

Individuality or Conformity? The Effect of Independent and Interdependent Self-Concepts on Public Judgments

Carlos J. Torelli

University of Illinois at Urbana-Champaign

When both independent and interdependent self-concepts are available, priming either self-concept will increase the accessibility in memory of the motivations and cognitions associated with it. Thus, priming the interdependent self may activate motivation to maintain harmony and conform to others' opinions, whereas priming the independent self is likely to activate motivation to be independent and to withstand social pressure. Two experiments investigated implications of these possibilities for judgments of risk when participants anticipated (or not) explaining their judgments to others. Participants relied on others' beliefs only when their interdependent self was primed and they expected they might have to explain their judgments to others. When their independent self was primed, expectations to communicate their judgments had no effect. Culture-based differences in individualism vs. collectivism had no impact on these effects.

People often have two perceptions of their relationship to others. That is, one may have a conception of oneself either as separate from other persons (i.e., an independent self-concept) or as connected to others (i.e., an interdependent self-concept; Markus & Kitayama, 1991). These two self-concepts are associated with distinct knowledge representations that can coexist in memory and be brought to mind at different times, depending on the situation (Trafimow, Triandis, & Goto, 1991). Abundant research has shown how these alternative self-concepts affect persuasion (i.e., Agrawal & Maheswaran, 2005), judgments (i.e., Mandel, 2003), and choices (i.e., Briley, Morris, & Simonson, 2000). In most cases, however, these studies have relied on participants' anonymous responses to questionnaires. Scant research has systematically examined the impact of self-concepts on consumers' judgments likely to be explained to others. People frequently anticipate justifying their consumption decisions to others (Schlosser & Shavitt, 1999). Consequently, research in consumer behavior will benefit from better understanding the way in which independent and interdependent self-concepts can influence these decisions.

When people anticipate explaining their judgments to others, they often make assumptions about others' opinions (Fussell & Krauss, 1992) and tailor their messages to corre-

spond to these opinions (Higgins, 1992). In this research, we study the impact of consumers' self-concepts on their use of others' opinions as a basis for judgment. More specifically, we try to answer the following research questions: Will individuals who are primed with interdependence conform to others' opinions and beliefs regardless of whether they expect to explain their judgments to others? Do individuals who are primed with independence also exhibit this conformity when they expect to communicate their judgments? In the following pages, we first propose answers to these questions based on a focused review of the literature. The results of two experiments then confirm the validity of our hypotheses.

THEORETICAL BACKGROUND

People can define themselves either as individuated entities or in relation to others. These alternative self-conceptions are represented in memory and associated with distinct motivations and cognitions. An *independent self-concept* includes mental representations of one's own traits, attitudes, and preferences and is associated with the motivation to withstand undue social pressure and to be independent. In contrast, an *interdependent self-concept* includes mental representations of social norms, group memberships, and others' opinions (Kuehnen, Hannover, & Schubert, 2001; Markus & Kitayama, 1991) and is linked to the motivation to adjust to the demands of others and to maintain harmony (Markus &

Correspondence should be addressed to Carlos J. Torelli College of Business, University of Illinois at Urbana-Champaign, 339 Wohlers Hall, 1206 South Sixth Street, Champaign, IL 61820. E-mail: ctorelli@uiuc.edu

Kitayama, 1991). These two self-concepts can coexist. Consequently, priming either self-concept can increase both its accessibility in memory and that of the motivations and cognitions that are associated with it. As a result, it can later have an impact on the judgments and decisions people make (Trafimow et al., 1991).

When people expect to explain their judgments to others, they must often choose whether to tailor their messages to the perceived attitudes of their audience. When people are motivated to seek approval from their audiences, they often try to conform to the judgments they anticipate others will make. In contrast, when people lack this motivation, or when they are motivated to disassociate themselves from others, they often base their judgments on their own previously formed beliefs or attitudes rather than on those of their audience (Higgins, 1992; McCann & Hancock, 1983). We can anticipate that individuals who are primed with interdependence, and who activate a motivation to ensure harmony with others, try to conform to others' judgments when they think that these others will have access to their judgments. To this end, they are likely to draw on their perceptions of attitudes, preferences, and opinions that others have in common (referred to as *others' beliefs* throughout the article) in constructing their messages (Fussell & Krauss, 1992). This may not be the case, however, when individuals are primed with independence. For these individuals, the activation of a motive to be independent and to withstand social pressure may lead them to make idiosyncratic judgments based on their personal attitudes, preferences, and opinions (referred to as *personal beliefs*).

People are fairly good at inferring others' beliefs (Fussell & Krauss, 1992). However, egocentric messages are the easiest to produce (Schober, 1993). Consequently, people are likely to use their personal beliefs to construct their messages when they don't expect to explain their judgments to others (Krauss & Fussell, 1996). Under these conditions, individuals have little motivation to consider others' beliefs and simply rely on their personal beliefs regardless of their readily accessible self-concept (Briley & Aaker, 2001; Briley et al., 2000). Individuals whose interdependent self-concepts are activated should be more likely to use their perceptions of other persons' beliefs as a basis for their judgments and decisions when they anticipate explaining their judgments to these persons. In contrast, persons whose independent self-concepts are activated may be equally likely to use their personal beliefs for their judgments regardless of whether they anticipate explaining their judgments to others. Perceptions of other persons' beliefs should affect people's judgments only when their interdependent self-concept is activated and these other persons will have access to their judgments. More formally:

- H1: Individuals will be more likely to conform to their perception of others' opinions if (a) their interdependent self-concept is primed and (b) they anticipate explaining their judgments to others than they will under other conditions.

Two experiments provided empirical support for this hypothesis. The judgmental domain we chose for this purpose was perceptions of risk. Perceived risk can be an important antecedent of consumers' evaluations of products (Campbell & Goodstein, 2001; Gurhan-Canli & Batra, 2004). Because risk is a multifaceted construct (Dowling, 1986), we restricted beliefs to perceptions of risk in a particular domain rather than more generally. In these simple contexts, we could more easily assess the use of others' beliefs and its impact on judgments hypothesized in this research (see also Simonson, 1989).

Personal and others' beliefs may or may not be different. Although the arguments developed in this research are not contingent on whether participants' personal beliefs are incongruent with their perceptions of others' beliefs, we focused on incongruent beliefs to evaluate their differential influence. The target beliefs used in the two experiments were selected on the basis of responses by an independent group of participants (see also Fussell & Krauss, 1992). In Experiment 1, which focused on perceptions of the physical risk of taking a hypothetical allergy drug, perceptions of others' beliefs were expected to decrease risk estimates. Experiment 2 studied perceptions of the financial risk of purchasing a digital camera. In this study, perceptions of others' beliefs were expected to increase risk estimates. In addition, the second experiment included participants from different cultural backgrounds to explore the influence of individuals' chronic self-concepts on the effects hypothesized in this research as a potential boundary condition.

PRETEST

To select the beliefs to be used in our experiments, we employed a procedure similar to that used to study the coordination of knowledge in communication and to uncover cognitive biases (Fussell & Krauss, 1992; Sagarin, Cialdini, Rice, & Serna, 2002). As part of a longer unrelated study, 52 participants completed a 10-item survey about the daily activities and beliefs of college students. Two groups were asked either about their personal beliefs or about common beliefs among college students. Two target items, "I am particularly concerned about exercising regularly" and "A product with a limited warranty (say 3-months) is not dependable," were included in the set. The first item was related to the physical risk situation used in Experiment 1 and the second item to the financial risk situation used in Experiment 2. All items were evaluated along a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Analyses of responses to the two target items indicated that participants believed that they were more concerned than the average college student about exercising regularly (5.73 vs. 4.69, respectively), $F(1, 50) = 7.41, p < .01$, but less concerned than their peers about warranty dependability issues (2.92 vs. 3.57, respectively), $F(1, 50) = 3.55, p < .065$. Thus, we assumed that concerns with exercising would become

more accessible in memory if people focus on personal beliefs than if they focus on others' beliefs. In contrast, concerns about warranty dependability issues would be more accessible in memory if people focus on others' beliefs than if they focus on personal beliefs.

EXPERIMENT 1

The experiment was designed to test the effect of priming independent versus interdependent self-concepts on perceptions of the risk of using a hypothetical allergy drug. Because physical risk is less correlated with other types of risk (Kaplan, Szybillo, & Jacoby, 1974), a consumer situation in which only this type of risk was made salient could be designed. Participants were asked to indicate the risk of using an allergy drug that was described as having many positive features but also undesirable side effects of particular concern to "people who exercise regularly." Based on results of the pretest described earlier, we assumed that individuals who were primed with interdependence and expected to explain their judgments to others would rely on their perceptions of others' beliefs and, therefore, would express less concern with exercising and the drug's side effects (and would perceive a lower level of risk) than would participants in other conditions.

Method

Overview and design. Participants first read a story aimed at priming either the independent or the interdependent self-concept. After that, they were told that they would perform an unrelated task about product evaluations in which either (a) they might be asked to explain their judgments about the product to others during a small group discussion or (b) their judgments would be anonymous. They were then given product information about the hypothetical allergy drug and asked to evaluate the risk associated with it and to state the reasons for their judgments.

Eighty-nine introductory business students participated in the experiment for course credit. Tabulation of demographic data revealed that 58% of the respondents were male, 66% were White, 7% African Americans, 11% were Asians, and 9% were East Asians.¹ They were randomly assigned to conditions representing four combinations of self-priming (independent vs. interdependent self) and expectation to explain

judgments to others (expectation vs. no expectation) in a between-subject full factorial design.

Procedure. Participants were told that they were participating in a consumer behavior study in which they would evaluate varied types of messages. To prime independent and interdependent self-concepts, participants were asked to read a story about Sostoras (Mandel, 2003; Trafimow, Triandis, & Goto, 1991b; Ybarra & Trafimow, 1998), a warrior in ancient Sumer who is forced to send a detachment of soldiers to fight for Sargon I (ruler of all Mesopotamia). In the independent-self priming condition, participants read that Sostoras sent a talented general that would increase his prestige and the chance he would be rewarded by Sargon I. In the interdependent-self priming condition, participants read that Sostoras sent a family member that would increase the family's prestige and that would benefit the family.

After this, participants took part in an ostensibly unrelated study about product evaluation. Their expectation that they might have to explain their judgments to others was induced using an accountability manipulation (Lerner & Tetlock, 1999). Participants in accountable conditions were told that a group discussion was going to be held at the end of the experimental session and that some of them might be asked to explain their judgments about the product to the rest of the group. Participants in nonaccountable conditions were told that their responses would be anonymous and would be reviewed only later by another research assistant (Thompson, Roman, Moskowitz, Chaiken, & Bargh, 1994).

All participants were then given information about a hypothetical allergy drug (RESPYRA). The information indicated that the drug was better than its main competitor in a number of respects (i.e., less drowsiness, more long-lasting effects, relieves symptoms faster, and more presentations) but also had some undesirable side effects (i.e., irregular heartbeat, difficulty breathing, and seizures) that were particularly relevant for "people who exercise regularly." They were then asked to rate their perceived physical risk and to write the reasons for their judgment. They filled in demographic questions, then were debriefed and dismissed.

Dependent variables. Two dependent variables were used in this experiment. The first measure assessed participants' levels of perceived physical risk (Kaplan et al., 1974, and additional items developed for this experiment) by asking them to rate how safe the drug was, indicate the likelihood it might be harmful, and state their overall physical risk perception along scales from 1 (*safe/improbable/very little risk*) to 7 (*unsafe/probable/substantial risk*). The second measure assessed participants' reliance on personal and others' beliefs as reasons for their judgments. Participants' reasons were coded by two judges blind to the different conditions (reliability = .96) as to whether they expressed personal concerns about the side effects due to regular exercising (i.e.,

¹Experiment 1 was not designed to test the influence of individual's chronic self-concepts (as inferred from their cultural background) on judgments. Although the experimental sessions were intended for U.S. participants only, some international students from other countries did also participate. All the participants were included in the analysis to increase the power of the test, and results from this analysis are the ones presented in the article. However, the statistical tests were also conducted with U.S. participants only, with no significant changes in the pattern of results.

personal beliefs). Each participant was identified as either expressing concerns about the side effects or not.

Results

Manipulation checks. A separate pretest, using 50 individuals from the same pool used in Experiments 1 and 2, was used to check the self-concept manipulation. After reading the story about Sostoras, participants indicated whether they admired Sostoras and completed 20 statements beginning with "I am ..." (Kuhn & McPartland, 1954). Participants' statements were divided in two blocks of 10 and coded by two independent judges (reliability = .90) as *idiocentric*, *group*, or *allocentric*. Idiocentric cognitions referred to personal qualities (i.e., "I am smart"), group cognitions to group memberships (i.e., "I am Roman Catholic"), and allocentric cognitions to a quality of interdependence (i.e., "I am a person who helps others"). The success of the manipulation is established by a greater percentage of idiocentric cognitions in the independent self-primed group in the two blocks of 10 statements (Trafimow et al., 1991). Participants made a higher percentage of idiocentric cognitions if independence was primed than if interdependence was primed in both Block 1 (.64 vs. .43, respectively), $F(1, 48) = 7.60, p < .01$ and Block 2 (.70 vs. .51, respectively), $F(1, 46) = 5.99, p < .025$.

The effect of the anticipated interaction with others on people's cognitive processes was inferred from both the time that a subset of the participants in the main experiment spent reading the product information (covertly measured by the experimenter to the nearest second) and the number of stated reasons.² Participants spent significantly more time reading the product information when they were accountable ($M = 79.15$ sec) than when they were not ($M = 62.42$ sec, $F(1, 37) = 14.48, p < .0025$) and provided more reasons for their judgment in the former case than in the latter (4.84 vs. 3.51, respectively), $F(1, 85) = 7.97, p < .01$.

Perceived physical risk. According to Hypothesis 1, participants whose interdependent self-concept was primed should conform to the risk judgments they anticipated others to make to a greater extent when they believed they would have to explain their judgments to others. In contrast, individuals who were primed with independence should report relatively high levels of risk regardless of whether they anticipate explaining their responses. To test this hypothesis, responses to the three measures of perceived physical risk were summed (Cronbach's $\alpha = .90$) and analyzed as a function of

accountability and priming conditions. Data pertaining to this interaction are shown in Table 1. The interaction of self-concept priming and accountability was significant, $F(1, 85) = 4.25, p < .05$, and of the nature we expected. That is, participants who were primed with interdependence reported lower risk when they anticipated explaining their judgments to others ($M = 11.1$) than when they did not ($M = 14.1$), $F(1, 39) = 7.74, p < .01$. In contrast, participants who were primed with independence did not differ in their levels of perceived risk in the two conditions (12.8 vs. 12.5, respectively), $F < 1$.

Use of personal and others' beliefs. The effects of self-concept priming and accountability on participants' concern about the drug's side effects were expected to parallel their effects on perceived risk. Data relevant to this prediction are summarized in the bottom half of Table 1, which shows the percentage of participants who reported concerns about the side effects in each experimental condition. A logistic regression analysis of these data yielded a significant interaction of accountability and self-concept prime ($\chi^2 = 9.65, p < .0025$).³ Participants whose interdependent self was primed were less likely to express concerns about the side effects when they were accountable (0%)⁴ than when they were not (24%), $\chi^2 = 7.35, p < .01$. In contrast, participants whose independent self was primed were nonsignificantly more likely to report concerns about the side effects when they were accountable than when they were not (46% vs. 25%), $\chi^2 = 2.30, p > .10$. An analysis involving accountable participants alone showed that participants primed with interdependence were less likely to express concerns about the side effects than those primed with independence (0% vs. 46%), $\chi^2 = 16.38, p < .001$.

To explore further the cognitive process underlying participants' perceptions of risk, reported concerns about the side effects due to regular exercising was subject to a mediation analysis (Baron & Kenny, 1986). A logistic regression analysis showed that concerns about the side effects was predicted by the interaction between accountability and self-concept prime ($\chi^2 = 13.16, p < .001$). A second regression analysis on participants' levels of perceived physical risk including the interaction between accountability and self-concept prime showed that the interaction explained 4.9% of the variance in perceived physical risk. When the mediator was included, however, it only explained 1.6% of the variance in perceived physical risk. The reduction on variance explained when the mediator was included was significant ($z = 2.14, p < .05$), which provided evidence for an

²In an additional pretest, the accountability manipulation also was checked by asking participants to rate the likelihood that they would be asked to explain their judgments to others. Participants in the accountability condition expressed a higher likelihood that they would have to interact with others than did their counterparts in the no accountability condition ($M_{acc} = 3.83, M_{no-acc} = 2.81, F(1,52) = 6.21, p < .025$).

³The likelihood ratio test statistic computed as the difference between the model χ^2 when the logistic regression is calculated with and without the variable being tested is the statistical test used in logistic regression throughout the article.

⁴These participants focused mainly on the positive attributes like speed of the effect, less drowsiness, etc.

TABLE 1
Perceived Physical Risk and Percentage of Participants Who Expressed Concerns About the Side Effects Due to Regular Exercising as a Function of Self-Prime and Accountability Conditions

	Accountability Condition	
	Accountable	Not Accountable
Perception of physical risk		
Interdependent self-prime	11.1 _a (20)	14.1 _b (21)
Independent self-prime	12.8 _b (24)	12.5 _{a,b} (24)
Percentage of participants who expressed concerns about side effects		
Interdependent self-prime	0 _a	24 _b
Independent self-prime	46 _b	25 _b

Note. Cell frequencies are given in parentheses. Cell means not sharing the same subscript differ significantly ($p < .05$).

effect of the interaction between accountability and self-prime on perceived physical risk via the concerns about the side effects due to regular exercising.

Discussion

Participants were more likely to rely on others' beliefs when they were (a) primed with interdependence and (b) expected to explain their judgments to others than they were in other conditions. This pattern of results was reflected in both their concerns about the side effects of the drug they considered and their judgments of the risk of using it. Furthermore, their reported concerns about the side effects mediated the impact of the interaction between accountability and self-prime on perceived physical risk, which suggests that others' beliefs were used as input for the judgments made by these individuals. Thus, persons whose interdependent self is activated are likely to conform to others' opinions only when they anticipate explaining their opinions to others. Moreover, individuals whose independent self is activated are unlikely to conform to others' opinions regardless of whether they anticipate an interaction with these others.

In this experiment, personal beliefs were measured directly by coding the reasons as related to personal concerns about exercising and the side effects. The use of others' beliefs was inferred from the absence of these concerns. The pretest showed that college students believed that the average college student does not exercise much, and risk perceptions were related to the presence of negative outcomes. Consequently, the absence of negative concerns about exercising suggests that participants accessed others' beliefs about how little people exercise. It is intuitively unlikely that accountable individuals who were primed with interdependence held different beliefs than other participants. Nevertheless, the lack of a direct measure of others' beliefs is a weakness of this experiment.

One noteworthy implication from the findings concerns the lower level of perceived risk among accountable individuals who are primed with interdependence. This finding argues against an alternative interpretation that the effect of

priming one's interdependent self-concept on perceived risk was the result of overweighting negative information (Aaker & Lee, 2001; Briley & Wyer, 2002). That is, participants who were primed with interdependence perceived less physical risk when they were accountable than when they were not, and the former perceptions were associated with others' beliefs about how little college students exercise.

EXPERIMENT 2

Experiment 2 was designed to replicate the findings of Experiment 1 in a more complex setting. A financial risk situation, involving the evaluation of a hypothetical digital camera, was selected for this purpose. Participants were asked to indicate the risk of purchasing a digital camera that had many positive features but carried a poor warranty. Based on the results of the pretest described earlier, we assumed that participants who were primed with interdependence would rely on others' beliefs and express more concerns with a warranty dependability relationship (and higher levels of perceived risk) when they anticipated explaining their judgments to others than would participants in other conditions.

In addition, this experiment explored the impact of individuals' chronic self-concepts on the effects we hypothesized. A significant impact of individuals' chronic self-concept on the dependent variables would provide evidence for an additive effect of chronic and primed self-concepts (Bargh, Bond, Lombardi, & Tota, 1986), whereas a nonsignificant impact would suggest an override effect of the primed self-concept (Bargh, Lombardi, & Higgins, 1988). To assess these possibilities, participants from countries with individualistic (i.e., chronically accessible independent self-concept) and collectivistic (i.e., chronic interdependent self-concept) cultural orientations were included.⁵

⁵Although country of origin has traditionally been used as a proxy for cultural orientation (i.e., Aaker & Lee, 2001), a more stable measure of chronic accessibility of self-concepts might have been more appropriate for this purpose.

Method

Overview and design. This experiment used a procedure similar to that employed in Experiment 1. After reading the same story that primed either the independent or the interdependent self-concept and being told about the same unrelated task regarding product evaluations, participants were given the product information about the hypothetical digital camera and asked to evaluate the financial risk associated with it and to state the reasons for their judgments.

One hundred twenty-eight introductory business students participated in exchange for course credit. Of these respondents, 62% had ethnic backgrounds that could be readily characterized as individualist (i.e., European American), and 38% had ethnic backgrounds that could be readily characterized as collectivist (i.e., Chinese, Korean, Hispanic, etc.). They were randomly assigned to conditions representing four combinations of self-priming (independent vs. interdependent self) and expectation to explain judgments to others (expectation vs. no expectation) in a between-subject full factorial design.

Procedure. The product used in this experiment (a digital camera that exhibited low levels of social and psychological risk in a pretest) was described as having a high price but a poor warranty. The price and warranty were intended to increase perceptions of financial risk relative to perceptions of performance risk (Grewal, Gotlieb, & Marmorstein, 1994; Shimp & Bearden, 1982). Specifically, respondents were presented with the positive attributes about the hypothetical digital camera (SYTECH DC-50i) stating its advantages over the closest competitor in a series of attributes (i.e., superior optical zoom, superior display, more storage memory, and easier to download). The price of the target product was set at the upper range of the category (Grewal et al., 1994), and the warranty was described as poor (limited, 3 months, service charges for warranted work not covered; see Shimp & Bearden, 1982).

After receiving this information, participants estimated the chance they might lose money with the product, the probability of incurring maintenance and repair costs, and their overall financial risk along scales from 1 (*low/improbable/very little risk*) to 7 (*high/probable/substantial risk*). They then reported reasons for their judgments. Participants' reasons were coded by two judges blind to the different conditions (reliability = .89) as to whether the reasons referred to issues associated with a poor warranty (i.e., dependability, malfunctioning, reliability, etc.). Whether each participant expressed concerns about dependability of the digital camera was also recorded.

Results

Manipulation checks. In the same pretest used to check the manipulations for Experiment 1, a subset of the

participants rated their perceived social, psychological, performance, financial, and overall risk related to the hypothetical digital camera in a 8-item scale (Grewal et al., 1994; Jacoby & Kaplan, 1972; Shimp & Bearden, 1982). The salient financial risk manipulation was checked by comparing financial risk for the digital camera with all the other types of risk. Participants perceived financial risk to be significantly greater ($M = 4.55$) than performance risk ($M = 3.45$), $F(1, 26) = 19.79$, $p < 0.001$), social risk ($M = 3.00$), $F(1, 26) = 12.20$, $p < .005$), and psychological risk ($M = 3.00$), $F(1, 26) = 17.40$, $p < .001$). However, these proportions did not depend on the self-prime manipulation ($p > .10$).

As in Experiment 1, an analysis of the time spent reading the product information indicated that participants in the accountability condition spent significantly more time reading the product information ($M = 87.07$ sec) than those in the no accountability condition ($M = 74.75$ sec), $F(1, 60) = 6.39$, $p < .025$). Accountable participants also indicated significantly more reasons for their judgment ($M = 4.76$) than did nonaccountable ones ($M = 3.96$), $F(1, 126) = 4.69$, $p < .05$).

Perceived financial risk. A total financial risk score was computed for each participant by summing the three measures of perceived financial risk (Cronbach's alpha = .76). These scores are shown in Table 2 as a function of accountability, self-prime, and cultural orientation. Analyses of these data yielded a significant interaction of self-prime and accountability ($F[1, 120] = 6.15$, $p < .025$). However, no effects involving cultural orientation were significant ($F < 1$, in all cases). Thus, participants whose interdependent self was primed perceived more financial risk when they were accountable ($M = 14.4$) than when they were not ($M = 11.5$), $F(1, 63) = 15.44$, $p < .001$), and this was true regardless of whether participants were from an individualistic culture (14.0 vs. 11.0, respectively), $t(36) = 2.65$, $p < .025$) or a collectivistic one (14.6 vs. 12.7, respectively), $t(25) = 1.63$, $p < .06$, one-sided). However, participants whose independent self was primed perceived nonsignificantly less risk when they were accountable than when they were not (12.1 vs. 12.7, respectively), $F < 1$, and this was also true regardless of whether participants' cultural background was individualistic (12.7 vs. 12.9) or collectivistic (11.5 vs. 12.2).⁶

Use of personal and others' beliefs. The bottom half of Table 2 shows the percentage of participants who reported concerns about dependability issues as a function of accountability, self-concept prime, and cultural orientation. A logistic regression analysis of these data yielded a main effect of self-concept prime ($\chi^2 = 6.05$, $p < .025$) and a significant interaction of accountability and self-concept prime ($\chi^2 = 7.86$, $p < .005$). However, no effects involving cultural orientation

⁶An additional analysis of variance was also performed with gender as a factor, yielding no significant interactions with gender.

TABLE 2
Perceived Financial Risk and Percentage of Participants Who Expressed Concerns About Dependability Due to the Poor Warranty as a Function of Self-Prime and Accountability Conditions for Respondents with Individualistic and Collectivistic Cultural Backgrounds

	<i>Individualistic Orientation</i>		<i>Collectivistic Orientation</i>		<i>Pooled</i>	
	<i>Accountable</i>	<i>Not Accountable</i>	<i>Accountable</i>	<i>Not Accountable</i>	<i>Accountable</i>	<i>Not Accountable</i>
Perception of financial risk						
Interdependent self-prime	14.0 _a (9)	11.0 _{b,c} (29)	14.6 _a (17)	12.7 _b (10)	14.4 _a (26)	11.5 _b (39)
Independent self-prime	12.7 _{a,c} (13)	12.9 _{a,c} (28)	11.5 _b (12)	12.2 _b (10)	12.1 _{b,c} (25)	12.7 _c (38)
Percentage of participants who expressed concerns about dependability						
Interdependent self-prime	56 _a	3 _b	18 _a	10 _{a,b}	31 _a	5 _c
Independent self-prime	23 _a	25 _a	0 _b	10 _{a,b}	12 _b	21 _{a,b}

Note. Cell frequencies are given in parentheses. Cell means not sharing the same subscript differ significantly ($p < .05$).

were reliable ($p > .10$). Participants whose interdependent self was primed were more likely to express concerns about dependability when they were accountable (31%) than when they were not (5%), $\chi^2 = 7.94$, $p < .005$, and this was true regardless of whether participants were from an individualistic culture (56% vs. 3%, respectively) or a collectivistic one (18% vs. 10%, respectively). Participants whose independent self was primed, however, were nonsignificantly less likely to report concerns about dependability when they were accountable than when they were not (12% vs. 21%, respectively), $\chi^2 < 1$, and this was also true regardless of whether participants' cultural background was individualistic (23% vs. 25%, respectively) or collectivistic (0% vs. 10%).

Participants' reported concerns about dependability was subject to a mediation analysis (Baron & Kenny, 1986). A logistic regression analysis showed that concerns about dependability was predicted by the interaction between accountability and self-concept prime ($\chi^2 = 4.34$, $p < .05$). A second regression analysis on participants' levels of perceived financial risk including the interaction between accountability and self-concept prime showed that the interaction explained 8.6% of the variance in perceived financial risk. When the mediator was included, however, it only explained 6.6% of the variance in perceived financial risk. The reduction on variance explained when the mediator was included was significant ($z = 1.62$, $p < .05$, one-sided), which provided evidence for an effect of the interaction between accountability and self-prime on perceived financial risk via the concerns about dependability of the digital camera.

Discussion

Overall, the results in this experiment replicated the findings of the first study in a more complex setting. That is, anticipating that they might have to explain their judgments to others prompted individuals who were primed with interdependence to express greater concern about the dependability of a digital camera that had a poor warranty and to perceive

greater financial risk than their nonaccountable counterparts. In contrast, anticipating an interaction with others did not have a significant effect on judgments by participants who were primed with independence.

The negligible effects of cultural orientation in this study suggest that the impact of a situationally primed self-concept can override that of chronic self-concepts. This conclusion is consistent with other findings when the dependent variables are taken without a delay after administering the primes (Aaker & Lee, 2001; Agrawal & Maheswaran, 2005; Bargh et al., 1988). However, a careful inspection of the data in Table 2 revealed an apparent anomaly for accountable participants. Although priming an interdependent self-concept increased the likelihood of expressing concerns about the warranty for these participants, a collectivistic cultural orientation decreased this likelihood compared to an individualistic cultural orientation (18% vs. 56%, respectively; $\chi^2 = 4.30$, $p < .05$). This would suggest an additive effect in the opposite direction one might expect. This anomaly might be partially attributed to the small sample sizes in some of the cells ($n = 9$ for individualistic participants). However, the null effects of chronic self-concepts should perhaps be taken with some caution pending replication.

GENERAL DISCUSSION

When both independent and interdependent self-concepts are available, priming either self-concept increases both its accessibility in memory and that of the motivations and cognitions that are associated with it. Results of this research show that priming one's interdependent self activates motivation to conform to others when one anticipates explaining his or her judgments to these others. In contrast, priming an independent self-concept activates a motive to be independent, which leads individuals to use personal beliefs as a basis for judgments regardless of whether they anticipate having to justify them. Interestingly, individuals primed with interde-

pendence are motivated to retrieve knowledge about others' opinions only when they believe these others would have access to their judgments. When this is not the case, they are as likely to rely on easily accessible personal beliefs for their judgments as their independent counterparts.

The findings in this research were detected among individuals with both individualistic and collectivistic cultural orientations, and the overall results suggest that the effect of situationally primed self-concepts can override that of chronic self-concepts on perceptions of risk under the conditions we studied. These results are consistent with findings reported in the literature (Aaker & Lee, 2001; Agrawal & Maheswaran, 2005; Bargh et al., 1988). However, some anomalies in the data set and the fact that no priming conditions were run call for further study of the role of individuals' chronic self-concepts on the effects reported in this research.

One limitation of this research is that only two propositions (i.e., concerns with exercising and warranty dependability relationship) were studied. A second limitation with the experimental design concerns the use of normative data to assess others' beliefs. Although this procedure has been used successfully to study the coordination of knowledge in communication (Fussell & Krauss, 1992), a direct measure of what each participant ascribed to others would have been more conclusive. Nevertheless, the similar effects of our manipulations on different dependent measures and the converging evidence obtained in two experiments conducted in different stimulus domains increase our confidence that the cognitive processes uncovered here can be extrapolated across varied knowledge domains and judgmental tasks.

This research focused on incongruent personal and others' beliefs that were empirically useful to test the hypothesized effects. However, in many instances, personal beliefs relevant for a given situation are congruent with those that others have in common. When this is the case, individuals would make judgments sampling from qualitatively similar types of beliefs, and the effect of self-concept priming on people's judgments and decisions may go undetected. This is likely to be the case when individuals make public choices. Because choice is often a form of self-expression (Kim & Drolet, 2003), personal decision rules may frequently be congruent with those prescribed by the culture. (For example, U.S. consumers have probably learned that their culture encourages individuals to make choices that appear unique and distinctive). In this context, people are likely to make the same choices regardless of their readily accessible self-concept. In contrast, when individuals are likely to hold personal beliefs that differ from those of others, the effects predicted here can be more apparent. This might often be true of people who are bicultural. These individuals often decrease internal conflicts by separating from the host culture (Penaloza, 1989). Therefore, priming independence may lead these individuals to focus on their personal beliefs when making choices and to avoid deci-

sions that conform to norms in the host culture. Further research should explore this possibility.

This research provides evidence that cultural knowledge, in the form of others' beliefs, can be recruited flexibly as a function of temporarily activated self-concepts. Thus, results reported here further contribute to the dynamic view of culture (Hong, Morris, Chiu, & Benet-Martinez, 2000) by showing that even when an interdependent self-concept has been activated, it may only have an impact on judgment when one's judgments and decisions are likely to be explained to others. Furthermore, activation of an independent self-concept can impair the use of cultural knowledge for judgments even when individuals anticipate justifying their judgments and decisions to others likely to think differently.

One important issue that this research raises is the synergistic effect of motivation and cognition on people's judgments. Participants primed with interdependence were more likely to use others' beliefs for their judgments than those in the other conditions, suggesting that their motivation to conform to the audience led them to search selectively for others' beliefs. However, an alternative possibility is that the activation of an interdependent self-concept spontaneously activates concepts about others' beliefs and that participants apply these concepts to judgments that they anticipate explaining to others. Instead of motivation influencing cognition, cognition might have preceded motivation. Although the mediation analysis conducted in this research showed that people accessed distinct types of beliefs, the data do not allow us to conclude whether these beliefs were retrieved by motivated individuals to deliver a biased judgment or whether they were accessible and applied to the judgment.

Nevertheless, the fact that nonaccountable individuals who were primed with interdependence did not rely on others' beliefs for their judgments suggests that an interdependent prime may not be sufficient to make others' beliefs accessible. Individuals may have to reach a threshold of motivation to trigger a cognitive process aimed at retrieving these beliefs (Briley & Aaker, 2001). The data in this research suggest that motivation may have influenced cognition, and not the other way around. Further research should try to provide more conclusive evidence about this subtle, yet important, theoretical issue. This would contribute to the growing perspective that a synergistic view of human action that integrates people's motivations and cognitions can have more explanatory power (Higgins & Kruglanski, 2000; Sorrentino, 2003).

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