Do You Know Me? Consumer Calibration of Friends' Knowledge

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A consumer's decision to rely on a friend to act as an agent depends, in part, on beliefs about the friend's knowledge. Three studies examine the role of motivational and cognitive biases in estimating friends' personalized knowledge (e.g., knowledge of one's movie preferences). Results show that estimates of close friends' knowledge are less accurate than those of less close friends for personalized but not for impersonal knowledge. Specifically, the studies show more overestimation of personalized knowledge and more bias in integrating new information for close as opposed to less close friends, supporting a motivational explanation for miscalibration of personalized knowledge.

When making purchases, consumers often enlist friends who act as agents by providing product information (Urbany, Dickson, and Wilkie 1989) and by providing evaluations and recommendations (Gershoff, Broniarczyk, and West 2001). The question addressed in this research is whether our estimates of our friends' knowledge of us is accurate. This is an important issue because poor calibration may lead to inaccurately over- or underweighting a particular friend's advice in a purchase decision and to the selection of inferior agents. A recent surge of interest in knowledge calibration and metacognition has underscored the importance of understanding individuals' beliefs about others' knowledge; however, research in the area remains "sparse and fragmented" (Alba and Hutchinson 2000, 146). Below, we derive and test the hypothesis that cognitive and motivational pressures are likely to result in overestimation of friends' knowledge of our tastes and preferences and that this overestimation is likely to be exacerbated among close friends.

CONSUMER CALIBRATION OF FRIENDS' KNOWLEDGE

The literature on interpersonal perception provides mixed evidence regarding accuracy in individuals' assessments and predictions of others (Alba and Hutchinson 2000; Kenny and Acitelli 2001). A number of studies examining people's assessment of how others view them have found that although people may be fairly accurate in assessing how they are viewed by a group of others on personality traits such as intelligence, humor, competence, and likability, they are less accurate in assessing how they are viewed on these same traits by specific others, including their friends (DePaulo et al. 1987; Kenny and DePaulo 1993).

When a consumer considers what a friend knows about his or her attitudes and preferences, both cognitive and motivational pressures may lead to overestimation. From a cognitive standpoint, one's own attitudes and preferences represent information that is relatively accessible to a target individual. Even when it is evident that another could not have access to particular information, individuals still show an egocentric bias in estimating what others know (Keysar et al. 2000). From a motivational perspective, people are motivated to believe that their friends know their attitudes and preferences well in order to maintain their beliefs about the friendship. The motivation to evaluate friends in this favorable light stems from a desire to protect relationships that are central to one's own identity and, in this way, to protect one's own identity (Kenny and Acitelli 2001). Thus, individuals may have the goal of protecting their relationships with friends. As a result, consumers may be inclined to use evaluation strategies that are consistent with this goal when they estimate their friends' knowledge about them (Kruglanski and Freund 1983; Kunda 1990). We therefore expect an overestimation effect when individuals estimate what their friends know about their tastes and preferences. This is consistent with the finding that people tend to overestimate what they know about their friends' preferences (Dunning et al. 1990; Swann and Gill 1997).

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This general tendency to overestimate is likely to be even greater for closer relationships. Again, cognitive as well as motivational pressures may lead to such enhanced overestimation. Cognitively, enhanced overestimation in the case of close relationships may be driven by beliefs that close friends, or those with whom one has an involved relationship, are likely to know one's preferences best. This seems like a reasonable assumption based on greater opportunity as well as motivation for learning about a close friend's preferences. As consumers spend time with a friend, they increase the opportunity for that friend to learn about them through shared participation in activities, observation, and discussion (Miller 1990). Because of these increased opportunities to learn, reliance on relationship involvement in predicting another's knowledge of oneself may be expected to increase accuracy. Further, because close friends tend to rely on one another for specific relationship outcomes, they are likely to be motivated to acquire and integrate information about each other (Berscheid et al. 1976). Therefore, a consumer may expect that a close friend's knowledge of his or her own attitudes and preferences is greater than that of a friend who is less close.

However, these beliefs may not necessarily result in accurate estimates. Although relationship involvement may develop as the relationship progresses, new learning about friends may diminish. Improvement in accuracy about others' preferences may occur early in a relationship, but the rate of improvement declines such that increased time in the relationship is not strongly related to accuracy (Kenny 1994; Kenny and Acitelli 2001). One reason for this is that people in close relationships may become complacent in their knowledge of partners and come to pay less attention to the information needed for judgmental accuracy (Thomas, Fletcher, and Lange 1997). Consumers also may overlook the fact that close friends may not have had the opportunity to observe them engaging in certain specific activities (e.g., grocery shopping) and may rely on their generalized belief that close friends know them best when they estimate how well a friend knows their product preferences. Thus, reliance on relationship involvement may not result in accuracy in terms of consumers' estimates of friends' knowledge about them. Given that people tend to overestimate how well friends know them in general, beliefs about close friends' opportunity and motivation to learn one's preferences may tend to exacerbate the degree of overestimation. In other words, people are likely to overestimate close friends' knowledge of their own tastes more than other friends' knowledge.

Motivational pressures also may lead to this enhanced overestimation of close versus other friends' knowledge of one's tastes and preferences. Two types of motivation may be at play. As discussed above, people are motivated to believe that their friends know them well. This belief is likely to be even greater in the case of close friends because it provides reassurance regarding the closeness of the relationship. In other words, people are motivated to protect their close relationships, and believing that close friends know you well is one way of doing so. This motivational pressure is less likely in the case of less involved relationships. Consistent with this reasoning, research has shown that friends and romantic partners tend to evaluate those more central to their social identity more favorably (Martz et al. 1998).

A second type of motivation is the motivation to aggrandize or idealize close friends and their abilities (Murray and Holmes 1993). Consumers motivated to perceive their close friends as knowledgeable may overestimate their close friends' knowledge on a number of topics, including knowledge of their own tastes and preferences as well as general knowledge (Kunda 1990; Martz et al. 1998). Prior research has found general overestimation when individuals estimate others' general knowledge (history, sports, etc.). In particular, individuals tend to overestimate the extent to which others share their knowledge (Keysar et al. 2000; Nickerson, Baddeley, and Freeman 1987). The motivation to idealize close friends may drive estimates and result in a greater degree of overestimation of both personalized and impersonal knowledge for close versus other friends.

In sum, our primary interest in the present research is in consumers' assessment of friends' knowledge about their own preferences and attitudes. This assessment is important since it likely drives the reliance on friends to act as agents to provide personalized information or make decisions on one's behalf. Across three experiments, we examine the role of cognitive and motivational biases in driving these estimates.

STUDY 1

The goal of study 1 was to examine estimates of a friend's knowledge of one's own tastes (personalized knowledge) compared with the friend's general domain knowledge (impersonal knowledge). This helps pin down the underlying role of motivation to protect close relationships versus the motivation to idealize close friends in producing overestimates.

Method

One hundred and nine pairs of friends who had known each other for at least 1 month participated in study 1. On arriving, each friend in a pair was randomly assigned to either the target or perceiver condition. Targets provided ratings for 40 movie categories (e.g., comedy, suspense, etc.) on seven-point scales anchored at "hate them" (1) and "love them" (7) and also indicated their top-five and bottom-five categories of movies. Next, targets estimated how accurate their friend in the study would be (between 0% and 100%) in guessing their responses. This served as the dependent variable of the targets' estimates of their friends' personalized knowledge. Targets also completed and then estimated how accurate their friends would be on a general knowledge task of providing the names of the capitals for the 50 states in the United States (names provided). This served as the dependent variable of the targets' estimates of their friends' impersonal knowledge. After a filler task, targets answered questions about their relationship involve-

ment with their friend measured by four items that asked about time spent doing things with their friend, conversing with the friend, sharing problems and worries with the friend, and their liking for the friend (Swann and Gill 1997). An index based on these four questions served as the primary independent variable of relationship involvement. Targets also provided overall estimates of their similarity to their friend and the number of years and months that they had known their friend in the study. Finally, targets answered questions about their beliefs regarding how useful it was to consider the four aspects of involvement in assessing how well their friend in the study could predict how they (the target) rated the 40 movie categories. This was a measure of cognitive beliefs about the usefulness of involvement as a cue to predict their friends' knowledge.

Participants assigned to the role of perceivers estimated how much the target liked and disliked each of 40 movie categories using the same seven-point scales, with instructions to respond to the questions "the way that you think your partner would answer them." They also estimated their friends' top-five and bottom-five categories. Next they completed the general knowledge task of providing the names of the capitals for the 50 states in the United States. Each perceiver's responses to the movie category questions were compared with his or her target's responses to calculate perceivers' actual accuracy.

Results

The length of the relationships of friends in the study ranged from one to 286 months, with a mean of 27.5 months. A measure of relationship involvement was created by combining the four involvement questions (Swann and Gill 1997; $\alpha = .87$). The effects of relationship involvement reported here and in studies 2 and 3 hold even after controlling both for measures of similarity between targets and perceivers and for relationship length; hence, these variables are not discussed further.

Estimates of Personalized Knowledge. The percentage of targets' movie category evaluations that targets estimated their friends would correctly identify ($M = .64$) and the number of targets' top-five ($M = 3.08$) and bottom-five categories ($M = 3.04$) that targets estimated their friends would correctly identify were analyzed. Each perceiver's actual accuracy was computed as the percentage of exact matches on the seven-point "hate them" to "love them" scale between his or her predictions of the target's responses and the target's actual responses ($M = .22$).

A repeated-measures ANOVA was run with perceivers' actual accuracy and targets' estimated accuracy as a within-dyad factor and relationship involvement (mean centered) as a continuous independent variable. Results revealed significant main effects for estimated versus actual accuracy ($F(1, 107) = 536.43$, $p < .001$), confirming a general tendency to overestimate a friend's knowledge of one's tastes. The main effect of involvement ($F(1, 107) = 27.93$, $p < .001$) was also significant. Importantly, in support of the motivational prediction, the interaction between involvement and the estimate versus actual accuracy within-subjects factor was significant ($F(1, 107) = 13.25$, $p < .001$).

Follow-up analyses were conducted by splitting involvement at the median of 3.81. The difference between the targets' estimated accuracy and the perceivers' actual accuracy was significant both under low ($M_{est.} = .58$ vs. $M_{act.} = .21$; $F(1, 53) = 214.42$, $p < .001$) and high involvement ($M_{est.} = .70$ vs. $M_{act.} = .23$; $F(1, 54) = 299.53$, $p < .001$). However, as the interaction indicates, the degree of overestimation is greater under high versus low involvement. Perceivers' actual accuracy did not significantly differ by involvement ($M_{high} = .21$ vs. $M_{low} = .23$; $F(1, 107) = 1.74$, $p = .189$); however, targets estimated that their friends would be more accurate for high versus low involvement ($M_{high} = .70$ vs. $M_{low} = .58$; $F(1, 107) = 14.33$, $p < .001$).

Similar results obtain for the top-five and bottom-five category matches when the same analyses are conducted. The mean actual number of top-five categories that the friends correctly identified is 1.71 versus 3.08, the targets' estimates of their friends' ability. In addition to main effects of the within-dyad factor ($F(1, 107) = 115.09$, $p < .001$) and involvement ($F(1, 107) = 10.78$, $p < .001$), a significant interaction ($F(1, 107) = 7.45$, $p < .01$) indicated a difference in the degree of overestimation depending on involvement. Follow-up contrast analyses based on a median split of involvement reveal overestimation under low ($M_{est.} = 2.72$ vs. $M_{act.} = 1.65$; $F(1, 53) = 33.06$, $p < .001$) and high involvement ($M_{est.} = 3.44$ vs. $M_{act.} = 1.78$; $F(1, 54) = 87.80$, $p < .001$). Although friends' actual accuracy does not differ by involvement ($M_{high} = 1.78$ vs. $M_{low} = 1.65$; $F(1, 107) = .40$, $p = .531$), the targets' estimates of their friends' accuracy is significantly higher under high versus low involvement ($M_{high} = 3.44$ vs. $M_{low} = 2.72$; $F(1, 107) = 18.98$, $p < .001$).

For the bottom-five categories, actual matches are 1.28 versus estimated matches of 3.04. Again, we found a main effect for the within-dyad factor ($F(1, 107) = 211.80$, $p < .001$), a main effect of involvement ($F(1, 107) = 22.51$, $p < .001$), and the predicted interaction effect ($F(1, 107) = 6.32$, $p < .05$). Follow-up contrasts reveal greater overestimation under high involvement ($M_{est.} = 3.42$ vs. $M_{act.} = 1.40$; $F(1, 54) = 135.96$, $p < .001$) than under low involvement ($M_{est.} = 2.63$ vs. $M_{act.} = 1.15$; $F(1, 53) = 77.09$, $p < .001$).

Similarly, although friends' actual accuracy did not differ by involvement ($M_{high} = 1.40$ vs. $M_{low} = 1.15$; $F(1, 107) = 1.68$, $p = .198$), targets' estimates of their friends' accuracy is significantly higher under high versus low involvement ($M_{high} = 3.42$ vs. $M_{low} = 2.63$; $F(1, 107) = 17.44$, $p < .001$).

Beliefs Regarding Diagnosticity of Involvement. Targets' responses to the questions on how useful the four aspects of relationship involvement would be in predicting the accuracy of their friends' estimates of the targets' movie preferences were averaged ($\alpha = .64$). The mean belief was significantly above the midpoint of the scale ($M = 3.77$ on

five-point scales anchored by "not at all useful" and "extremely useful"; $t(107) = 10.34$, $p < .001$). Further, beliefs in the usefulness of involvement in predicting friends' accuracy increased with the involvement between the pairs in the study ($r = .55$, $p < .001$; $M_{low} = 3.36$, $M_{high} = 4.15$; $t(106) = -6.18$, $p < .001$).

To examine the effects of motivation to protect relationships over and above cognitive beliefs about the usefulness of relationship involvement, we included the average belief in the analysis along with involvement as independent variables (both mean centered) and actual versus estimated percentage accuracy as a within-subjects factor. The main effect for actual versus estimate continued to reveal significant overestimation ($F(1, 105) = 535.49$, $p < .001$). The significant main effect for involvement also persisted ($F(1, 105) = 18.61$, $p < .001$). Most important, the interaction between involvement and the within-subjects actual versus estimate factor remained significant ($F(1, 105) = 5.33$, $p < .05$), and none of the effects involving beliefs in the usefulness of involvement in predicting the friend's accuracy were significant.

Estimates of Impersonal Knowledge. Targets' estimates of their friends' knowledge of state capitals ranged from 2% to 100% accurate with a mean of 50%. Actual ability ranged from 0% to 88% correct with a mean of 25.05%. The targets' estimates and friends' actual accuracies were entered as a within-dyad factor in a repeated-measures ANOVA model with involvement (mean centered) as a continuous independent variable. The only significant effect was a main effect for estimate versus actual ($F(1, 104) = 80.86$, $p < .001$), revealing general overestimation of others' knowledge. The interaction effect was not significant, indicating no difference in degree of overestimation by the amount of involvement in the relationship, ruling out the motivation to idealize close friends as the mechanism underlying enhanced overestimation of personalized knowledge under high (vs. low) involvement.

These results provide support for our propositions. First, participants overestimated their friends' knowledge about their tastes in movies as well as their general knowledge in the domain of geography. The degree of overestimation of one's tastes (personalized knowledge) was significantly higher for participants who had involved relationships with their friend compared to those with less-involved relationships. This effect was not found for impersonal knowledge. This suggests that a motivation to protect close relationships rather than a motivation simply to idealize close friends underlies the enhanced overestimation under high involvement. Results also show that the effect of involvement on enhanced overestimation is significant even after controlling for generalized beliefs that relationship involvement is a good predictor of another's accuracy in knowing one's tastes. The next study further isolates the role of motivation in individuals' estimates of their friends' knowledge.

STUDY 2

By directly manipulating motivation, study 2 seeks to show that the motivation to maintain close relationships underlies the enhanced overestimation of personalized knowledge under high relationship involvement. Study 2 seeks to link individuals' estimates of their friends' knowledge about them to actual consumer behavior by measuring the extent to which participants would be willing to rely on their friends to make choices for them.

Method

One hundred and thirteen students completed study 2 and received monetary compensation. The study was similar to study 1 with the addition of the manipulation of motivation to maintain close relationships. In this study we were only interested in participants' estimates of their friends' knowledge about them and the basis for these estimates (and not in the accuracy of these estimates). Thus, unlike in study 1, both participants in each pair were placed in the role of target. All participants provided their own preferences and estimates of the percentage of their responses they believed their partner in the study would correctly predict.

Each participant rated 40 categories of movies as either "dislike" or "like." Motivation was manipulated by priming the importance of building and maintaining close relationships. The motivation prime was presented in the guise of a study of comprehension ability. In the control condition participants read a passage about the value of experiencing all the city had to offer during their college years. In the motivation condition they read about the value of building and maintaining close relationships during their college years. After responding to some questions about the passage, participants estimated how accurate they thought their friend would be (percentage accurate out of 40) in guessing their ratings of the 40 categories of movies. Next participants completed a questionnaire in which they indicated whether each of 40 movies was an Oscar "winner" or "not a winner." Thus, in study 2, friends' personal and impersonal knowledge was estimated in the same domain of movies and on similar dichotomous scales.

To make sure that the motivation manipulation was equally salient at the time of responding to personalized and impersonal knowledge estimate questions, prior to estimating how well their friends did on the Oscar-winning movie quiz (percentage accurate), the motivation prime was repeated under the guise of examining the effects of repetition on comprehension. After a filler task, participants estimated their level of relationship involvement on the same four items as in study 1 ($\alpha = .85$). Finally, after a second filler task, participants were asked how likely they were to agree to allow their friend in the study to choose a movie for them at the video store.

Results

Participants rated the motivation and control condition passages as equally convincing ($M_{mot.} = 5.06$ vs. $M_{con.} = 4.92$; $t(112) > 1$) and understandable ($M_{mot.} = 6.52$ vs. $M_{con.} = 6.33$; $t(112) > 1$).

Estimates of Personalized Knowledge. A regression analysis was conducted with the targets' estimates of the percentage of movie category preference responses that their friends would correctly identify as the dependent variable. An indicator variable for the motivation manipulation, the mean-centered continuous measure of involvement, and an interaction term were independent variables. All betas reported are standardized. The involvement main effect was significant ($\beta = .288$; $t(110) = 2.587$, $p < .05$), suggesting that estimates increased as involvement increased. There was no main effect for the motivation manipulation ($\beta = -.065$; $t(110) = -.810$, $p > .4$). However, the predicted interaction effect between involvement and the motivation manipulation was significant ($\beta = .292$; $t(110) = 2.63$, $p < .01$). The effect of involvement on estimates in the control condition ($\beta = .306$; $t(55) = 2.39$, $p < .05$) is lower than in the motivation condition ($\beta = .669$; $t(110) = 6.67$, $p < .001$). This interaction demonstrates that the relationship between involvement and one's estimate of a friend's knowledge becomes even stronger when the motivation to maintain close relationships is reinforced.

Estimates of Impersonal Knowledge. Participants' estimates of the percentage of Oscar-winning movies that their friend would correctly identify were analyzed in a regression with involvement, the motivation manipulation, and their interaction as independent variables. Neither the main effects nor the interaction was significant. The nonsignificant interaction was expected because although the motivation to maintain close relationships affects estimates of friends' personalized knowledge, it should not affect estimates of impersonal knowledge.

Personalized Knowledge Estimate and Agent Choice. Estimates of how well a friend knows one's tastes should influence the extent to which that friend is relied on to act as an agent. This suggests that the effect of relationship involvement on reliance on the friend for selecting a movie for oneself should be mediated by estimates of the friend's knowledge about one's movie tastes. This mediation was confirmed. First, involvement, motivation, and the interaction were included as independent variables, with willingness to rely on the friend to choose a video as the dependent variable. The only significant effect was that of involvement ($\beta = .320$; $t(110) = 2.528$, $p < .05$). The mediator, estimated knowledge of one's movie tastes, was then regressed on involvement and motivation. Both main effects as well as the interaction were significant (as discussed above). Finally, willingness to rely on the friend to choose a video was regressed on involvement, motivation, the involvement-motivation interaction, and estimated personalized knowledge. The previously significant effect of involvement on willingness to rely on the friend became insignificant ($p > .1$), whereas the effect of estimated personalized knowledge was significant ($\beta = .428$; $t(109) = 4.24$, $p < .001$). A Sobel test confirmed this mediating effect ($Z = 2.17$, $p < .05$).

These results reinforce the motivational nature of the enhanced overestimation of personalized knowledge effect. Relationship involvement and overestimation of personalized knowledge have a stronger relationship when the motivation to maintain close relationships is increased. Study 3 provides additional support for the role of motivation to protect close relationships in the enhanced overestimation effect.

STUDY 3

The main goal of study 3 is to provide a compelling demonstration that the motivation to maintain close relationships underlies the enhanced overestimation effect. If this motivation is salient in the case of close relationships, then people should update their estimates in a biased manner in the face of feedback. Specifically, feedback regarding a close friend's accuracy in estimation should be incorporated into updated estimates if the feedback is favorable (i.e., learning that a friend knows more about one's tastes than previously estimated). However, if the feedback is unfavorable (i.e., learning that a friend knows less than previously thought), the motivation to protect the relationship should lead to a lesser degree of updating. The direction of the feedback (favorable or unfavorable) should not asymmetrically affect the degree of updating by those in less close relationships where no relationship protection motivation is in place.

In this study, we also replicate the finding that individuals' estimates of friends' personalized knowledge (but not impersonal knowledge) are related to relationship involvement. To establish the robustness of the finding we used a variety of domains with more elaborate measurement in each.

Method

Forty-four pairs of friends participated in study 3. Participants were randomly assigned to one of two updating conditions in which they would receive feedback that their friend was either more or less knowledgeable about their attitudes and preferences than they had initially estimated. Both participants in each dyad were placed in the role of target and made estimates about their friends' knowledge, which they were led to believe would be compared with their friends' actual knowledge. Participants provided preference ratings for 40 items in each of three domains of common grocery items, restaurant cuisine types, and leisure activities using seven-point scales ("hate it" to "love it"). For each domain they estimated how accurate their friend would be in predicting their preferences. Next, participants completed three general knowledge quizzes; providing the

names of the last 10 years of Oscar-winning best picture films, naming the capital cities of each of the 50 states, and supplying the full names of the first 25 elements of the periodic table of the elements from their abbreviations. Again, they provided estimates of the percentage of each general knowledge questionnaire that their friend would answer accurately.

Participants were then provided with false feedback regarding their initial estimates of their friends' accuracy in predicting their preferences in the three domains. Lab assistants handwrote the words "more" or "less" (depending on condition) and each participant's original estimate for each of the three domains into the corresponding blanks in the sentence on the report that read, "When we scored your responses and your partner's, we found that you actually matched ___ frequently than your estimate of ___ out of the 40 questions."

Participants then provided new (updated) estimates of the number of questions on which the friends' responses accurately indicated their preference ratings. Finally, participants rated their relationship involvement using the same four items as in the previous studies ($\alpha = .88$).

Results

Estimates of Personalized Knowledge. Regression analyses with participants' estimates of their friends' knowledge of their preferences as the dependent variable and the mean-centered relationship involvement variable as the independent variable revealed significant effects for all three domains of restaurants ($\beta = .452$; $t = 4.419$, $p < .001$), grocery products ($\beta = .558$; $t = 5.867$, $p < .001$), and activity preferences ($\beta = .607$; $t = 6.66$, $p < .01$). This finding is consistent with the enhanced overestimation by those in close relationships observed in studies 1 and 2.

To account for floor and ceiling effects from their initial estimates, for each type of preference, a normalized measure of updating was created by dividing each participant's updating by the amount the estimate could have been updated (Roggeveen and Johar 2004). These normalized measures of updating were regressed on the mean-centered relationship involvement variable, an indicator variable for feedback condition (coded 1 for the more accurate than estimated condition and -1 for the less accurate than estimated condition), and an interaction term. Across all three types of preferences, neither feedback nor relationship involvement was significant, indicating that the overall amount of updating was not related to the degree of participants' relationship involvement. However, there was a significant feedback by involvement interaction for all three preference types: restaurant ($\beta = .370$; $t = 3.43$, $p < .001$), grocery products ($\beta = .342$; $t = 3.23$, $p < .01$), and activity preferences ($\beta = .365$; $t = 3.40$, $p < .001$).

To examine these results further, relationship involvement was split at the median. For all three types of preferences, participants in high-involvement relationships made greater upward adjustments when they learned that their friends were more accurate than they had initially predicted, compared with downward adjustments when they learned that their friends were less accurate (restaurants: $M_{\text{more}} = .50$ vs. $M_{\text{less}} = .35$; $F(1, 74) = 6.05$, $p < .05$; groceries: $M_{\text{more}} = .44$ vs. $M_{\text{less}} = .28$; $F(1, 74) = 7.82$, $p < .01$; activities: $M_{\text{more}} = .60$ vs. $M_{\text{less}} = .38$; $F(1, 74) = 4.12$, $p < .05$). Conversely, there was no significant difference in the amount of updating by individuals in low-involvement relationships (restaurants: $M_{\text{more}} = .34$ vs. $M_{\text{less}} = .43$; $p > .1$; groceries: $M_{\text{more}} = .38$ vs. $M_{\text{less}} = .42$; $p > .5$; activities: $M_{\text{more}} = .41$ vs. $M_{\text{less}} = .43$; $p > .7$). The biased updating under higher (but not lower) levels of relationship involvement suggests once again that the underlying mechanism of enhanced overestimation is motivational in nature.

Estimates of Impersonal Knowledge. As in studies 1 and 2, participants' estimates of their friends' accuracy and their friends' actual accuracy were analyzed as a repeated-measures within-dyad factor with the mean-centered involvement measure as an independent variable. For the state capitals task, the only significant effect was that of the within-subjects factor revealing that people overestimate their friends' accuracy ($M_{\text{est.}} = .51$ vs. $M_{\text{act.}} = 25$; $F(1, 77) = 68.23$, $p < .001$). For the Oscar-winning movies naming task, overestimation was again the only significant effect ($M_{\text{est.}} = .38$ vs. $M_{\text{act.}} = .21$; $F(1, 80) = 38.79$, $p < .001$). Finally, for the chemical elements task, participants were surprisingly accurate in their predictions ($M_{\text{est.}} = .66$ vs. $M_{\text{act.}} = .71$; $p > .11$). None of the other effects were significant (p's $> .45$). Thus, again we found no effect of relationship involvement on the degree of overestimation of friends' impersonal knowledge.

Results are consistent with the notion that consumers are motivated to believe that their close friends know a lot about them—they are more susceptible to positive than negative feedback about their close friends' knowledge about them. When the relationships are less close, positive and negative feedback are equally integrated into their estimates of friends' personalized knowledge. Further, as in studies 1 and 2, the effect of involvement on estimates of friends' knowledge was significant for personalized knowledge but not for impersonal knowledge.

GENERAL DISCUSSION

Studies 1, 2, and 3 showed that consumers are not well calibrated about their friends' personalized knowledge about them and tend to overestimate it, especially when the relationship with a friend is close. Overestimates of close friends' knowledge appear to be driven by a motivation to maintain and protect close relationships. Because close friendships are important to individuals, particularly with respect to protecting one's own self-identity, individuals seek to protect their beliefs about the strength of these relationships (Kenny and Acitelli 2001). One indication that an individual is important to, and close to, a friend is that the friend is knowledgeable about the individual's tastes and preferences. These studies also rule out a potential alter-

native explanation: that enhanced overestimation of close friends' knowledge stems from a desire to exaggerate or aggrandize positive traits of close friends (Martz et al. 1998). In all three studies, differences in the degree of overestimation by those in close versus less close relationships were only observed for personalized knowledge but not for impersonal knowledge.

Fully teasing apart strictly motivated inferences from cognitive evaluations is generally a difficult task, and it has been argued that any motivational interpretation can always be reinterpreted as a cognitive effect (Kruglanski 1996). We acknowledge that in addition to the motivational issues described above, there may be a cognitive component to the enhanced overestimation effect. If the explanation for our results was strictly cognitive, then controlling for beliefs about the relationship between involvement and estimates of personalized knowledge should account for our results. However, the enhanced overestimation effect holds even after controlling for this belief (study 1). Our finding of biased feedback by those in close relationships (study 3) also suggests a motivation-driven hypothesis confirmation strategy.

These findings contribute to the literatures on agent evaluation and interpersonal influence. Much prior research on agent evaluation has focused on situations where agents provide their own preferences or evaluations (Gershoff et al. 2001; West and Broniarczyk 1998). The studies presented here focus on situations where agents provide personalized evaluations tailored to one consumer's preferences. Our findings show that beliefs about a potential agent's personalized knowledge influence the willingness to rely on that agent. Our results also add to research that suggests that aspects of consumer information processing may lead to inferior agent selection and to overweighting or underweighting an agent's advice (Gershoff et al. 2001; Gershoff, Mukherjee, and Mukhopadhyay 2003).

This research also contributes to literature on metaknowledge and calibration. Our results highlight how consumers may rely on beliefs about others' knowledge, despite poor calibration for these beliefs. Finally, although consumers may overrely on close friends, we do not rule out the possibility they are better off as a result. For example, recommendations from friends provide an opportunity to learn about one's own tastes and preferences (West, Brown, and Hoch 1996). Further, accepting a recommendation may enhance a relationship in much the same way as accepting a gift does (Ruth, Otnes, and Brunel 1999). Potentially, the benefit of maintaining a close relationship is worth the cost of overrelying on a friend.

[*Dawn Iacobucci served as editor for this article.*]

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