures, for it is the subjective cognitive constructs of individuals that presumably mediate between cultural contexts and the behavior of individuals. One such subjective cognitive mediator may be the difference between thinking of the self as an autonomous entity versus one that is embedded within a larger social whole. The idea that cultural beliefs shape self-construals is unquestioned; however, the premise that self-construals may in turn shape the behavior of individuals within a culture has been more difficult to assess. The influence of independent versus interdependent self-construals on social processes has been studied primarily through cross-cultural comparison, and although this method has been a fruitful one in delineating the many ways in which cultural differences moderate various social cognitive processes (see Fiske, Kitayama, Markus, & Nisbett, 1998, for review), an exclusive reliance on cross-cultural analysis necessarily limits the inferences that may be drawn concerning underlying mechanisms. Many factors that present a challenge to inferences from cultural data, such as linguistic biases (Tardif, 1996) and cultural preferences for different types of reasoning (Peng, 1997), are themselves promising areas of cross-cultural investigation. However, they also present possible confounds for drawing inferences concerning the influence or importance of self-construal.

The goal of the present research was to investigate the impact of independent versus interdependent self-construals within the individual. By holding culture constant while varying self-construal, one may draw stronger inferences concerning the importance of self-construal as an interpretive framework for understanding the social world. This approach is possible because, although both the genesis and the focus of the research concerning independence and interdependence have heretofore been cross-cultural, members of Eastern and Western cultures are capable of displaying both kinds of self-construal (Brewer & Gardner, 1996; Trafimow, Triandis, & Goto, 1991; Triandis, McCusker, & Hui, 1990), as might be expected given the universality of both the goals of autonomy and belongingness (Brewer, 1991). Moreover, several studies have recently demonstrated that the proportion of independent or interdependent self-construals reported by an individual may be shifted by a situational prime. Research conducted by Trafimow et al. (1991) showed that reading a story with an independent or interdependent theme increased theme-consistent self-construals. Similarly, Brewer and Gardner (1996) demonstrated an increase in the proportion of interdependent self-construals after participants circled interdependent pronouns (e.g., we) in a word-search task. Thus, although an individual’s culture may strongly determine the self-construal that is chronically accessible, self-construals may shift in response to situational accessibility.

Address correspondence to Wendi Gardner, Department of Psychology, Northwestern University, 2029 Sheridan Rd., Evanston, IL 60208-2710; e-mail: wgardner@nwu.edu.

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Primbing and Cultural Values

The demonstration that independent or interdependent self-construals may be activated through priming allows the investigation of the extent to which this distinction plays a causal role in social judgment and behavior. If, as Markus and Kitayama (1991) proposed, differences in self-construal shape cultural differences in judgments and behavior, then priming a relatively independent or interdependent self-construal within a culture should create differences in values and social judgments that are usually seen across cultures. This hypothesis was tested in Experiment 1. Additionally, cultural as well as situational influences should be reflected in responses to primes. Specifically, because Western cultures chronically encourage an independent self-construal, interdependence priming should affect judgments to a greater degree than independence priming because of greater shifts in self-construal. In contrast, independence priming should have the greater effect in Eastern cultures. The prediction of an interaction between current cultural context and a situational prime was tested with a cross-cultural sample in Experiment 2.

EXPERIMENT 1

The goal of Experiment 1 was to investigate whether self-construal serves as a cognitive mediator between cultural context and differences in social judgment. To this end, European-American students were presented with independent or interdependent primes before they completed a number of tasks that had been shown to differ reliably in cross-cultural comparisons.

Method

Ninety European-American undergraduates at Northwestern University were primed with an independent or interdependent story (Trafimow et al., 1991) or word search (Brewer & Gardner, 1996); both types of primes had been demonstrated to shift the balance between independent and interdependent self-construals on a self-construal task. The story primes described a dilemma in which a general had to choose a warrior to send to the king. In the independent condition, the general chose the person who was the best individual for the job and considered benefits to himself. In the interdependent condition, the general chose a member of his own family and considered family safety, national security, respect for elders) is endorsed strongly in the United States, and the collectivist subset (belongingness, friendship, family safety, national security, respect for elders) is endorsed strongly in the People’s Republic of China (Triandis et al., 1990). If self-construals serve as an interpretive frame for understanding the world, shifts in self-construal should also shift the relative importance of these goals and values.

The social judgment task was adapted from Miller et al. (1990), and presented a story in which “Lisa” refused to give her friend “Amy” directions to an art store because she was busy reading an exciting book. Participants judged how desirable Lisa’s actions were on a 7-point scale, and answered whether Lisa was obligated to help her friend or whether her actions represented a personal choice, and whether or not Lisa’s actions should be punished. Miller et al. demonstrated that members of a collectivist culture were likely to perceive that Lisa had an objective obligation and more likely to endorse punishment for violating that obligation, compared with members of an individualist culture. We hypothesized that those participants for whom interdependent self-construals were activated would be more sensitive to social obligations.

The TST (Kuhn & McPartland, 1954) provided a manipulation check for the prime. In this task, participants are asked to provide 20 self-descriptions. Responses are then coded as independent if they describe a personal attribute (trait, ability, physical descriptor, or attitude—e.g., “I am intelligent”) and as interdependent if they describe a role in an important relationship (e.g., “I am engaged to marry Scott”) or membership in a social group (e.g., “I am a sister in Kappa Kappa Gamma”).

Results and Discussion

A 2 (prime type: independent vs. interdependent) × 2 (prime method: story vs. word search) analysis of variance (ANOVA) was used to analyze the proportion of interdependent self-construals that participants reported on the TST (interrater reliability = .91). This analysis revealed that the priming manipulation was successful in making interdependent aspects of the self-concept more accessible. Participants primed with interdependence described themselves with a greater proportion of interdependent self-construals (M = .22) than those primed with independence (M = .06), F(1, 89) = 17.21, p < .01. No effects were found for the method of priming used (story vs. pronoun). Thus, both of the interdependent primes were successful in activating a relatively greater interdependent self-construal in this individualist sample.

The subsets of values that Triandis et al. (1990) found to be more highly endorsed in individualist and collectivist cultures were aver-

1. Participants could also respond –1 to indicate that a value was one with which they disagreed.
2. Miller et al. (1990) presented a number of different scenarios that varied the relationship and the target’s level of need. We chose the scenario depicting a friend in mild need because it showed large cultural differences in perceptions of obligation.
3. Completions that referred to transient states (e.g., “I am hungry”) were relatively rare (fewer than 3%) and were not counted as self-definitions.
aged to produce individualist and collective indices. A repeated measures ANOVA with value type (individualist vs. collectivist) as a within-participants factor and with prime type (independent vs. interdependent) and prime method (story vs. word search) as between-participants factors revealed only an interaction between value type and prime type, $F(1, 84) = 11.10, p < .01$. Pair-wise comparisons showed that participants gave higher endorsements to collectivist values than individualist values after the interdependence primes, $t(40) = -3.20, p < .05$, and higher endorsements to individualist than collectivist values after the independence primes, $t(47) = 2.19, p < .05$ (see Fig. 1).

Thus, priming interdependence in this American sample appeared to shift values to reflect more collectivist goals. A mediational analysis further supported the hypothesis that self-construal was the psychological mechanism underlying the effects on value endorsements (see Fig. 2).

Finally, the results for the social judgment task (Miller et al., 1990) also supported predictions. Consistent with the hypothesis that a relatively interdependent self-construal would increase the perceived importance of social obligations, Lisa’s actions were seen as significantly less desirable in the interdependence priming condition ($M = 2.21$) than in the independence condition ($M = 2.89), t(88) = 2.90, p < .01$. Additionally, 76% of the participants in the interdependence condition reported that Lisa had an obligation to help her best friend, compared with 50% in the independence condition, $\chi^2(1, N = 88) = 5.40, p < .05$. Finally, 32% of the participants in the interdependence condition endorsed punishment, compared with 15% in the independence condition, $\chi^2(1, N = 88) = 3.26, p = .07$.

Overall, these results demonstrate that the situational activation of an independent or interdependent self-construal within an individualist culture resulted in differences in values and social judgments that mirror those commonly found between individualist and collectivist cultures. Thus, the results imply that the way in which the self is perceived, either as an autonomous entity or as embedded in a network of social relationships, may indeed act as an interpretive frame for viewing the world. Persons who perceive the self as independent endorse values that reflect individualistic goals to a greater degree than they endorse values that reflect collectivist goals, and likewise perceive lower obligations to others in their social network. In contrast, those who perceive the self as interdependent endorse collectivist values to a greater degree than individualist values, and perceive higher social obligations to others. These results were thus consistent with the hypothesis that differences in self-construals may affect the way individuals evaluate and perceive events; self-construals that are naturally encouraged through distinct cultural practices and contexts may thus change the way members of different cultures evaluate events. However, fully testing this hypothesis requires looking across both individualist and collectivist cultures, and investigating the interplay of chronic and situational activation of the independent and interdependent self. This was the focus of Experiment 2.

**EXPERIMENT 2**

Experiment 2 focused on the interplay between cultural and situational influences on self-construal by examining the responses of participants from both a Western individualist (U.S.) and an Eastern collectivist (Hong Kong) culture. A no-prime control condition was included to allow us to compare the results of situational activation and the chronic activation encouraged by each culture. If, as hypothesized, cultural differences in social judgment are influenced by differences in whether the independent or interdependent self is encouraged, then in the United States, judgments in the control condition should be similar to those after independence priming, whereas in Hong Kong, judgments in the control condition should be similar to those after interdependence priming. Thus, we predicted that activating the type of self-construal that is not frequently afforded by the culture should be most effective in shifting judgments.

**Method**

Seventy-five European-American participants from Northwestern University and 82 Chinese participants from the University of Hong Kong were primed with independence or interdependence, or given no

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**Fig. 1.** Endorsements of individualist and collectivist values as a function of prime in a U.S. sample.

<table>
<thead>
<tr>
<th>Prime Type</th>
<th>Individualist Values</th>
<th>Collectivist Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>[Data</td>
<td>]</td>
</tr>
<tr>
<td>Interdependent</td>
<td>[Data</td>
<td>]</td>
</tr>
</tbody>
</table>

**Fig. 2.** Results in the test for mediation. Baron and Kenny’s (1986) multiple regression test of mediation was used. Asterisks denote those paths that are significant. INT = interdependence; IND – COL = difference score calculated by subtracting score on collectivist subscale from score on individualist subscale.

`INT. PRIMING INT SELF-CONSTRUAL IND - COL`

`-.38* -.66* -.36* -.11 -`
Collectivist Values

Results and Discussion

The individualist and collectivist value indices were computed following the same procedures as in Experiment 1, and were then analyzed in a repeated measures ANOVA with value type (individualist vs. collectivist) as a within-participants factor and prime type (independent vs. interdependent vs. control) and culture (United States vs. Hong Kong) as between-participants factors. The interaction of value type and prime type found in Experiment 1 was replicated, F(2, 151) = 3.68, p < .05. Across cultures, participants who received the independence prime endorsed collectivist values (M = 5.27) to a lesser degree than individualist values (M = 5.63), t(45) = –2.89, p < .05, whereas participants who received the interdependence prime endorsed collectivist values (M = 5.60) to a greater degree than individualist values (M = 5.17), t(49) = 3.73, p < .05; participants receiving no prime endorsed the two subsets of values equally (Ms = 5.42 and 5.47, respectively). This finding showcases the impact of the situational activation of independent or interdependent self-construals on judgments.

Evidence supporting the importance of cultural self-construal differences could be seen in the expected interaction of value type by culture, F(1, 151) = 6.35, p < .01. Across priming conditions, Hong Kong participants endorsed collectivist values (M = 5.43) to a greater extent than individualist values (M = 5.13), whereas the reverse was true for the U.S. participants (Ms = 5.42 and 5.70, respectively). Additionally, an unexpected response bias was reflected in a main effect for culture, F(1, 151) = 6.47, p < .05; the Hong Kong participants gave lower endorsements generally (M = 5.28) than did the U.S. participants (M = 5.56).

We had predicted that if value endorsements were affected by self-construal, then the situational activation that was inconsistent with the aspect of the self-concept that was already made accessible by the culture would have the greatest effect on value endorsements because an inconsistent activation would shift the self-construal away from the cultural “default.” This hypothesis was supported by a three-way interaction among value type, prime type, and culture, F(2, 151) = 2.38, p = .08, and follow-up planned comparisons (see Fig. 3).

A value-profile difference score (individualist subscale minus collectivist subscale) was computed for each participant; positive numbers reflect relative individualism, and negative numbers reflect relative collectivism. Planned comparisons on the value profiles tested the hypothesis that the default in the United States would be similar to independent but different from interdependent priming, and that the default in Hong Kong would be similar to interdependent but different from independent priming. For the U.S. participants, the no-prime and the independent-prime conditions both resulted in relative individualism (Ms = 0.54 and 0.55, respectively) and did not differ (p > .8).

4. To ease conducting Experiment 2, we used only the story primes. Recall that no differences were found between the story and word-search primes in Experiment 1.

5. Although it has been posited that the language of questionnaires may sometimes influence bilinguals’ response, in this case the use of English in Hong Kong would bias the data in the direction of disconfirming our hypothesis of chronic cultural differences in the no-prime control condition.

6. A study conducted with Asian students at Northwestern University showed shifts similar to those found here, and these shifts were mediated by shifts in self-construal as measured by the TST. These results provide support for our belief that a shift in self-construal was the mechanism responsible for the shifts in values observed in the Hong Kong sample.
ic mechanisms through which culture has an impact must be determined empirically. The work of Triandis and colleagues (Triandis, 1989; Triandis et al., 1990) serves as an excellent example of this approach. Through specifying the values, attitudes, and perceptions that differed among members of collectivist and individualist cultures and measuring these variables within as well as across cultures, they have shown that these features are strongly related to behavioral differences. Likewise, Nisbett and Cohen (1996) have shown that differences in the "culture of honor" script powerfully predict differences in the ways members of the culture of the American South respond to insult.

To our knowledge, the present series of studies is the first to manipulate rather than measure the psychological construct of interest and empirically demonstrate its causal character in shaping cultural behavior patterns. Indeed, the incorporation of social-cognitive paradigms into the investigation of the cognitive mediators of cultural behavior may provide a valuable complement to the traditional paradigms of cross-cultural analysis. We are not the first to use a priming paradigm in a cultural analysis; interestingly, the priming of culturally relevant materials has been shown to increase the presence of specific cultural orientations (e.g., see Hong, Chiu, & Kung, 1997, for review). However, what is unique about the current studies is the demonstration that shifts in judgment may be effected by making alternative universal ways of construing the self more accessible. For example, the participants in Experiment 1 were not primed with specific cultural associates, nor with specific values or social obligations, but rather were primed with an interdependent self-construal (e.g., circling "we" in a word search), and the shifts in values and judgments of obligation were mediated through a shift in self-construal. Similarly, in Experiment 2, it was only when self-construal was shifted away from the self-construal chronically activated by the culture that resultant shifts in value endorsements were found. It thus appears that the ability to construe the self in an independent or interdependent fashion may be a human universal that may be shaped by cultural practices that encourage independence or interdependence to varying degrees.

Despite the present results, however, it would be an oversimplification to assume that the independence-interdependence distinction always takes the same form, or has identical implications for behavior across cultures. The present studies demonstrated, for instance, that shifting the relative interdependence of self-construal in American participants can increase the importance of general social values (such as belonging) or judgments of social obligation to close others in ways that were once believed to be culturally mandated. It is likely that examinations of the more specific manifestations of independence or interdependence will still display the rich diversity of culture. The work of Miller et al. (1990), on which part of Experiment 1 was based, serves as an excellent example of this point. Miller et al. showed that Indians were more sensitive than Americans to dependent others in need, and in particular that they differed from Americans in their sensitivity to social obligation regardless of need or role. In Experiment 1, we increased European-Americans' perceptions of obligation to a friend through priming interdependence. It is highly likely that self-construal may shift the general importance of "obligation to others in need"—but who these others are, and what level of need must be displayed, may be specifics that continue to be constrained as a function of the norms and practices specific to a culture. For example, interdependence priming in Experiment 1 may have resulted in shifting perceptions of obligation to friends because there is a precedent in American culture for perceiving duties to friends; other roles may not have been so easily shifted.

The existence of cultural differences in the specific foci of independence and interdependence does not detract from the results of the present investigation; rather, the differences point to the rich interplay between human universals and cultural influences. Our research also does not trivialize the importance of cultural differences in social judgments and behavior; in fact, our results in Experiment 2 confirm the chronic influence of culture on self-construal, but highlight the malleability of how the self is construed within each culture.

Finally, the premise that an independent or interdependent self-construal may affect social judgment and behavior has implications beyond the bounds of understanding cross-cultural differences. The expansion of the study of self-construals as possible reflections of alternative universal motivations, in addition to the continued study of cultural differences, allows investigations of the ways in which shifts between independent and interdependent self-construal may affect a wide assortment of social behavior, including perceptions of the self and others (Brewer & Gardner, 1996), intergroup behavior (Gardner & Gabriel, 1998a), and standards for social comparison and self-esteem (Gardner & Gabriel, 1998b; Heine, Takata, & Lehman, 1998). We hope that a greater understanding of the ways in which self-construal affects social behavior will assist in both an appreciation of cultural differences and the continuing search for human universals.

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