

Social Comparison Theory and Deception in the Interpersonal Exchange of Consumption Information

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Four experiments demonstrate that self-threatening social comparison information motivates consumers to lie. Factors related to self-threat, including relevance of the social comparison target (i.e., the importance of the comparison person), comparison discrepancy (i.e., the magnitude of the performance difference), comparison direction (i.e., whether one performs better or worse), nature of the information (i.e., whether the comparison is social or objective), and perceived attainability (i.e., the possibility of achieving the compared performance), influenced consumers' willingness to engage in deception. Results extend social comparison theory by demonstrating that comparisons that threaten public and private selves have implications for lying behaviors.

You told a lie, an odious, damned lie,
Upon my soul, a lie, a wicked lie.
(William Shakespeare, *Othello*)

Consumers often exchange interpersonal information when recommending a product or service such as a restaurant, a potential family physician, or a new home computer. To date, research investigating the exchange of information between two consumers has primarily focused on the impact of positive word of mouth on consumers' judgments and the adoption of new products (Arndt 1967; Bone 1995; Brown and Reingen 1987) as well as precursors of and reactions to communication about negative consumption experiences (Fisher et al. 1999; Laczniaik, DeCarlo, and Ramaswami 2001; Richins 1983). One facet of consumer-to-consumer interactions that has been largely overlooked is interpersonal deception (i.e., lying).

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Defined as "intentionally try[ing] to mislead someone" (DePaulo et al. 1996, 981), lying occurs at a surprising rate. In fact, research has shown that lies can occur as frequently as once in every three social interactions (DePaulo et al. 1996). In consumption settings, there are a variety of ways in which individuals might deceive others, such as misrepresenting where they purchased a product, lying about the brand name of a product, or even falsely indicating whether or not they purchased a product at a discounted price.

It has been suggested that lying is often a means of achieving certain goals (Miller and Stiff 1993). For instance, using a daily diary methodology, DePaulo and colleagues (1996) found that people told self-serving lies to cast themselves in a more positive light, to feel better about the self, and to be protected from negative outcomes such as embarrassment and disapproval. Although previous research has created taxonomies of different types of lies, theoretical explanations that delineate the precursors to deception have received limited attention. One exception is research by Sengupta, Dahl, and Gorn (2002) that investigated the impact of brand expensiveness, communication recipient status, and individual differences on lying intentions. These researchers found that one motivation for lying in consumption contexts was impression management concerns. In the present research, we build on this initial work and investigate consumers' lying motivations utilizing a new conceptual framework guided by social comparison theory.

According to social comparison theory, people often obtain information about their own performance by comparing

themselves to others (Festinger 1954). Under certain circumstances, this social comparison information can be threatening to the self (Mussweiler and Bodenhausen 2002; Mussweiler, Gabriel, and Bodenhausen 2000; Wills 1981). We predict that when individuals perceive social comparison information as threatening, their willingness to lie will be augmented in an effort to protect the self. We test this prediction in the context of a consumer engaging in a social comparison regarding the purchase price of a product.

Our research is the first to consider deception as an outcome of social comparison processes. Using social comparison theory as a theoretical framework, we test the notion that when consumers are exposed to social comparison information that threatens their self-identity they will utilize deception as a mechanism to respond to this threat. Further, we show that specific characteristics of the comparison context are critical in defining the level of self-threat and the resulting willingness to lie. In particular, the relevance of the comparison target, the comparison discrepancy, the comparison direction, the nature of the comparison information, and the perceived attainability are all shown to be fundamental to creating self-threat and influencing consumers' willingness to lie. We also demonstrate that when consumers engage in threatening social comparisons this information can threaten different aspects of the self. Specifically, we find that consumers' willingness to lie is related to a desire to protect not only public selves (i.e., the impressions they convey to others) but also private selves (i.e., their sense of self-worth). In summary, this research demonstrates that the underlying reason why consumers become more willing to lie when they are exposed to unfavorable social comparison information is to mitigate both public and private threats to the self. Next, we review social comparison theory and delineate the direction of the four experimental studies that comprise the current research.

SOCIAL COMPARISON THEORY

Social comparison theory posits that people are generally motivated to evaluate their opinions and abilities and that one way to satisfy this need for self-evaluation is to compare themselves to others (Festinger 1954). Information garnered from these social comparisons can then be used to provide insights into one's capacities and limitations. Further, research suggests that, under certain conditions, this social comparison information can be threatening to the self (Morse and Gergen 1970; Mussweiler and Bodenhausen 2002; Wills 1981) and that these self-threats can lead to negative reactions (Brickman and Bulman 1977; Mussweiler et al. 2000; Salovey and Rodin 1984). One model that makes specific predictions as to when social comparisons will be threatening to the self is the self-evaluation maintenance (SEM) model (Tesser 1988; Tesser, Millar, and Moore 1988; Tesser and Paulhus 1983).

According to the SEM model, people are motivated to maintain or increase positive self-evaluations. This motivation is particularly apparent when people respond to upward social comparisons (i.e., comparisons to someone who

is superior; Wheeler [1966]). The theory further posits that upward social comparisons have more negative self-evaluative consequences when one is outperformed by someone who is relevant or psychologically close (vs. irrelevant) and when one is outperformed in an important (vs. unimportant) domain (Pelham and Wachsmuth 1995; Tesser and Collins 1988). In the current research, the performance domain of interest is shopping ability. As Schindler (1998) and a pretest with the sample population provide evidence that it is important for consumers to be smart shoppers, the importance of this domain to our sample will always be high. Thus, there is always some self-threat present in the studies we conduct, and what we investigate in our research is the degree of self-threat.

In addition to manipulating relevance of the comparison target (i.e., the person with whom one compares), we also manipulate aspects of the social comparison context related to self-threat. In particular, we investigate how consumers' willingness to lie is influenced by the degree of discrepancy between the compared performances (study 1), the direction of the social comparison (study 2), the nature of the comparison information (study 3), and the attainability of the compared performance (study 4). Overall, we predict that the degree of self-threat produced by social comparisons will motivate consumers' willingness to lie. Further, we expect that these comparisons will threaten the self both publicly (i.e., the impressions people convey to others) and privately (i.e., people's sense of self-worth; e.g., see Tesser and Paulhus [1983]). While the public self is discussed in study 1, we defer our discussion of the private self to study 2.

STUDY 1

In study 1, participants read a scenario in which they learned that they paid more than another consumer for an identical product (i.e., they engaged in an upward social comparison). The first goal of this study was to examine the impact of two factors on consumers' willingness to lie in response to an upward social comparison: relevance of the comparison target and comparison discrepancy. Second, we sought to investigate the possibility that the reason these factors influence willingness to lie is because they create public self-threat.

Based on our discussion of the SEM model, we expect that when consumers are outperformed by someone relevant (as compared to irrelevant) their self will become threatened. We propose that in response to this threat, consumers will be more willing to lie. This is because when public self-image is threatened individuals are often motivated to engage in impression management tactics (Schlenker 1980) such as lying (Goffman 1959; Sengupta et al. 2002). However, we anticipate that the impact of the comparison target's relevance on an individual's willingness to lie will be moderated by the extent to which the individual is outperformed. Specifically, if an individual is significantly outperformed, deception is likely to occur regardless of the relevance of the comparison target. This prediction is supported by Strohmer, Biggs, and McIntyre (1984), who found that the se-

verity of the discrepancy in social comparison information influenced the impact of the information. In their research, participants who received more (as opposed to less) severe upward social comparison information reported higher levels of depression. Thus, it appears that it is more threatening to be outperformed to a large (rather than small) degree. Taking the research findings on comparison target and comparison discrepancy together, we propose that when there is a small comparison discrepancy, consumers will be more willing to lie to a relevant (vs. an irrelevant) comparison target. In this case, while the discrepancy itself is not threatening, being outperformed by a relevant target is. However, when the comparison discrepancy is large, consumers will feel threatened and will be similarly willing to lie regardless of who has outperformed them. More formally,

H1a: When a comparison discrepancy is small, an individual will be more willing to lie to a relevant versus an irrelevant comparison target.

H1b: When a comparison discrepancy is large, differences in the willingness to lie to a relevant versus irrelevant comparison target will be mitigated.

Method

The hypotheses were tested using a 2 (comparison target: relevant vs. irrelevant) \times 2 (comparison discrepancy: small vs. large) between-subjects experimental design. Participants included 99 undergraduate students (males = 50, females = 49) from a large North American university who completed the study for course credit.

Procedure. Participants were asked to read and imagine a scenario that described a situation involving a social interaction. In the scenario, the participant is washing his or her newly purchased car when another person (i.e., the comparison target) says hello. In the relevant target condition, participants imagined they were interacting with a coworker whom they knew well. In the irrelevant target condition, they imagined they were interacting with a stranger whom they did not know. The scenario then indicated that the comparison target began to ask questions about the participant's new car. After listening to the participant's responses the comparison target mentions that s/he purchased the same car last week for \$18,000. Comparison discrepancy was operationalized as the price differential that existed between the price participants paid and the price the comparison target paid for the same product. Unbeknownst to the comparison target, in the small discrepancy condition, the participant's car cost \$200 more (i.e., \$18,200), whereas in the large discrepancy condition the participant's car cost \$2,000 more (i.e., \$20,000). The comparison target then asked how much the participant paid for his/her new car. The scenario ends by asking participants to think about how they would respond to this question. They then completed a questionnaire, were debriefed, and were thanked for their participation.

Dependent Variables. To assess willingness to lie, participants were asked, "How likely do you think you would be to misrepresent the actual purchase price of the car?" They responded to this question using four seven-point scales (very unlikely to misrepresent the truth/very likely to misrepresent the truth, very unlikely to be deceptive/very likely to be deceptive, very unlikely to mislead/very likely to mislead, and very unlikely to hide the truth/very likely to hide the truth). These items were averaged to form a lying index ($\alpha = .93$).

Participants were also asked their motives for why they responded to the situation as they did using seven-point scales (not at all/very much so). The list of motives was compiled from taxonomies in previous lying research (DePaulo et al. 1996) and included four items related to public self-threat. As expected, factor analysis (68% of variance explained) indicated that the public self-threat items loaded on one factor. The items, which included "To avoid looking foolish," "To look like I got a good deal," "To avoid showing I paid too much," and "To look like I made an intelligent purchase," were averaged to form a public self-threat index ($\alpha = .88$).

After completing these measures, participants responded to a manipulation check for comparison target relevance that included three seven-point scales: "How strong is your relationship with this person?" (not very strong/very strong), "How important is this person to you?" (not very important/very important), and "How central is this other person in your life?" (not very central/very central; relationship index $\alpha = .95$). The manipulation check for comparison discrepancy asked participants on three seven-point scales: "Did you pay a significant amount more for the car?" (not at all/very much so), "How much more was the purchase price of your car?" (not very big/very big), and "How important was the purchase price of the car?" (not very important/very important; discrepancy index $\alpha = .80$). Finally, participants indicated their gender and age and completed a suspicion probe. Responses to the demographic items did not predict significant variance in any of the dependent measures, nor did the suspicion probe questions indicate that anyone correctly identified the experimental hypotheses in this study or in the subsequent studies. Thus, these variables are not discussed further.

Results

The manipulation checks were successful. Analysis of variance (ANOVA) using the relationship index as the dependent variable and comparison target and comparison discrepancy as independent variables produced a significant main effect for comparison target ($F(1, 95) = 84.02, p < .001; M_{\text{Rel}} = 3.59, M_{\text{Irrel}} = 1.68$). A second ANOVA with the same independent variables and the discrepancy index as the dependent variable revealed a significant main effect for comparison discrepancy ($F(1, 95) = 49.97, p < .001; M_{\text{Small}} = 3.11, M_{\text{Large}} = 4.72$).

ANOVA on the lying index produced a significant inter-

action between comparison target and comparison discrepancy ($F(1,95) = 4.06, p < .05, \omega^2 = .03; M_{\text{Rel,Small}} = 4.11, M_{\text{Rel,Large}} = 3.92, M_{\text{Irrel,Small}} = 2.78, M_{\text{Irrel,Large}} = 3.85$; see fig. 1). Planned contrasts indicated that consistent with hypothesis 1a, when the comparison discrepancy was small (i.e., \$200), participants were more willing to lie to a relevant than an irrelevant other ($t(95) = 3.02, p < .01$). Support was also found for hypothesis 1b as results showed that when the comparison discrepancy was large, differences in willingness to lie to a relevant versus an irrelevant target were mitigated ($t < 1$). Additional analysis indicated that when the comparison target was irrelevant, participants were more willing to lie when the comparison discrepancy was large versus small ($t(95) = 2.43, p < .05$) but that they were willing to lie to a relevant target regardless of the comparison discrepancy ($t < 1$). This interaction qualified a significant main effect for comparison target ($F(1,95) = 4.97, p < .05, \omega^2 = .04$).

Correlations were conducted to determine whether willingness to lie was related to public self-threat. As public self-threat increased, so too did consumers' willingness to engage in deception ($r(99) = .69, p < .001$). An examination of the means for the public self-threat index revealed a pattern of results similar to those found for willingness to lie; participants were least concerned with managing public self-threats when the comparison discrepancy was small and they were interacting with a stranger ($M_{\text{Rel,Small}} = 4.06, M_{\text{Rel,Large}} = 4.76, M_{\text{Irrel,Small}} = 2.91, M_{\text{Irrel,Large}} = 4.59; F(1,95) = 11.49, p = .001$).

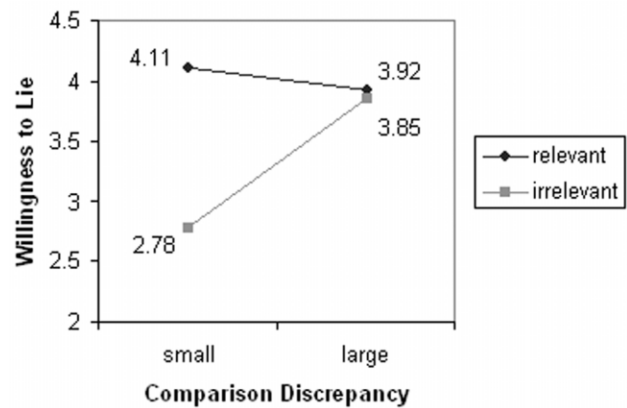
Discussion

Study 1 found that participants were more willing to lie when the performance discrepancy was small and they were interacting with a coworker as opposed to a stranger. In contrast, when the comparison discrepancy was large participants were equally willing to lie, regardless of the relevance of the comparison target. Additional analysis demonstrated that a social comparison that threatens one's public self-image is related to an increase in willingness to lie. The results of study 1 are the first to demonstrate that threatening social comparisons have implications not only for people's emotions and self-evaluations but also for their willingness to engage in deceptive behaviors. In addition, the findings provide further support of research by Sengupta et al. (2002), demonstrating that consumers are willing to lie to manage self-presentation concerns (i.e., in response to public self-threat).

STUDY 2

In study 2, participants read a scenario in which they again compared their shopping ability with a comparison target. All participants learned that there was a small comparison discrepancy between their performance and that of the target. We predicted that comparison target relevance would interact with another factor related to degree of self-threat: comparison direction (i.e., participants either performed

FIGURE 1
STUDY 1 LYING INDEX SCORES



worse [upward comparison] or better [downward comparison] than the comparison target). We also tested the possibility that the comparison would threaten not only the public but also the private self and that threats to both selves would in turn be related to willingness to lie.

Downward social comparison is a process in which people compare to someone who is inferior on a dimension or attribute (Wills 1981). People tend to compare downward in an effort to minimize threats to the self (Gibbons et al. 2002; Gibbons and McCoy 1991), as downward comparisons often lead people to feel better about themselves (Morse and Gergen 1970; Wills 1981). Although there may be conditions under which individuals are motivated to lie in response to downward social comparisons (i.e., to protect others from threatening information; e.g., DePaulo and Kashy [1998]), we suggest that what drives willingness to lie in our context is threat to the self. Because downward social comparisons are often less self-threatening than upward social comparisons (Mendes et al. 2001; Morse and Gergen 1970), contrasting the two allows us to determine whether it is the presence of self-threat arising from a social comparison and not the comparison itself that motivates deceptive behavior.

We predict that people will be more willing to lie when exposed to an upward rather than a downward social comparison. However, this should be particularly apparent for an upward social comparison with a relevant versus an irrelevant target, as this condition is the most threatening to the self (Tesser 1988; Tesser and Collins 1988). Given that self-threat should be attenuated when comparing to someone who is worse off, no differences in willingness to lie in response to downward comparisons are anticipated, regardless of the comparison target's relevance. Thus, in the context of a small comparison discrepancy we predict:

H2a: When engaging in an upward comparison, an individual will be more willing to lie to a relevant versus an irrelevant comparison target.

H2b: When engaging in a downward comparison, differences in the willingness to lie to a relevant versus irrelevant comparison target will be mitigated.

Again, we expect that public self-threat will correlate with willingness to lie. Further, based on SEM's premise that people seek positive self-evaluations, we expect that social comparisons will threaten the private self, which will in turn be related to willingness to lie.

Method

Study 2 utilized a 2 (comparison target: relevant vs. irrelevant) \times 2 (comparison direction: upward vs. downward) between-subjects experimental design. Eighty-six undergraduate students (males = 47, females = 39) were randomly assigned to one of the conditions. In this study, comparison discrepancy was held constant at small (i.e., \$200).

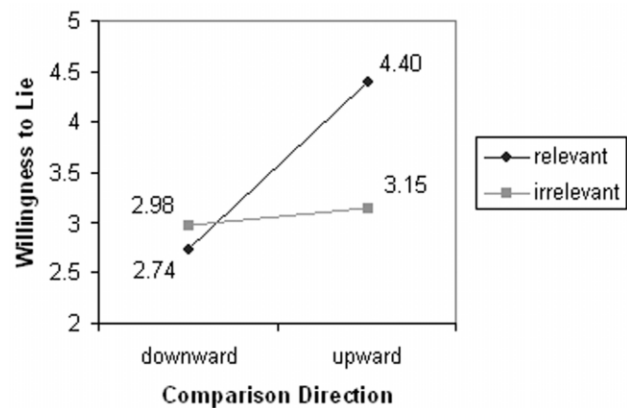
Participants read a scenario similar to the one used in study 1. Comparison target was manipulated as in study 1. To manipulate comparison direction the scenario indicated that participants paid either \$200 more (upward; i.e., \$18,200) or \$200 less (downward; i.e., \$17,800) than the target for their new car. Dependent measures followed those utilized in study 1 (lying index $\alpha = .95$, public self-threat index $\alpha = .84$, relationship index $\alpha = .92$). To assess whether participants were cognizant of the comparison direction, they were asked whether they or the comparison target got a better price (i.e., a downward vs. an upward comparison, respectively). Three seven-point scales measured the degree to which private self was threatened by the comparison. These items included the extent to which the situation was a threat: "Threatened your self?" (absolutely no threat/definitely a threat), "Threatened your ego?" (absolutely no threat/definitely a threat), and "Had the potential to make you feel worse about how you view yourself?" (absolutely no potential/definitely a potential; private self-threat index $\alpha = .88$).

Results

The manipulation checks were successful. ANOVA on the relationship index using comparison direction and comparison target as independent variables revealed a main effect for comparison target ($F(1, 78) = 65.25, p < .001; M_{\text{Rel}} = 3.71, M_{\text{Irrel}} = 1.68$). Analyzing the recall measure for comparison direction indicated that all participants correctly identified the direction of the price differential.

ANOVA on the lying index produced a significant interaction between comparison target and comparison direction ($F(1, 82) = 4.03, p < .05, \omega^2 = .03; M_{\text{Rel,Up}} = 4.40, M_{\text{Rel,Down}} = 2.74, M_{\text{Irrel,Up}} = 3.15, M_{\text{Irrel,Down}} = 2.98$; see fig. 2). Consistent with hypothesis 2a, participants were more willing to lie when making an upward comparison to a relevant versus an irrelevant target ($t(82) = 2.41, p < .05$).

FIGURE 2
STUDY 2 LYING INDEX SCORES



Further, as predicted in hypothesis 2b, participants' willingness to lie more to a relevant other was mitigated when they engaged in a downward comparison ($t < 1$). Participants were also more willing to lie when interacting with a relevant target and comparing upward as opposed to downward ($t(82) = 3.22, p < .01$). A main effect for comparison direction also emerged ($F(1, 82) = 6.21, p < .05, \omega^2 = .06$).

Replicating study 1, there was a positive correlation between public self-threat and willingness to lie ($r(86) = .57, p < .001$). Willingness to lie and private self-threat were also positively related ($r(86) = .59, p < .001$). Consistent with social comparison theory, the greatest amount of private self-threat arose when consumers engaged in an upward comparison with a relevant target ($M_{\text{Rel,Up}} = 3.61, M_{\text{Rel,Down}} = 2.63, M_{\text{Irrel,Up}} = 3.14, M_{\text{Irrel,Down}} = 2.64; F(1, 82) = 5.74, p < .05$). Additional analysis indicated that private self-threat was uniquely related to willingness to lie when partialling out public self-threat ($r(83) = .32, p < .01$). Similarly, public self-threat was related to willingness to lie when controlling for private self-threat ($r(83) = .33, p < .01$).

Discussion

Study 2 lends additional support to the notion that threatening social comparisons influence consumers' willingness to lie. This study also identified a boundary condition under which consumers would be most willing to misrepresent the price they paid for a product: when the social comparison is upward. Examining social comparison direction enabled us to demonstrate that it is the presence of self-threat arising from a social comparison and not the comparison itself that motivates deceptive behavior. Finally, willingness to lie was related not just to public self-threat but also to private self-threat. These self-threat concerns appear to be integral to the process we articulate and provide insight into why consumers are willing to lie.

STUDY 3

The primary goal of study 3 was to identify another condition under which consumers' willingness to lie would be attenuated. Participants again read a scenario involving a comparison target in a small upward comparison discrepancy situation. We predicted that comparison target would interact with another factor related to degree of self-threat: nature of the information.

Festinger (1954) hypothesized that information from either objective standards or social surroundings can be used to evaluate one's abilities. Although objective standards may provide unbiased information, people often seek and are influenced by information obtained from social sources (Wood 1989; Wood and Wilson 2003). Moreover, information from social sources is often more consequential for the self than objective information (Gastorf and Suls 1978; Klein 1997; Marsh and Parker 1984). In our context, social information refers to pricing information specific to the performance of another consumer, whereas objective information involves pricing information not reflective of another's performance. Extending previous work, we posit that social as opposed to objective information is more important to the self in the consumer context we investigate. We expect that an upward comparison using social information will result in a greater self-threat and willingness to lie than an upward comparison using objective information. Given our earlier discussion, we expect that, in the context of a small discrepancy, this effect will be more apparent when people compare using social information from a relevant (vs. irrelevant) other. When the information is objective, we expect a lower likelihood of deception regardless of the target with whom they are interacting. Finally, we anticipate that both public and private self-threat will be related to consumers' willingness to lie.

H3a: When the nature of the information is social, an individual will be more willing to lie to a relevant versus an irrelevant target.

H3b: When the nature of the information is objective, differences in the willingness to lie to a relevant versus irrelevant comparison target will be mitigated.

Method

We used a 2 (comparison target: relevant vs. irrelevant) \times 2 (information nature: social vs. objective) between-subjects experimental design in a small comparison discrepancy (i.e., \$200) context. Eighty-seven undergraduate students (males = 35, females = 52) from a large North American university participated in exchange for course credit.

Participants again read a scenario about an interaction with either a coworker or a stranger. Information nature was manipulated by varying whether the comparison information was social or objective. In the social condition, participants

imagined that the comparison target bought the same car as they did. In the objective condition they imagined that the comparison target indicated that s/he saw the advertised price of the same car. In both conditions participants learned that they had paid \$200 more. Dependent measures included those used previously (lying index $\alpha = .95$; public self-threat index $\alpha = .73$; private self-threat index $\alpha = .71$; relationship index $\alpha = .95$). Two seven-point scales assessed information importance: "How important was the topic to you?" (not at all important/very important) and "How personally relevant was the subject matter to you?" (not at all relevant/very relevant; $r = .74, p < .001$).

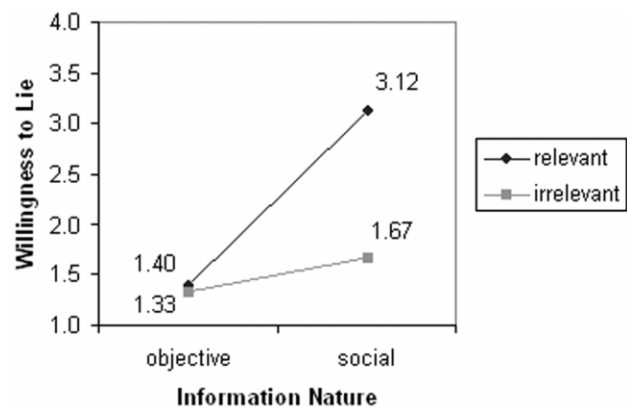
Results

Our manipulation checks were once again successful. A main effect for comparison target on the relationship index emerged ($F(1, 83) = 67.84, p < .001; M_{\text{Rel}} = 3.76, M_{\text{Irrel}} = 1.60$). In addition, there was a significant main effect of information nature on information importance ($F(1, 83) = 22.30, p < .001; M_{\text{Soc}} = 4.24, M_{\text{Obj}} = 2.72$).

ANOVA on the lying index revealed significant main effects for comparison target ($F(1, 83) = 11.48, p = .001, \omega^2 = .08$) and information nature ($F(1, 83) = 21.27, p < .001, \omega^2 = .16$). These main effects were qualified by the predicted two-way interaction ($F(1, 83) = 9.44, p < .01, \omega^2 = .07; M_{\text{Rel,Soc}} = 3.12, M_{\text{Rel,Obj}} = 1.40, M_{\text{Irrel,Soc}} = 1.67, M_{\text{Irrel,Obj}} = 1.33$; see fig. 3). Consistent with hypothesis 3a, when the information was social, participants were more willing to lie when interacting with a relevant versus irrelevant other ($t(83) = 4.55, p < .001$). Supporting hypothesis 3b, when the information was objective, willingness to lie more to a relevant other was mitigated ($t < 1$). Finally, when interacting with a relevant other, participants were more willing to lie when the information was social versus objective ($t(83) = 5.53, p < .001$).

Replicating our earlier findings, willingness to lie was

FIGURE 3
STUDY 3 LYING INDEX SCORES



positively correlated with public ($r(87) = .77, p < .001$) and private ($r(87) = .57, p < .001$) self-threats. Again, partial correlation analyses indicated that threats to both public and private selves were independently related to the willingness to lie ($r_{\text{Pub Lying, Priv}}(84) = .72, p < .001$; $r_{\text{Priv Lying, Pub}}(84) = .46, p < .001$).

Discussion

The results of study 3 demonstrated that the nature of the information used in a comparison will influence willingness to engage in deception. Objective information was found to be less threatening to a consumer's self than social information. Replicating our earlier studies, we found that the comparison target's relevance was moderated by the impact of the social comparison context. In particular, participants were most willing to lie when the target was relevant and the comparison was social in nature. Finally, we once again demonstrated that social comparisons threatened both public and private selves and that self-threats were directly related to consumers' willingness to lie.

STUDY 4

In the first three studies we demonstrated that upward social comparisons threaten consumers' selves and motivate them to misrepresent the truth about their shopping performance, particularly when they compare themselves to a relevant target. In our final study we sought to identify an instance where an upward social comparison to a relevant target would not facilitate a willingness to lie. To achieve this, we tested the impact of a new factor related to degree of self-threat—performance attainability—on consumers' willingness to lie. In addition, to increase generalizability we utilized a new consumption domain.

Researchers have found that upward social comparisons with relevant targets are less threatening when the superior performance is perceived to be attainable (Lockwood and Kunda 1997; Mills et al. 2002). That is, if people believe that they are capable of achieving the superior other's performance level they may be inspired rather than threatened. For example, Lockwood and Kunda (1997) found that when accounting undergraduates were exposed to an accounting professional who had won an award for outstanding career achievements, participants evaluated themselves more positively when the outstanding performance was perceived to be attainable rather than unattainable. Thus, we expect that when the compared performance is perceived to be attainable, self-threat and willingness to lie will be attenuated regardless of the comparison target's relevance. Finally, we anticipate that both public and private self-threat will be related to willingness to lie.

H4: Individuals will be more willing to lie when the superior performance of a comparison target is unattainable versus attainable.

Method

Ninety-two undergraduate students (males = 43, females = 49) were randomly assigned to a 2 (comparison target: relevant vs. irrelevant) \times 2 (performance attainability: attainable vs. unattainable) between-subjects experimental design. Participants always compared upward.

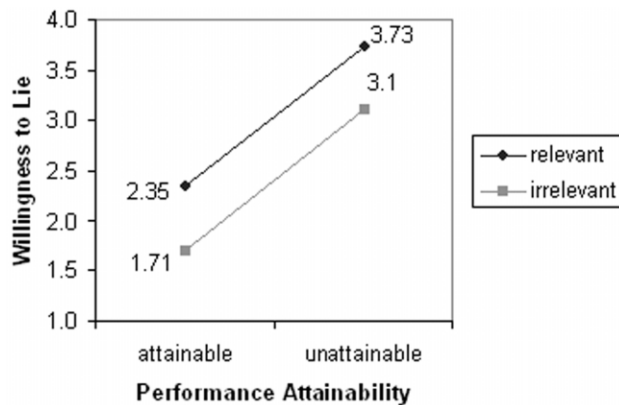
Participants read and imagined a scenario that described a discussion with a comparison target (either a coworker or a stranger) regarding gym memberships. After the participant described his/her gym to the comparison target, the target indicated that a membership to his/her gym with similar facilities costs \$25.00 per month. Unknown to the comparison target, the participant's membership cost \$25.00/month more (i.e., \$50.00). To operationalize attainability, current gym membership status was manipulated. In the attainable condition participants had just completed the initiation period at their gym and were free to switch to a new gym. In the unattainable condition they were locked into their gym membership for a number of years and could not switch to a new gym. Dependent measures followed those discussed earlier (lying index $\alpha = .98$, public self-threat index $\alpha = .81$; private self-threat index $\alpha = .93, p < .001$; relationship index $\alpha = .93$). Four seven-point scales assessed performance attainability: "Were you locked into the gym membership you purchased?" (not locked in at all/very locked in, reverse scored), "Was it possible to get out of the gym membership you purchased?" (not very possible/very possible), "How easy would it be to change gyms?" (not easy at all/very easy), and "How attainable was the other gym membership?" (not very attainable/very attainable; attainability index $\alpha = .91$).

Results

The manipulations were successful. There was a significant main effect of comparison target on the relationship index ($F(1, 88) = 55.79, p < .001$; $M_{\text{Rel}} = 4.06, M_{\text{Irrel}} = 1.95$), as well as a significant main effect of performance attainability on the attainability index ($F(1, 88) = 268.14, p < .001$; $M_{\text{Attain}} = 6.19, M_{\text{Unattain}} = 2.51$).

Consistent with hypothesis 4, ANOVA on the lying index produced a significant main effect for performance attainability ($F(1, 88) = 16.24, p < .001, \omega^2 = .17$; $M_{\text{Attain}} = 2.04, M_{\text{Unattain}} = 4.42$; see fig. 4). Participants were more willing to lie when the superior performance of the comparison target was unattainable (i.e., they were locked in) as opposed to attainable (i.e., they were free to switch). A marginally significant main effect for comparison target was also realized ($F(1, 88) = 3.43, p < .10, \omega^2 = .03$; $M_{\text{Rel}} = 3.03, M_{\text{Irrel}} = 2.39$). The interaction between the two independent variables was not significant ($F < 1$). Finally, willingness to lie was again positively correlated with both public ($r(92) = .60, p < .001$) and private ($r(92) = .62, p < .001$) self-threat. Again, partial correlations indicated that threats to both public and private selves were independently related to willingness to lie ($r_{\text{Pub Lying, Priv}}(89) = .35, p < .001$; $r_{\text{Priv Lying, Pub}}(89) = .40, p < .001$).

FIGURE 4
STUDY 4 LYING INDEX SCORES



Discussion

While the findings from the first three studies showed that social comparisons to the superior performance of a relevant target threaten consumers' selves and motivate them to lie, in our final study we identified a boundary condition under which self-threat and willingness to lie were attenuated even in the context of an upward social comparison to a relevant target. In particular, participants were less willing to lie when they believed that the superior performance was attainable rather than unattainable. As in the earlier studies, willingness to lie was independently related to both public and private self-threats.

GENERAL DISCUSSION

The present research integrates social comparison theory with research on the interpersonal exchange of consumption information to provide valuable insight into consumers' willingness to lie. To our knowledge, this research is the first empirical test of social comparison theory as a theoretical explanation for when and why individuals will become motivated to engage in deceptive behavior. Overall, the results demonstrated that consumers are willing to utilize deception as a protective mechanism in response to social information that poses a threat to their self-worth (private self) and/or self-image (public self). Drawing from social comparison theory, we tested the impact of a variety of situational factors, including the relevance of the comparison target and the type of comparison information (comparison discrepancy, comparison direction, nature of information, and perceived attainability), on the degree of self-threat elicited and consumers' willingness to lie. In the first three studies we found that the influence of the comparison target's relevance on willingness to lie was moderated by comparison discrepancy, comparison direction, and the nature of the information (social vs. objective). Interestingly, this willingness to lie to relevant others was even prevalent when a small comparison discrepancy existed. In study 4, per-

formance attainability independently influenced willingness to lie. Finally, our results not only confirmed the previous finding that lying is related to a desire to protect the public self (Sengupta et al. 2002) but also extend this research by demonstrating that willingness to lie is also independently related to a desire to avoid private self-threat. We propose that both public and private self-threats underlie consumers' motivations to engage in deception.

The results of four studies demonstrate that individuals appear to be willing to lie to someone they know and with whom they have a relationship. Worse yet, the reasons they are willing to lie are self-focused in nature—they are concerned with protecting their self-image and self-worth. This robust finding is interesting especially considering the negative implications of deception. While future interactions with a specific stranger are unlikely, we regularly interact with coworkers and friends. Given the increased frequency of contact with relevant others, there is a subsequent increase in the probability that the truth and the fact that we have lied will eventually be discovered. One reason that the truth is likely to surface is due to the cognitive effort required to maintain a lie (Lane and Wegner 1995). Lane and Wegner (1995) showed that when asked to suppress information, the mental control necessary to hide the information from someone else resulted in the secret being inadvertently revealed. If the truth is revealed, one must then deal with the ramifications of having lied. Thus, while lying may achieve short-term self-focused objectives (e.g., to look good or feel better), if the lie is detected, in the long run, the implications may be more severe (e.g., damaging a valued relationship). Future research might seek to establish how an awareness of the implications and risk of being caught in a lie affects deceptive behaviors.

A second factor that was investigated was related to the actual performance information individuals compared against—the comparison discrepancy. While consumers are willing to lie to a relevant comparison target regardless of the comparison discrepancy, they appear to be willing to lie to an irrelevant other only when the discrepancy reaches a certain size. Thus it appears that when interacting with an irrelevant other, there is a point at which the size of the comparison discrepancy crosses a threshold and threatens the self. Our results suggest that with a continued increase in comparison discrepancy, comparison targets that were once considered irrelevant begin to become relevant. Thus, the extent to which a comparison target is relevant is context specific—it changes based on other factors that coexist in the environment. Although this research considers two extreme points for a discrepancy, future research could further investigate comparison discrepancy to establish how large the relative discrepancy has to be for someone to become motivated to move from being honest to being deceptive.

The direction of the comparison was the third factor related to the social comparison literature that we tested. Results indicated that when the comparison was downward, creating minimal self-threat, participants were not motivated to engage in deceptive behaviors for self-focused reasons.

The inclusion of this social comparison component enabled us to demonstrate that it is the presence of self-threat arising from a social comparison and not the comparison itself that motivates deceptive behavior.

The impact of the nature of the information against which consumers compared their performance ability on willingness to lie was also considered. Results showed that consumers were more threatened by social as compared to objective information. This is surprising given that objective information should arguably be more threatening, as it is a more accurate indicator of the current state of affairs. Furthermore, it is much more difficult to find explanations and blame others when presented with factual information that leaves individuals to accept that they are totally to blame for their poor performance.

Finally, the inclusion of perceived attainability created a condition under which consumers were not threatened when engaging in an upward social comparison to a relevant other. This finding is consistent with health psychology research that has shown that the existence of a role model who is coping well with cancer and surviving has proven to help cancer patients successfully deal with their illness (Buunk et al. 1990). Similarly, the use of role models is an important component of successful weight loss companies such as Weight Watchers, who have members share tactics that they used to successfully lose weight. Thus, consumers can "safely" engage in upward social comparisons without negative implications if they believe that performance success is achievable.

There are several additional avenues for future research. First, a broader range of comparison target relationships could be investigated. Tice et al. (1995) found that people are more modest in their impression management tactics with extremely close others (i.e., spouses and best friends) than with those they do not know as intimately; thus, the willingness to lie to an intimate other might differ from the relationships investigated in this research. Second, threatening social comparisons may not only be detrimental to the person who has been outperformed but may also negatively affect the superior target who will receive misleading information during the interaction. Future research could investigate the implications of realizing that one has been deceived and assess how this realization influences social interactions. Finally, recognizing that one has lied and realizing that other consumers may do so as well may have implications for consumer satisfaction and bargaining behavior within the marketplace itself.

While we would have liked to have tested our hypotheses in real consumption situations, the ethics of manipulating lying and the lack of control in field situations prevented us from doing so. Instead, we relied on scenarios to depict consumption situations and inquired about consumers' intentions to deceive. Although scenario-based methodology has limitations, this approach may have provided a more stringent assessment of lying intentions because real situations are more involving, and the propensity to lie in such situations is likely to be higher than in response to scenarios.

A second potential limitation of this research is that, due to the sensitive nature of deception and impression management concerns, participants may have lied about their lying intentions. However, again this provides a stringent test of our hypotheses because if consumers lied about their "lying" it is likely that this would have led to decreased reports of a willingness to lie. The fact that we did find evidence of a differential willingness to lie across conditions is thus somewhat telling. This research serves as a first step in examining the important new topic of the exchange of deceptive communication between consumers.

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