Improving Customer Reactions to Electronic Brokered Ultimatums: The Benefits of Prior Experience and Explanations

Aleksander P. J. Ellis¹

Department of Management and Policy
The University of Arizona

DONALD E. CONLON

Department of Management Michigan State University STEPHEN E. HUMPHREY

Department of Management Florida State University

CATHERINE H. TINSLEY

Department of Management Georgetown University

Because of the growth of online discount travel intermediaries (e.g., Priceline), researchers have become interested in how customers react to electronic brokered ultimatum bargaining contexts. This paper investigates how characteristics of the customer and characteristics of the bargaining context might ameliorate customers' (a) perceptions of justice; (b) willingness to recommend the intermediary to others; and (c) willingness to repatronize the intermediary. We found that customer familiarity generally improved customer reactions to the electronic intermediary. We found a moderating effect for intermediary explanations in the form of an excuse, as explanations improved customer reactions when offers were rejected, but worsened reactions when offers were accepted.

Traditionally, negotiation has been a face-to-face activity. However, with the introduction of the Internet, bargaining activities can take place between essentially anonymous parties. Often, these exchanges occur through intermediaries. For example, in the travel industry, intermediaries such as Expedia and Travelocity serve as brokers between service providers (e.g., airlines, hotels, car rental agencies) and the public. Through these discount intermediaries, vendors can sell off their excess capacity to customers, allowing service providers an additional distribution channel with relatively low marginal costs. Moreover, discount intermediaries such as Priceline and Hotwire offer customers the opportunity to acquire travel-related items at reduced cost. In return, the customer gives up some degree of certainty

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¹Correspondence concerning this article should be addressed to Aleksander P. J. Ellis, The Eller College of Management, Department of Management and Policy, 405 McClelland Hall, Tucson, AZ, 85721-0108. E-mail: ellis@eller.arizona.edu

about the exchange, such as prior knowledge regarding exactly what hotel or airline will act as their service provider.

Transactions between customers and service providers using the online discount intermediaries can be viewed as variations of *ultimatum bargaining games* in which one person makes a single proposal (e.g., a division of a sum of money) to another party (e.g., Croson, Boles, & Murnighan, 2003; Güth, Schmittberger, & Schwarze, 1982; Pillutla & Murnighan, 1995). If the proposal is accepted, then a successful transaction has occurred and resources are distributed accordingly. If the proposal is refused, then no transaction takes place.

Conceptually, these situations are variations of the traditional ultimatum game, as the negotiation does not occur between the two parties who are actually exchanging the resources. Instead, the transaction occurs between a customer and a party representing one of the resource providers (Fershtman & Gneezy, 2001). Humphrey, Ellis, Conlon, and Tinsley (2004) coined the term *brokered ultimatum games* (BUGs) to describe these transactions, which they defined as

any exchange occurring through an intermediary where an ultimatum price is offered for a resource by one party (either the customer or the service provider via the intermediary), and the ultimatum offer is accepted or rejected by the other party. (p. 467)

Given the novelty of this online distribution channel, interaction norms are not readily apparent, and there is almost no research examining characteristics of these intermediaries or customer reactions to the use of such intermediaries. In an effort to remedy this oversight, Humphrey et al. (2004) conducted a study of brokered ultimatum bargaining contexts and found that a number of different structural variations affected customer attitudes and behaviors. In particular, they found that offer rejection negatively affected justice perceptions, repatronage behavior, and customers' willingness to recommend the service to others. They also found that customers' reactions were related to one another, as justice perceptions significantly affected repatronage behavior and customer recommendations. However, the authors failed to address one important issue: How can discount intermediaries such as Priceline improve customer reactions?

The answer may lie in understanding customers' relationships with this new, low-context medium. Low-context media are *lean media* (e.g., online exchanges, e-mail, pagers) in which paralinguistic signals are absent and there is little context surrounding the message (Hall, 1990). Barry and Fulmer (2004) noted that low-context media have *low social bandwidths*,

which refers to how saturated the messages are in social, relational, and symbolic cues.

High-context media are rich media (e.g., face to face, video conferencing), which generally have higher social bandwidths and offer receivers more information than the pure text of a message (Daft & Lengel, 1986). For example, high-context media allow for rapport, which is "a state of mutual positivity and interest that arises through the convergence of nonverbal expressive behavior in an interaction" (Drolet & Morris, 2000, p. 27).

Unfortunately, there is little information regarding the effects of utilizing this low-context medium in economic transactions (Morris, Nadler, Kurtzberg, & Thompson, 2002). On the one hand, customers may enjoy this low-context medium as an efficient way to process an economic transaction. On the other hand, they may be frustrated in their somewhat uncertain environment by the lack of information and paralinguistic signals. They may use these online BUGs for their discount benefits, but may be frustrated that these intermediaries are poor substitutes for human assistance.

We examine how customer reactions to accepted or rejected bids are influenced by characteristics of the customer and characteristics of the bargaining context. First, we examine whether the amount of prior experience (familiarity) the customer has with online BUGs influences his or her reactions. Familiarity with this low-context medium can induce a level of comfort and certainty so that customers may focus on the positive aspects of this lean exchange as saving both purchasing costs and transaction costs. Second, we examine whether the provision of an explanation for the decision made by the intermediary influences customer reactions. Enriched explanations, by definition, increase the context of the message, providing customers with a heightened understanding of their bid results. To the extent that customers are frustrated with the leanness of this communication medium, adding an explanation for results should help, particularly when in the form of an excuse.

In our study, a customer makes a bid for an asset (a hotel room), and the intermediary responds with an acceptance or rejection of the offer. This structure is similar to what many people experience using discount intermediaries such as Priceline, whose slogan is "Name your own price." In addition, the intermediary provides or does not provide an explanation regarding what happened in the negotiation.

In the following sections, we first discuss the various aspects of Webbased BUGs, including how offer rejection affects justice perceptions, repatronage, and recommendations. We then examine the influence of prior experience and explanations (see Figure 1).

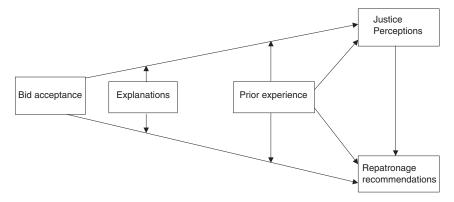


Figure 1. Effects of prior experience and explanations on the relationship between bid acceptance, justice perceptions, customer recommendations, and repatronage.

Effects of Offer Rejection

From the perspective of intermediaries, the higher the percentage of successfully completed transactions, the more money they make. Intermediaries do not earn anything when transactions do not take place. From the perspective of customers and service providers, completed transactions are also preferred over noncompleted transactions.

Customers want to purchase the resource, and service providers are looking to sell. However, other goals of the customer and the service provider clash with one another. For one thing, customers want to buy the item at the lowest possible price, whereas the service provider wants to sell the item at the highest possible price. In addition, the intermediary wants to keep customers satisfied to ensure that they will use the service again in the future (i.e., engage in repatronage behavior), and that they will make positive recommendations about the service to others (thereby increasing the number of people who visit the intermediary, potentially increasing the number of transactions completed). If customers' perceptions of the intermediary are negative, no one will reach the intermediary's short-term goals of a completed transaction; and the long-term goals of the intermediary and the service provider also will be thwarted.

When offers are rejected, researchers have suggested that fairness theory may explain customers' reactions to the decision (Kagel & Wolfe, 2001). The current literature describes four forms of justice, each of which may play a role in explaining how customers react to rejected offers. *Distributive justice* (the belief that the outcome was fair; Adams, 1965), *procedural justice* (the belief that the formal process used to make decisions was accurate and consistent; Leventhal, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut &

Walker, 1975), interpersonal justice (the belief that people were treated with politeness, dignity, and respect by those executing procedures or determining outcomes), and informational justice (the belief that the information provided as to why procedures were used or why outcomes were distributed was fair; Bies & Moag, 1986; Colquitt, 2001; Greenberg, 1993).

While researchers have examined justice perceptions in ultimatum games (e.g., Pillutla & Murnighan, 1995), such studies generally have focused on distributive justice perceptions because there is usually a division of money between two parties. Studies also have tended to focus on the recipient's justice perceptions (cf. Handgraaf, van Dijk, Wilke, & Vermunt, 2003). Other forms of justice may come into play when there is an exchange of cash by one party for a nonfinancial resource by another party and when the offerer's justice perceptions are examined.

Justice researchers have suggested that receiving an unfavorable outcome often encourages the recipient to think about why the negative outcome was received (Wong & Weiner, 1981). This search process often leads the recipient to question the fairness of the procedure, as well as the source responsible for the outcome (cf. Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Lind & Tyler, 1988).

Research has widely supported the broad effect of outcome favorability on all four forms of justice. A meta-analysis by Cohen-Charash and Spector (2001) documented that outcome negativity has strong negative correlations with distributive and procedural justice judgments, although they failed to examine interpersonal and information justice perceptions. Colquitt et al. (2001) conducted another meta-analysis with all four forms of justice and found that outcome satisfaction moderately correlated with distributive, procedural, interpersonal, and informational justice perceptions.

In Web-based brokered ultimatum bargaining contexts, the intermediary is analogous to the authority figure because the intermediary conveys to the customer whether his or her bid is successful or unsuccessful. Supporting a link between offer rejection and justice perceptions, Humphrey et al. (2004) found that offer acceptance was significantly and positively related to all four forms of justice in a BUG context similar to that used in the present study.

Prior negotiation research has suggested that offer rejection also has the potential to impact other customer reactions. This literature documents that settlements providing mutual benefit to parties produce a number of other positive outcomes, including increased attraction toward the other party responsible for the outcome, and longer lasting settlements (cf. Pruitt, 1981; see also Lewicki, Barry, Minton, & Saunders, 2003). Applying these patterns to a BUG suggests that customers whose offers are rejected will respond more negatively to the intermediary who provided the outcome, and make it

less likely that the customer would continue to have a relationship with this intermediary. In support of these assertions, Humphrey et al. (2004) found that customers whose offers were rejected were less likely to reuse or recommend the system to others than customers whose offers were accepted.

Improving Reactions to Rejected Offers: The Role of Prior Experience and Explanations

Although Humphrey et al. (2004) found that offer rejection can negatively influence justice perceptions, recommendations, and repatronage of an online BUG, they did not investigate methods to possibly ameliorate these effects. We explore the impact that two different factors could have in mitigating negative reactions to rejected offers: prior experience and explanations.

Prior Experience

Online BUGs are a relatively new interaction medium. Novelty increases customers' feelings of uncertainty and challenges them to expend greater effort, thus decreasing a novel participant's favorable disposition. On the other hand, prior experience—and indeed mere exposure—introduces a positivity bias (Zajonc, 1968), as it induces a level of comfort and certainty that evoke a more positive disposition.

Familiarity may be particularly important because of the leanness of the online exchange. The customer has few interaction options with the electronic intermediary. He or she cannot ask detailed parameters of the commodity being bid (beyond, for example, a simple one- to five-star rating of a hotel room and a basic geographic location), nor can he or she step out of a preset menu to ask for advice or clarification.

This paucity of options and information may frustrate an individual who is used to the richness of interpersonal interactions. Yet, for someone who is more familiar with this medium and its norms, particularly someone who has self-selected to use these online BUGs in the past, he or she may focus on the benefits of this lean medium as an efficient transaction in which he or she can lower both transaction costs and purchasing costs.

Furthermore, although customers may experience injustice when bids are rejected (Humphrey et al., 2004), those with multiple prior experiences are likely to have received both accepted and rejected offers in the past, which may make them less upset with a rejected bid in our study. This suggests an interaction between prior experience and outcome in which those with prior

experience respond less negatively to a rejected bid than would first-time users. Thus, as shown in Figure 1, we hypothesize the following:

Hypothesis 1 (Hypotheses 1a, 1b, 1c, and 1d). Customers with prior experience with brokered ultimatums will have more favorable justice perceptions—(a) procedural, (b) interpersonal, (c) informational, and (d) distributive—than will customers without prior experience.

Hypothesis 2a. Customers with prior experience with brokered ultimatums will be more likely to recommend the system to others than will customers without prior experience.

Hypothesis 2b. Customers with prior experience with brokered ultimatums will exhibit higher levels of repatronage than will customers without prior experience.

Hypothesis 3 (Hypotheses 3a, 3b, 3c, and 3d). The effects of offer rejection on customers' justice perceptions—(a) procedural, (b) interpersonal, (c) informational, and (d) distributive —will be less negative when a customer has prior experience with brokered ultimatums.

Hypothesis 4a. The effects of offer rejection on customer recommendations will be less negative when a customer has prior experience with brokered ultimatums.

Hypothesis 4b. The effects of offer rejection on repatronage behavior will be less negative when a customer has prior experience with brokered ultimatums.

Explanations

Customers who are seeking more context from this lean medium or who view their interactions as an opportunity to learn how to improve their bids should react favorably to the intermediary offering an explanation for the bid decision. Justice research generally has shown that providing an explanation for a decision has positive consequences (Bies & Shapiro, 1987; Bies, Shapiro, & Cummings, 1988; Daly & Geyer, 1994; Ployhart, Ryan, & Bennett, 1999).

There are two qualities to an explanation that are important. First, an explanation provides information so that participants can better understand why a decision occurred. That is, they can learn what causal factors are responsible for their outcome. Second, an explanation provides empathy, suggesting some amount of concern for the welfare of the recipient. Daft, Lengel, and Trevino (1987) showed that the communication medium must fit the message being conveyed; and that richer media are better for conveying equivocal messages, suggesting that lean media—such as online BUGs, which lack the interpersonal context—tend to lack empathy. Thus, providing customers with an empathetic explanation should enhance customer reactions.

Yet, as attribution theory (e.g., Kelley, 1973; Weiner, 1985) and fairness theory (Folger & Cropanzano, 1998, 2001) remind us, positive outcomes are different from negative outcomes, and explanations should be particularly important when the customer's bid has been rejected. Although people generally ascribe to a notion of control over themselves, attribution biases exist such that when negative events happen, people tend to blame the external environment, rather than themselves; yet when a positive event happens, people prefer an internal attribution (Ickes & Layden, 1978; Zuckerman, 1979). Thus, when a negative event happens to customers in an online BUG (i.e., a rejected bid), an explanation that allows people to attribute failure to external circumstances will be more important than when a positive event happens (i.e., an accepted bid).

Moreover, we suggest that an intermediary's explanation for bid decisions will prompt customers to consider "could," "should," and "would" counterfactuals. Folger and Cropanzano (1998, 2001) explained that *could counterfactuals* compare what the decision maker did to what he or she could have done; *should counterfactuals* compare what the decision maker did to what he or she should have done; whereas *would counterfactuals* compare the current state of well-being with what it would have been if another outcome had been received or another procedure followed. They argued that could and should concerns are less important when the outcome is perceived as favorable (which, by definition, would neutralize would concerns). In other words, if individuals cannot imagine how their situations would have been improved, there is no need for them to concentrate on could or should counterfactuals. Therefore, explanations that focus on could or should counterfactuals are only important when individuals receive unfavorable outcomes.

Although there is some empirical evidence that providing an explanation is equally beneficial when participants receive a favorable (selected) or an unfavorable (rejected) outcome (Gilliland, 1994), the majority of the research is consistent with attribution theory and fairness theory that shows an interaction between explanation provision and outcome favorability (e.g., Bies & Shapiro, 1988; Schaubroeck, May, & Brown, 1994), particularly when the explanation takes the form of an excuse. *Excuses* allow the

decision maker to deny full responsibility by attributing the decision to some external cause or mitigating circumstance. Justifications, on the other hand, deny any wrongdoing based on the decision maker's attempt to fulfill some sort of superordinate goal (Scott & Lyman, 1968).

Colquitt and Chertkoff (2002) found that providing an explanation in the form of an excuse had little effect on justice perceptions when an authority figure upheld a participant's judgment (i.e., a favorable outcome). Yet, when that authority figure rejected a participant's decision, providing an excuse explanation focused on the could and should increased judgments of both procedural and distributive fairness (Colquitt & Chertkoff, 2002). In support of these results, Shaw, Wild, and Colquitt (2003) conducted a metaanalytic review of the explanations literature and found that explanations were more beneficial when the outcome was unfavorable, particularly when the explanations were excuses. Therefore, we posit the following:

Hypothesis 5 (Hypotheses 5a, 5b, 5c, and 5d). The effects of offer rejection on customers' justice perceptions—(a) procedural, (b) interpersonal, (c) informational, and (d) distributive —will be less negative when an explanation in the form of an excuse is provided for the intermediary's final decision.

Hypothesis 6a. The effects of offer rejection on customer recommendations will be less negative when an explanation in the form of an excuse is provided for the intermediary's final decision.

Hypothesis 6b. The effects of offer rejection on repatronage behavior will be less negative when an explanation in the form of an excuse is provided for the intermediary's final decision.

Effects of Justice Perceptions on Recommendations and Repatronage

Finally, there is evidence that fairness perceptions lead to a number of different outcomes in brokered ultimatum contexts, including customer recommendations and repatronage behavior. For example, Blodgett, Granbois, and Walters (1993) found that a global measure of justice perceptions positively affected repatronage intentions and negatively affected negative word-of-mouth behavior. In a scenario study describing a customer returning a product to a store, Blodgett, Hill, and Tax (1997) demonstrated that encounters high in distributive justice (e.g., because the complainant was offered a full refund, rather than a 15% discount on a new purchase) and high in interactional justice (a construct reflecting elements of both

informational and interpersonal justice) had a positive effect on customer repatronage intentions and on customer recommendations to others.

Extrapolating from the meta-analytic studies of justice also provides support for these assertions. For example, if repatronage decisions are construed as the opposite of a job withdrawal behavior, we see that multiple forms of injustice lead to the decision to withdraw and not reuse the intermediary (cf. Colquitt et al., 2001). Most recently, Humphrey et al. (2004) examined the effects of justice perceptions utilizing a BUG similar to that used in the present study. They found that all four forms of justice perceptions related to both repatronage behavior and the customer's willingness to recommend the service to others. Consequently, we hypothesize the following:

Hypothesis 7 (Hypotheses 7a, 7b, 7c, and 7d). Customers' justice perceptions—(a) procedural, (b) interpersonal, (c) informational, and (d) distributive—will be related positively to customer recommendations and repatronage behaviors.

Method

Participants, Research Design, and Procedure

A total of 136 business undergraduates at a large, midwestern university participated in the present study. Mean participants' age was 21.3 years, and approximately 59% (80) were male. All of the students were recruited from an upper-level general management course, and they received course credit for their participation.

A 2×2 factorial design (Offer Outcome: offer accepted vs. rejected \times Explanation: no explanation vs. explanation) was employed. Participants were randomly assigned to one of the four conditions.

The experimental procedure was similar to that employed by Humphrey et al. (2004). When participants arrived, they first completed the prior experience measure. They then were informed that they would be helping to evaluate an online travel service similar to Priceline.com (named "Price-Fine.com") that was almost ready to begin operating nationally. The travel service had hired the researchers to evaluate its system so they could better understand how customers make decisions about purchasing goods and services over the Internet.

Specifically, the company was examining hotel bids that people make for rooms in different U.S. cities. Participants were told that they would be

taking a trip to a well-known vacation site (San Diego) with their significant others and that they would be making a bid on a hotel room with the understanding that they had \$500 in spending money that was needed to cover their expenses, including 2 nights at the hotel (the cost of traveling to San Diego was already covered). All leftover money could be spent on incidental expenses during the trip.

After reading the instructions, participants began the bidding stage of the study. They first received printed computer screen pages that provided the actual normative information used by a real intermediary indicating that the average retail price for a four-star hotel room in this area is between \$189.00 and \$249.00. Participants then wrote down their bids, which were then taken by the experimenter to be entered into the "expert system database" to determine whether the intermediary would accept their bids. The experimenter later returned with another printed computer screen informing participants whether the bids they submitted to the expert system were accepted or rejected. After the bidding process was finished, participants completed a questionnaire measuring justice perceptions, customer recommendations, and repatronage.

Manipulations

Bid acceptance. Participants whose bids were accepted received a response that read "Congratulations! Your offer price for a four-star hotel room in San Diego was accepted. See your complete hotel itinerary and receipt for your trip below." A listing of the hotel property and location was then provided to the participant. Participants whose bids were rejected received a response that read "Welcome back! We're sorry, but we could not find a hotel willing to accept your offer for a hotel room in the San Diego area."

Explanations. In conditions that did not include an explanation, participants simply read the acceptance or rejection response. In the explanation conditions, participants received additional information regarding the intermediary's decision.

As noted earlier. Shaw et al. (2003) found that excuses tend to be more beneficial than justifications. Because we are interested in how to improve customer reactions, our explanations provided causal accounts regarding the decision of the intermediary that focused primarily on external causes and mitigating circumstances. Specifically, in the acceptance condition, participants read the following explanation:

As you are aware, we have numerous hotel affiliations, which provide many hotel rooms per night. However, the availability of these rooms changes on a minute-to-minute basis as a result of other customers' actions. Because of the availability changes, bids that could be acceptable at some times are not acceptable at other times. Therefore, we are happy that we were able to provide a room at the price you have bid, as it was a function of both the level of your bid and room availability at that moment.

In the rejection condition, the last sentence was changed to the following:

Therefore, our inability to provide a room at the price you have bid is a function of both the level of your bid and room availability at that moment.

Given that the explanations involved some slight word alterations, it was necessary to ensure that the explanations were seen by the participants as equivalent in both their empathy and their information as to the causal factors responsible for the outcome. We examined the explanatory power and empathy of these explanations using 39 participants from a management class who were not included in the main study.

Each participant was provided with an overview of the bidding scenario and told that he or she had already bid on the room. These participants were then presented with one of the two verbatim responses (acceptance or rejection) from the intermediary, followed by the explanation that corresponded to their acceptance or rejection condition. They were then asked to rate the explanation on an empathy scale (Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; $\alpha = .84$ in our study) and to assess three causal responsibility questions: "How much responsibility do you feel PriceFine was taking for your success/failure in receiving a hotel room?"; "To what extent does PriceFine suggest that you are solely responsible for why you did (or did not) get a hotel room?"; and "To what extent does PriceFine suggest that other factors (i.e., not you) are responsible for why you did (or did not) get a hotel room?" The results of our test demonstrate that the explanations in the acceptance condition did not differ from the explanations in the rejection condition on either empathy (Ms = 2.48 and 2.54, respectively), t(37) = -0.25, ns; or on the responsibility items: acceptance condition, Ms = 3.05, 2.81, and 3.48, respectively; rejection condition, Ms = 2.72, 2.56, and 3.78, respectively; t(37) = 0.99, 0.78, and -1.07, respectively, all ns.

Measures

Prior experience. Prior to beginning the negotiation task, we measured whether participants had ever used Priceline.com, given that our structure

closely mimicked this online intermediary. Participants simply answered Yes or No to the question "Have you ever used Priceline.com?" Approximately 40% of the participants reported having used Priceline.com in the past.

Justice. Justice perceptions were measured with adapted versions of the scales developed and validated by Colquitt (2001). Procedural justice was measured with six items ($\alpha = .70$; e.g., "Have the bid procedures used accurate information?"). Interpersonal justice was measured with four items (α = .86; e.g., "Has the intermediary treated you in a polite manner?"). Informational justice was measured with five items ($\alpha = .76$; e.g., "Has the intermediary explained the procedures thoroughly?"). Distributive justice also was measured with five items ($\alpha = .89$; e.g., "Does the final decision reflect the effort you put into the transaction?").

Positive recommendations. Positive recommendations were measured with two items adapted from the consumer complaint literature (Blodgett et al., 1993, 1997). These items were "After this transaction, I would have no problem saying positive things about PriceFine.com to others," and "I would encourage friends and relatives to use PriceFine.com." The alpha level for this scale was .93.

Repatronage decision. After completing all of the other measures, participants were presented with the following: "Imagine that you have just found out that you have a friend who will be getting married in San Diego in 3 months. You will be taking your significant other with you, so you need to get a four-star hotel room for the event." Participants were then asked "Would you use PriceFine.com again?" Subjects chose either Yes or No, which was our measure of repatronage.

Results

The means, standard deviations, and intercorrelations for the variables of interest are presented in Table 1. We subjected participants' bids for the hotel room, the justice measures, and the customer recommendation measure to a $2 \times 2 \times 2$ MANOVA, which compared the bid acceptance and explanations manipulations along with our dichotomous measure of prior experience. Significant multivariate effects emerged for the offer acceptance manipulation, multivariate F(6, 122) = 13.30, p < .001, partial $\eta^2 = .40$; and whether the participant had prior experience with brokered ultimatums, multivariate F(6, 122) = 4.02, p < .001, partial $\eta^2 = .17$. The explanation manipulation did not exert a main effect, multivariate F(6, 122) = 0.24, p < .96, partial $\eta^2 = .01$; although it did interact with the offer acceptance manipulation, multivariate F(6, 122) = 2.81, p < .01 partial $\eta^2 = .12$. There were no other significant multivariate effects.

Table 1

Means and Intercorrelations

Variable	M	SD	1	2	3	4	5	6	7	8
1. Bid acceptance	0.51	0.50								
2. Enriched explanation	0.49	0.50	.01							
3. Prior experience	0.40	0.49	09	13	_					
4. Procedural justice	18.23	4.38	.19	03	.16	_				
5. Interpersonal justice	15.01	3.20	03	01	.19	.50	_			
6. Informational justice	17.95	3.74	.07	.06	.16	.48	.63	_		
7. Distributive justice	16.49	4.76	.52	06	.15	.54	.37	.53	_	
8. Recommend to others	5.97	2.01	.40	04	.26	.54	.52	.54	.65	_
9. Repatronage behavior	0.71	0.48	.31	.02	.20	.35	.32	.40	.53	.66

Note. n = 136, except n = 135 for previous use. Bid acceptance: 0 = rejected, 1 = accepted. Enriched explanation: 0 = no, 1 = yes. Prior experience: 0 = no, 1 = yes. Repatronage behavior: 0 = no, 1 = yes. Correlations $\geq .17$ are significant at p < .05, and those $\geq .26$ are significant at p < .01.

Table 2 presents the main effect means across our two manipulations and prior experience, and Table 3 presents the means from the Offer Acceptance × Explanation interaction. As can be seen in the tables, univariate follow-up ANOVAs reveal a number of significant differences. Beginning with the left third of Table 2, we see that the offer acceptance manipulation influenced two of our four justice measures. Accepted offers led to higher perceptions of procedural justice and distributive justice. As the last row of Table 2 reveals, accepted offers led to more positive recommendations of the system.

In addition, we used contingency analyses to examine the repatronage decision, as this measure was a dichotomous Yes/No decision. As expected, accepted offers led to a higher repatronage rate (59 of 70; 84.3%) than rejected offers (37 of 66; 56.1%), $\chi^2(1, N=136)=13.37$, p<.001. These results support Humphrey et al.'s (2004) findings.

Hypothesis Tests

The right third of Table 2 presents the main effect means for the prior experience variable. Hypotheses 1a through 1d proposed that prior experience would have a positive effect on all four justice measures. As can be seen in Table 2, this hypothesis received complete support, as all four forms of justice were more positive when customers had prior experience

Table 2

Main Effects as a Result of Experimental Manipulations and Prior Experience Measure

	Bid not Bid accept	Bid accepted	l <i>F</i> (1, 127) e	No explanation	Bid not Bid No Enriched No prior Prior accepted accepted $F(1, 127)$ explanation explanation $F(1, 127)$ experience $F(1, 127)$	F(1, 127)	No prior Prior experien	Prior experience	<i>E E</i> (1, 127)
Procedural justice	17.46	19.17	19.17 4.89*	18.39	18.23	0.43	17.60	19.03	3.41^{\dagger}
Interpersonal justice	15.19	14.95	0.17	15.08	15.05	0.00	14.50	15.64	4.02*
Informational justice	17.71	18.27	0.70	17.79	18.18	0.35	17.36	18.61	3.54^{\dagger}
Distributive justice	14.07	18.92	48.41 ***	16.66	16.33	0.22	15.61	17.38	6.48**
Recommend	5.24	6.84	25.71***	6.04	6.03	0.00	5.47	6.61	13.05***
intermediary to others									
N	64	69		69	64		42	54	

 $^{\dagger}p < .07. \ ^{*}p < .05. \ ^{**}p < .01. \ ^{***}p < .001.$

with brokered ultimatums. In addition, customer recommendations were more positive when customers had prior experience. Although not present in our table, our dichotomous measure of repatronage also was influenced by the experience measure: Those with prior experience reported a greater willingness to use the system again (44 of 54; 81.5%) relative to those who had no prior experience (51 of 81; 63.0%), $\chi^2(1, N=135)=5.55$, p<.05. These patterns provide complete support for Hypotheses 1a through 1d as well as Hypotheses 2a and 2b.

Regarding Hypotheses 3a through 3d and Hypotheses 4a and 4b, we had predicted that prior experience would interact with bid acceptance to influence both justice judgments and more distal customer outcomes. However, prior experience did not interact with bid acceptance or the explanations factor. Thus, this pair of hypotheses received no support.

However, the MANOVA results did yield a significant interaction between our explanations factor and offer acceptance or rejection. This interaction was expected and is relevant to our analysis of Hypotheses 5a through 5d as well as Hypotheses 6a and 6b. Hypotheses 5a through 5d predicted that the effects of offer rejections on justice perceptions would be less negative when an explanation is provided for the intermediary's decision. These patterns can be found in Table 3. Both the distributive justice and interpersonal justice measures were impacted, and the remaining justice measures (procedural and informational justice) also approached—though did not reach—statistical significance.

The patterns for distributive and interpersonal justice are presented in Figures 2 and 3, respectively. As can be seen in each figure, and as predicted by attribution theory and fairness theory, when participants' offers were rejected, the provision of an explanation lessened the negative impact. Both distributive and interpersonal justice judgments were greater when an enriched explanation was provided.

However, another pattern is evident as well. When offers were accepted, explanations appear to have had the opposite effect, as both distributive and interpersonal justice judgments were greater when no explanation was provided. In this case, participants preferred to hear nothing over an explanation as to why they were successful. The same patterns emerged for the procedural and informational justice measures, though these interactions only approached significance. Thus, Hypotheses 5a through 5d, related to the four justice measures, were generally supported.

Hypotheses 6a and 6b argued that the effects of offer rejection on customer recommendations and repatronage behavior, respectively, would be less negative when an explanation was provided for the final decision. As can be seen in Table 3, for the recommendations measure, the interaction is significant. Again, a plot of this interaction (see Figure 4) reveals a similar

Table 3

Cell Means for Bid Acceptance imes Enriched Explanation Interaction

	Bid rejected— B No explanation	Bid rejected— Enriched explanation	Bid accepted— No explanation	Bid accepted— Enriched explanation	F(1, 127)
Procedural justice	16.98	17.93	19.80	18.53	2.07
Interpersonal justice	14.56	15.81	15.61	14.29	5.12*
Informational justice	17.03	18.39	18.55	17.98	2.08
Distributive justice	13.10	15.03	20.21	17.63	10.50***
Recommend intermediary to others	4.87	5.61	7.22	6.45	5.77*
N	33	31	36	33	

p < .05. *** p < .001.

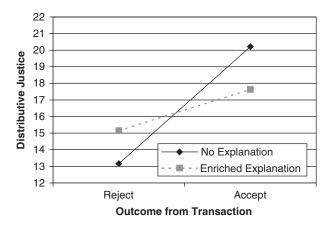


Figure 2. The Bid Acceptance × Explanation interaction on distributive justice judgments.

pattern. When offers were rejected, enriched explanations led to stronger intentions to recommend the system to others; but when offers were accepted, participants who received no explanation had stronger recommendation intentions than did those who received the enriched explanation. This finding supports Hypothesis 6a. However, Hypothesis 6b did not receive support, as explanations and acceptances did not influence repatronage rates interactively.

Our final hypothesis predicted that customer justice perceptions would be related positively to customer outcomes. To test this hypothesis, we ran a hierarchical ordinary least squares (OLS) and logistic regression analysis

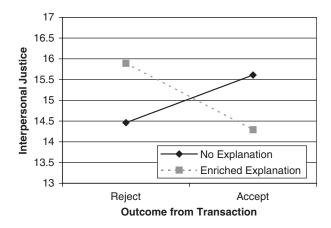


Figure 3. The Bid Acceptance × Explanation interaction on interpersonal justice judgments.

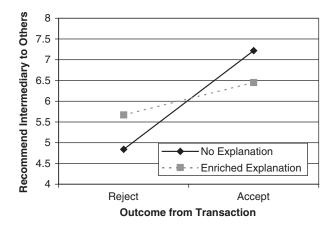


Figure 4. The Bid Acceptance × Explanation interaction on customer recommendations.

on the recommendations and repatronage measure, respectively. Results indicate that justice perceptions explained a significant 51% of the variance in customer recommendations, and a significant 39% of the variance in repatronage behavior (see Table 4). Distributive justice perceptions exhibited significant unique effects on both customer recommendations (β = .40, p < .01) and repatronage behavior (β = .25, p < .01); while procedural justice (β = .23, p < .05), interpersonal justice (β = .20, p < .01), and informational justice (β = .15, p < .05) exhibited significant unique effects on customer recommendations. These results also support Humphrey et al.'s (2004) findings. This provides modest support for Hypothesis 7 (Hypotheses 7a through 7d).

Discussion

The present study used an experimental simulation to examine how Webbased BUGs influence customer reactions. The one prior study in this area (Humphrey et al., 2004) revealed that rejected bids in such structures had a number of negative effects on customers, such as reduced justice judgments, less positive recommendations, and less willingness to use the service again (repatronage). Humphrey et al. also found that customers' reactions were related to one another, as justice perceptions significantly affected repatronage behavior and customer recommendations.

Our study replicated these findings, and the unique contribution offered by our study is the investigation of how to improve customer reactions, particularly in the face of receiving negative outcomes. Obviously, one cannot simply have intermediaries accept every offer, as rejecting unprofitable low bids is necessary for an intermediary to survive. Thus, understanding how to ameliorate negative reactions to rejections is critical.

Benefits of Prior Experience

The prior experience factor had the most widespread effects in our study, positively influencing all four justice judgments, as well as customers' propensity to recommend the BUG to a friend or to reuse it themselves. These results are consistent with our familiarity arguments for this new, low-context medium.

BUGs present customers with a high degree of uncertainty, which is exacerbated by an online format that provides for only lean information exchanges. Exposure to this novel task appears to induce the positivity bias that Zajonc (1968) described, as familiarity here may focus customers on the positive aspects of this low-context system as an efficient exchange mechanism that can decrease customers' purchasing costs and transaction costs. Based on these results, it might be interesting to parse out which benefits are more salient to customers (reduced purchasing costs or reduced transaction costs), how cost saliency relates to familiarity, and whether this saliency differs depending on the nature of the asset being bid (expensive vs. inexpensive, used for pleasure vs. business, etc.).

The more favorable reactions occurring for those with prior experience with brokered ultimatums leads to an important practical suggestion for real-world online BUGs. In short, these electronic intermediaries would benefit if they let parties try their system so that they can get familiar with it. We see at least two ways that brokered intermediaries can accomplish this. First, they could set up a hypothetical bidding room that allows parties to get more familiar with exactly how the system works, before having to risk their own money. For instance, the intermediary could use data from an already past date and allow people to make bids for hypothetical hotel rooms on this date. Then, the intermediary could give them feedback on whether their bid would have been accepted or rejected on that day, given the actual data they had for accepted and rejected offers on that day.

Allowing novices to gain familiarity with the system might lead them to respond more favorably when they use the system for real, which also could lead them to positively promote the system to others and increase the likelihood that they would reuse the system in the future. One tension here is that while familiarity enhanced recommendations and reuse, it also led customers to lower their bids. Those who had prior experience with Priceline offered lower amounts for the hotel room than those with no experience (Ms = \$136.56 and \$154.74, respectively), F(1, 124) = 9.42, p < .01. However, if the profitability of these intermediaries comes from high volumes

(i.e., numbers of accepted bids for rooms) rather than high bids, this familiarity would, in the long run, be a profit-enhancing strategy.

Prior experience, however, is not particularly helpful when outcomes are negative (as our interaction hypotheses for experience—that is, Hypotheses 3 and 4—were not supported). We suggest two explanations. First, recall our argument for these hypotheses, that prior experience allows customers to learn so that even though they may experience rejection, they have learned valuable information about how to bid successfully in the future, which should ease their feelings of injustice. It appears, however, that information scarcity in this low-context medium does not compel customers to reason that although they were rejected, they learned valuable information for the future. They may have learned information about how to bid, but they do not appear to perceive this benefit. Second, it may be that those customers with prior experience—whom we have argued likely view the electronic BUG as an efficient exchange mechanism to decrease their purchasing costs and transaction costs—are frustrated by a bid rejection because it implies that they must now increase their transaction costs (i.e., time/effort to rebid) and purchasing costs (i.e., bid higher).

Curious Role of Explanations

As communication, attribution, and justice literature would suggest, providing an enriched explanation for the intermediary's decision should add information and empathy to this low-context exchange and hence enhance customer reactions to a negative outcome (or an equivocal message), particularly when it takes the form of an excuse. Our results provide general support for these theories, as our explanation manipulation exerted interactive effects on two forms of justice and on the recommendations measure. As predicted by the theory, when bids were rejected, providing explanations in the form of an excuse enhanced justice judgments (particularly ratings of interpersonal and distributive justice) and made customers more likely to recommend the BUG to others.

However, our results also suggest some interesting effects related to when participants receive positive outcomes. Here, we see that providing enriched explanations for accepted bids appears to decrease distributive and interpersonal justice judgments, as well as customer recommendations. We can suggest several reasons for this. First, recall Folger and Cropanzano's (1998, 2001) arguments that explanations are less important when a positive outcome is received because little counterfactual thinking occurs when the party cannot imagine a situation in which his or her outcome would be improved. In other words, would counterfactuals are not activated, and thus subsequent counterfactuals (i.e., could and should counterfactuals) remain dormant.

On the contrary, our testing of Folger and Cropanzano's (1998, 2001) theory in the domain of positive outcomes suggests that we modify it to assert that explanations do prompt could, should, and would counterfactuals, with negative consequences. An explanation with a positive outcome (i.e., bid acceptance) may trigger customers to think about what lower bids they could or should have made and they still would have gotten the room. That is, with positive outcomes, explanations may trigger counterfactual thinking that produces a *winner's curse* (Bazerman, 2002), a feeling that if the bid was accepted (i.e., the customer "won"), then the bid must have been too high.

Second, as attribution biases suggest, people like to make internal attributions for success (e.g., Ickes & Layden, 1978; Weiner, 1985; Zuckerman, 1979). Thus, an explanation that mentions how room availability changes from moment to moment can suggest external sources (e.g., other bidders, number of rooms, luck), rather than skill, played a central role in customers' outcomes. So, ironically when positive outcomes are accompanied by enriched explanations that include reference to external causal factors (i.e., an excuse), people are less able to succumb to their natural attribution biases, and hence feel less positive about the whole experience.

Collectively, these examples suggest that explanations are a double-edged sword: They can enhance fairness judgments and customer reactions (e.g., our recommendations measure) when negative outcomes are received, but they can also reduce those same judgments when positive outcomes are received. This perspective actually would be consistent with some other work in the justice literature. For instance, Schroth and Shah (2000) found that fair procedures resulted in lower self-esteem ratings than did unfair procedures when the outcome was negative, but that fair procedures led to higher self-esteem ratings than did unfair procedures when the outcome was positive.

Similar to their findings for self-esteem, perhaps explanations in the form of excuses for positive outcomes keep parties from being able to take the credit for the good outcome, thereby negatively affecting judgments of self-esteem, self-efficacy, or beliefs that one is a competent or savvy negotiator. Thus, perhaps the best recommendation we can make is to use enriched explanations in the form of excuses when negative outcomes are received, while forgoing explanations altogether when positive outcomes are received.

We were surprised that the interactive effects of outcome and explanation did not also affect informational and procedural justice (although the direction of the effects was as predicted, the effects did not reach traditional levels of significance). We believe that one explanation for this stems from

the timing of our explanation. In our study, we provided the enriched explanations after participants had received their outcomes. In hindsight, it may have been more effective to provide explanations before the outcomes were determined. By providing the explanations earlier, there should be less suspicion by participants that the explanation was developed simply to make them feel better about the outcome.

Finally, although the four forms of justice each positively influenced customer recommendations, only the distributive justice measure was a significant predictor of repatronage (see Table 4). This may simply be an example of how it is more difficult to predict behaviors than attitudes. Nevertheless, the unique predictive effects of distributive justice in the present study, along with the results found in the correlations of Humphrey et al. (2004), certainly document that justice scholars should not ignore distributive justice when it comes to predicting some customer reactions.

Limitations and Directions for Future Research

As with any study, we must caution researchers on the generalizability of our findings. Our testing of hypotheses using a controlled laboratory context and a simulation methodology raises concerns that the participants were not able to achieve psychological realism (Berkowitz & Donnerstein, 1982) during this study and that their results would not mimic results obtained from the field. However, we believe that there are several reasons why this method for testing our hypotheses was appropriate.

First, testing our hypotheses in a laboratory setting allowed us to manipulate conditions in a way that would not be possible in the real world. For example, we were able to accept or reject the customer's offer, regardless of the actual level of the bid. If we were to have tested these hypotheses in the field, the decision to accept or reject the bid would have been a function of the level of bid, thereby introducing a confound into the study; for instance, the customer's distributive justice perceptions were not a function of getting the bid accepted, but rather cognitive dissonance increasing justice perceptions and satisfaction because the customer bid a high amount of

Second, there is a long history of capturing participants' economic and negotiation behaviors in laboratory settings (cf. Bazerman, Curhan, Moore, & Valley, 2000; Pruitt, 1998). In fact, this research has acted as the foundation of much of the economic and negotiation literature. In addition, research has demonstrated that the findings from laboratory studies are highly comparable to results that are obtained from field settings (Anderson, Lindsay, & Bushman, 1999). Thus, these issues mitigate some of our

Table 4

Relationship Between Justice Measures, Customer Recommendations, and Repatronage Behavior

		Customer recommendations	suc		Repatronage behavior	
Independent variable	β	ΔR^2	ΔF	В	Nagelkerke ΔR^2	$\Delta\chi^2$
Procedural justice Interpersonal justice	.14 [†] .22.	.53***	37.09***	.02	.42**	47.40***
Informational justice Distributive justice	.11.			.09 ***27		

Note. N = 136. $^{\dagger}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

concerns as to whether findings obtained from the laboratory context will differ from results obtained in a field setting.

Third, although the task was not completed online, our materials closely replicated actual Web pages used at Priceline. This was done purposely in an attempt to mimic real-world settings. In addition, among users of electronic intermediaries such as Priceline, significant percentages are of the same age and educational level as our participants. Therefore, our participant population, if not completely representative of the users of electronic intermediaries, provided a comparable sample. However, we realize that this is an important shortcoming of our study, and we hope that future work can make the bidding process a completely electronic transaction (rather than our more simplistic game) in an effort to increase realism. We also hope that we or other researchers can build ties with electronic intermediaries that are currently operating in an effort to obtain data on customer behaviors.

In addition to generalizability issues, there are several other limitations of the present study that warrant further investigation. For one thing, as the task utilized in this study was fashioned after Priceline, we focused only on one type of BUG. As noted in the introduction, there are other electronic intermediaries (e.g., Hotwire.com) that use an ultimatum structure to facilitate transactions between customers and vendors. However, unlike Priceline, Hotwire makes the initial offer for a hotel room, flight, rental car, and so forth. The customer then accepts or rejects the offer. Future research must investigate how customer behaviors and attitudes are affected in these types of contexts, as it is unclear whether organizational justice would play as significant a role when the customer is given more control over the system. Taken together, each of these steps will allow researchers to better understand and predict behavior within the BUG paradigm. It also will allow intermediaries to apply the gained knowledge in ways that may help to sustain their survival over time.

Also, because we were interested in how to improve customer reactions, our explanations focused primarily on providing an excuse. It would be interesting to determine whether the same interactive effects would appear if the explanation provided justification, rather than an excuse. As noted earlier, such explanations tend to reference internal causal factors, allowing the customer to succumb to his or her natural attribution biases and perhaps leading to more rather than less positive feelings regarding positive outcomes. It may be that the best strategy for the service provider would be to include excuses when customers' offers are rejected and justifications when offers are accepted.

In addition, although we found significant effects regarding prior experience and repatronage, both were examined as dichotomous, rather than continuous variables. Researchers have noted that dichotomizing a conceptually continuous variable constrains effect sizes by lowering statistical power (Aguinis, 1995). While low power only strengthens conclusions regarding the hypotheses that were supported, it may contribute to the nonsignificant findings regarding prior experience.

In addition, regarding prior experience, there may be a level of familiarity necessary with this low-context communication form in order to focus customers on the benefits of online BUGs, as suggested by research on organizational learning curves (e.g., Argote, 1993; Argote, Insko, & Yovetich, 1995). Therefore, future research would benefit from examining prior experience and repatronage as continuous variables. For example, prior experience could be measured by asking "How many times have you used Priceline.com?" With more precise measurement, researchers may find more consistent effects for prior experience, particularly as a moderator of the relationship between offer rejection and our outcome variables (i.e., Hypotheses 3 and 4).

Measurement of prior experience also could be improved by asking participants whether their experiences were positive or negative. For example, the effects of prior experience on justice judgments, customer recommendations, and repatronage may be significantly more positive when an individual has had a higher percentage of positive experiences in the past.

It is also possible that prior experience acted merely as a proxy variable, influencing customers' levels of self-efficacy, which then affected reactions. For example, prior experience may allow customers to learn valuable information about how to bid successfully in the future, raising feelings of self-efficacy. Researchers have shown that this impacts motivation (Quiñones, 1995) and performance (Stajkovic & Luthans, 1998) positively.

However, we found that self-efficacy, which was measured using a 10-item scale (α = .80) adapted from Quiñones, failed to mediate the effects of prior experience on any of our outcome variables. In addition, self-efficacy failed to exhibit any significant interactive effects with either offer rejection or prior experience. This may have been a result of a number of factors. For one thing, the fact that no one has really performed a task like the one utilized in this study may have minimized the relevance of self-efficacy. If anything, high levels of self-efficacy may have reflected an overconfidence bias, containing significant amounts of error variance. Consequently, we feel that familiarity, which is a more broad-based measure, was more appropriate in this study.

Another option would be to manipulate prior experience, rather than measure it. For example, in one condition, participants could be given accurate information, which would allow them to determine what types of offers are optimal. In a second condition, participants would be given information at random, which would make it impossible to determine an

optimal approach to bidding. This would allow researchers to determine whether individuals who learn how to bid through their prior experience view rejection as less negative, rather than individuals who learn nothing, which would help to explain the nonsignificant findings regarding our interaction hypotheses (Hypotheses 3 and 4).

Self-efficacy also may play a more significant role when customers are able to gain knowledge of how to efficiently and effectively interact with the intermediary. This would also allow researchers to better determine the direction of the relationship between prior experience and justice perceptions, which was impossible to determine in the present study.

In addition to examining variables such as repatronage through selfreport, future research would benefit from utilizing more behavioral measures of the variables examined in this study. For example, after finishing the experiment, participants could be given another travel assignment, along with several choices of service providers (e.g., PriceFine, Hotwire, Expedia, etc.). Repatronage could be measured by examining whether participants continued to select PriceFine as the service provider. Similar methods could be used to measure positive recommendations. For instance, after finishing the experiment, participants could be given an e-mail from one of their close friends asking whether he or she could recommend one of several service providers for their travel needs, including PriceFine. This would further support the practical implications of our results for service providers' bottom lines.

Finally, future research would benefit from examining certain individual differences. In particular, research has shown that extraversion, agreeableness, and cognitive ability play a role in bargaining contexts (Barry & Friedman, 1998). Although the effects of individual differences have not been examined in BUG contexts in which there is no verbal interaction, agreeableness and cognitive ability still may be influential. For example, agreeable individuals tend to be trusting, flexible, and cooperative (Barrick & Mount, 1991). Given their tendencies, agreeable customers may be less likely to react negatively to a rejected offer, particularly when an explanation in the form of an excuse is provided.

Cognitive ability also may play a role, particularly when customers have used the system before. Because cognitive ability predicts an individual's learning ability (Jensen, 1986), customers high in cognitive ability may be better able to learn valuable information about how to bid successfully through their prior experiences, which, as noted earlier, may then affect their reactions to rejected or accepted bids.

Online BUGs are a novel exchange medium that demonstrates our ambivalence with new technologies. On the one hand, their lean context allows for efficient exchange, decreasing customers' transaction costs and purchasing costs (since vendors can sell off excess capacity cheaply). On the other hand, the sparse information conveyed by this new medium decreases a customer's certainty and comfort. Two solutions emerge to this dilemma. The first is to familiarize customers with the medium, as prior experience had a main effect on justice judgments, tendency to recommend, and repatronage. The second is to add context via an enriched explanation in the form of an excuse, but only when bids are rejected.

For rejected bids, explanations enhanced distributive and information justice as well as the tendency to recommend the system to others; whereas for accepted bids, explanations had the opposite effect. Thus, explanations appear to trigger counterfactual thinking, which with negative outcomes allows customers to learn from their experiences as well as attribute some fault to external circumstances. Yet, for positive outcomes, explanations may trigger counterfactual thinking that leads to winner's curse. Thus, in some situations, following the old adage "silence is golden" may be the best strategy.

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