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*Journal of Service Research* 2013 16: 202 originally published online 21 December 2012
DOI: 10.1177/1094670512468330

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What is This?
Designing Service Guarantees With Construal Fit: Effects of Temporal Distance on Consumer Responses to Service Guarantees

Liyin Jin¹ and Yanqun He¹

Abstract
This article examines the influence of temporal distance on consumer responses to different types of service guarantees. Four studies revealed that the effectiveness of service guarantees depends on whether their elements match the time frame of consumer purchase decisions. Full-satisfaction guarantees more strongly influence decisions in the distant future, while attribute-specific guarantees more strongly influence decisions in the near future. Combined guarantees are as effective as attribute-specific guarantees for temporally close consumer decisions, but less effective than full-satisfaction guarantees for temporally distant decisions. Attribute-specific guarantees that are easy to invoke are more persuasive for purchases in the near future, while full-satisfaction guarantees with high compensation are more effective for purchases in the distant future. The finding that the construal fit between guarantee elements and the purchase time frame significantly enhances a guarantee’s effectiveness contributes to the service literature by identifying the time-contingent effects of service guarantees. Service firms can improve a guarantee’s effectiveness by ensuring that its scope, compensation level, and invocation process match the consumer’s purchase time frame.

Keywords
service guarantee, temporal distance, construal levels, construal fit

Introduction
Consider the situation in which a consumer who plans to travel in 2 days is evaluating package tour offerings and the associated service guarantees provided by two travel agencies. One agency offers a full-satisfaction guarantee that promises that consumers will be compensated if they experience any dissatisfaction with the services offered. In contrast, the second agency offers an attribute-specific guarantee that explicitly specifies the guaranteed services, such as the friendliness of the tour guide, cleanliness of the room, and transportation comfort. How might the different scopes of guarantees provided by the two agencies influence the consumer’s choice? Consider the alternative situation in which the consumer plans to travel in 6 months rather than in 2 days. How might the response to the same service guarantees differ? Moreover, one service guarantee might provide limited compensation through a process that is easy to invoke, whereas another might provide substantially more compensation through a process that is difficult to invoke. How would these different configurations of compensation level and difficulty in enforcing the guarantee affect the consumer’s attitude toward these guarantees? Our current knowledge of and practices in service guarantees cannot provide satisfactory answers to these questions.

This article addresses these issues from a new perspective that has the potential to improve the effectiveness of service guarantees. Based on research on psychological distance (Trope, Liberman, and Wakslak 2007) and construal fit (Higgins 2000), we propose that attribute-specific guarantees more strongly influence consumption in the near future because they focus on specific, subordinate, and incidental features of a service promise (McCollough and Gremler 2004), which enhances the construal fit between the close temporal distance (e.g., 2 days) and the low-construal levels associated with this type of guarantee. In contrast, because a full-satisfaction guarantee is represented at a higher construal level, it more strongly influences consumer service evaluations and purchase intentions for consumption in the distant future (e.g., 6 months).

In addition, we propose that the feasibility-oriented invocation process exerts a greater influence on consumer evaluations and purchase intentions for consumption in the near future, whereas the desirability-oriented compensation level exerts a greater
influence for consumption in the distant future. Given that a firm’s promises of compensation level and the difficulty of the invocation process are not independent of the scope of the guarantee, we further propose that there might be a three-way interaction of construal fit for these variables.

Four studies tested the research hypotheses. Study 1 found that full-satisfaction guarantees were associated with greater perceived usefulness compared to attribute-specific guarantees, and consequently, produced higher consumer expectations of service quality and purchase intentions for distant future consumption compared to near future consumption due to the construal fit. Study 2 further examined the interplay between the temporal distance of the decision and the construal levels of different guarantee scopes by examining the effects of a combined guarantee that mixes the wide scope of a full-satisfaction guarantee with the specific performance promises of an attribute-specific guarantee. Study 3 investigated a potential confounding effect due to differences in the wording of service guarantees. Study 4 extended the research by investigating the interaction of compensation level and difficulty of the invocation process with the scope of the guarantee and found that service guarantee effectiveness depended not only on the fit between the decision’s temporal distance, and the scope of the guarantee but also on the extent to which the service guarantee as a whole matched the time frame for consumer purchase decisions.

Theoretical Framework and Hypothesis Development

Temporal Distance and Construal Levels

Temporal distance refers to the period between the time that a decision is made and the time of the future event (Gilovich and Medvec 1993). Many studies have found that temporal distance influences judgments and decisions. Construal Level Theory (CLT; Liberman and Trope 1998; Trope and Liberman 2000) proposes that temporal distance influences individuals’ responses to future events by modifying their mental representations of the events. More specifically, this theory posits that distant future events are construed as abstract, primary, and global aspects that center on why the event needs to be done (i.e., high-level construals), whereas near future events are construed as concrete, secondary, and local aspects, which center on how to do the event (i.e., low-level construals).

CLT studies that have examined consumer evaluations of events with different time frames have demonstrated that temporal distance affects the attractiveness of an option by increasing the value associated with higher level construals of the option and decreasing the value of lower level construals of the option. For events in the near future, the lower level value of an option is viewed as more attractive, while the higher level value of an option is regarded as more attractive for events in the distant future (see Trope, Liberman, and Wakslak 2007 for a review).

For service guarantees, a full-satisfaction promise that assures the performance of all aspects of the service offers the widest scope (Hart 1998). The promise is context-independent and emphasizes the global experience of the service (e.g., 100% Satisfaction Guaranteed!). Thus, the construal level associated with full-satisfaction guarantees is a more abstract and higher level mental representation. In contrast, an attribute-specific guarantee explicitly identifies what is covered (McDougall, Levesque, and VanderPlaat 1998; Wirtz and Kum 2001) and emphasizes concrete procedures for achieving satisfaction. The peripheral aspects of service promises become the central focus when consumers evaluate service expectations, and attribute-specific guarantees are thus represented at lower construal levels. According to CLT, one can expect that consumer responses to full-satisfaction and attribute-specific guarantees will differ for temporally near versus distant purchases.

The Effects of Construal Fit on Judgment

Construal fit theory claims that an external stimulus exerts the greatest influence when it fits the consumers’ mind-set (Higgins 2000; Higgins et al., 2003). For instance, promotional messages are more persuasive when their frames fit consumers’ regulatory focus (Lee and Aaker 2004) and when the type of message (comparative vs. noncomparative) matches consumers’ mental representation of information processing (analytical vs. imagery-based; Thompson and Hamilton 2006). In relation to temporal distance, a recent study by Nenkov (2012) also demonstrated that the persuasive impact of messages could be maximized when their framing was matched to where target consumers were in their decision-making process at the time they evaluate the message. In addition, Thomas, Chandran, and Trope (2007) found that central information at a higher level, such as a feature upgrade, was viewed as more important and more strongly influenced consumer purchase intentions in the distant future, whereas peripheral information at a lower level, such as a discount coupon, was more relevant and more strongly influenced purchase intentions in the near future due to the fit between the product information and consumers’ mind-set.

Research has found that construal fit increases individuals’ engagement in what they are doing (Avnet and Higgins 2003). As a result, they are more likely to consider and rely on stimulus information that is consistent with their mental representation states (Petty and Wegener 1998). For instance, Nussbaum, Trope, and Liberman (2003) found that increasing the psychological distance from a future situation increased the probability that predictions about the situation would be based on implications of high-level rather than low-level construals. In other words, construal fit implies that information at high construal levels promotes confidence in predictions for distant future events while information at low construal levels promotes confidence in predictions for events in the near future. Recent research has shown that people perceive different social distances for close others and for distant others, and the construal fit between such social distance and temporal distance affects their subsequent judgment. For instance, Zhao and Xie (2011) find that close others do not always have greater impact than distant others in shifting preferences. Instead,
recommendations from close others are more influential when people make decisions for near future consumption, whereas recommendations from distant others are more influential than those from close others when people make decisions for distant future consumption because others’ recommendation, as a kind of persuasive message, is perceived to be more relevant when there is a construal fit between the social and temporal distances. That is, people perceive an external stimulus as more useful for their decision making when they experience a construal fit.

Because full-satisfaction guarantees are construed as more abstract and represented at higher construal levels, we predicted that consumers would perceive full guarantees as more useful for evaluating temporally distant service purchases because they increase confidence in prediction of service quality. Similarly, due to the construal fit experienced, consumers would find attribute-specific guarantees more useful for service purchases in the near future. Thus, we propose that:

**Hypothesis 1:** Full-satisfaction guarantees will increase the level of perceived usefulness of the guarantee for purchase decisions in the distant future compared to the near future, while attribute-specific guarantees will increase the level of perceived usefulness of the guarantee for purchase decisions in the near future compared to the distant future.

Recent research also provides evidence that construal fit enhances a target’s perceived value (Higgins et al. 2003), attitudes toward a brand (Labroo and Lee 2006; Lee and Aaker 2004; Wan, Hong, and Sterntahl 2009), and purchase intentions (Thomas, Chandran, and Trope 2007) because this type of experience changes the persuasiveness of the message received, which in turn influences consumer judgment (Avnet and Higgins 2003). As a result, when a message presents a compelling argument, construal fit tends to promote more favorable evaluations of a target object (Lee, Keller, and Sterntahl 2010).

Service guarantees identify what consumers can expect from a service and what the company will do to rectify the situation if the service does not meet expectations (Ostrom and Hart 2000). Consequently, because service guarantees often emphasize the compelling and attractive aspects of a service to influence consumer evaluations of service quality and motivate service purchase, full-satisfaction guarantees with persuasive messages at high construal levels should produce more favorable evaluations of guaranteed services when the purchase decision is temporally distant due to construal fit. Similarly, attribute-specific guarantees with persuasive messages at low construal levels should stimulate more favorable evaluations for decisions in the near future.

Because expected service quality and purchase intentions are the two primary measures used to evaluate service offerings (Ostrom and Hart 2000), we propose that:

**Hypothesis 2:** Full-satisfaction guarantees will increase levels of (a) expected service quality and (b) purchase intentions in the distant future compared to the near future, while attribute-specific guarantees will increase levels of (a) expected service quality and (b) purchase intentions in the near future compared to the distant future.

Because the quality of most services cannot be easily evaluated, consumers often find it difficult to choose among various service providers, and their pre-purchase expectations and purchase intentions are often based on extrinsic cues such as service guarantees (Bittner 1992). Wirtz and Kum (2000) found that providing a guarantee significantly improved consumer evaluations of service quality for reputable but not outstanding service providers because the guarantee was perceived as a useful signal of service quality. However, outstanding service firms might not need service guarantees because their reputation already serves as a reliable indicator of service quality and the guarantee adds no new or useful information. In other words, the extent to which service guarantees enhance consumer evaluations and purchase intentions depends on the extent to which they contribute additional, useful information regarding service quality.

In addition, recent research has documented that the effect of the construal fit between a persuasive message and the purchase time frame on consumer product evaluation is mediated by the perceived usefulness of the message (Zhao and Xie 2011). Based on these arguments, we expected that the perceived usefulness of the service guarantee would play a mediating role. Full-satisfaction guarantees that match the high construal levels of a temporally distant purchase would thus be perceived as more useful for assessing service quality and subsequent purchase intentions, whereas attribute-specific guarantees that are perceived as more useful for more immediate purchases would result in higher expectations of service quality and purchase intentions.

**Hypothesis 3:** The perceived usefulness of a guarantee mediates the effects of the scope of the guarantee and decision time frame on consumer evaluations of service.

**Study 1: Temporal Distance and the Scope of the Guarantee**

Study 1 tested the above hypotheses. We manipulated the scope of the service guarantee (full-satisfaction or attribute-specific) and predicted that the full-satisfaction guarantee would be more persuasive for purchase decisions in the distant future compared to the near future, while the attribute-specific guarantee would be more persuasive for decisions in the near future compared to the distant future.

**Method**

A total of 145 Master of Business Administration (MBA) students (73 females, 72 males) from a major university in China participated in this study for partial course credit. The average age was 27.50 years. The participants self-reported that their English was at ordinary levels, and 70.30% of them had
consumption experience for English language training services. The study was a 2 (temporal distance: near vs. distant) \( \times 2 \) (scope of guarantee: full-satisfaction vs. attribute-specific) between-subjects design.

We manipulated temporal distance (an event for tomorrow vs. 1 year later; Trope and Liberman 2003) when giving instructions to participants. Specifically, participants were asked to imagine themselves attending a foreign-language training program tomorrow (temporally near) or 1 year later (temporally far). In terms of the scope of the guarantee, we manipulated a full-satisfaction guarantee by stating that “If you are not fully satisfied with our training program, you can quit the program at any time, and we will return the tuition fee for unfinished classes.” Similarly, we designed an attribute-specific guarantee by saying that “If you are not satisfied with the following aspects of our training program, you can quit the program at any time, and we will return the tuition fee for unfinished classes.”

To determine the attributes that are important to customers when evaluating educational services, we conducted 10 in-depth interviews with local education firms and their customers. These interviews generated a list of seven attributes that consumers considered important. We then conducted a retest inviting an independent sample of 20 students to evaluate the appropriateness of the service guarantees and to rank the attributes according to their importance. For simplicity and succinctness, we chose the five most important attributes (including the punctuality and consistency of the instructors, training contents, and comfortable learning environment) as the specific guarantee components in our manipulation (see Appendix A for details). In this study, we did not provide explicit information about compensation and the invocation process. Instead, we controlled them for both scope conditions by stating: “For more information about our guarantee, please call our service hotline.”

Participants were randomly assigned to one of the four conditions, which instructed them that they were going to attend a foreign-language training program either the following day or 1 year later. After a brief introduction to the training firm, participants were presented with a poster describing the service guarantee with either a full-satisfaction or an attribute-specific scope design. Participants were instructed to review the contents of the guarantee carefully and then to indicate their overall service quality of the training firm, and to indicate their purchase intention to next time you need the training service, how likely will you be to choose this firm? To capture the perceived usefulness of the service guarantee, we asked the participants to indicate how useful, attractive, and persuasive they thought the given service guarantees were. Both questions were based on 5-point scales (1 = not at all, 5 = very much).

Because the experiment took place in China, we used a Chinese version of the questionnaire. The commonly employed translation/back translation procedure was followed to ensure the accuracy of the translation (Sperber, Develis, and Boehlerke 1994).

**Results and Discussion**

**Manipulation Check**

For a manipulation check, participants were asked to indicate the extent to which they thought the service guarantee was abstract or concrete on a 5-point rating scale anchored at 1 = very concrete and 5 = very abstract. Participants in the full-satisfaction condition reported a significantly higher mean value of perceived abstraction (\( M = 3.83 \)) compared to the attribute-specific guarantee condition (\( M = 3.22; t(143) = 3.29, p < .01 \)), suggesting that the manipulation of the scope of the guarantee was successful.

**Hypothesis testing.** The data show that the measurements of perceived usefulness of the service guarantee (\( \alpha = .74 \)), expected service quality (\( \alpha = .72 \)), and purchase intention (\( \alpha = .85 \)) have acceptable reliability. Thus, the items were summed to form one index for each dependent variable for further analysis.

Consistent with Hypothesis 1, an analysis of variance (ANOVA) of perceived usefulness yielded a two-way interaction between the guarantee scope and temporal distance, \( F(1, 141) = 14.54, p < .001 \), whereas the main effects of guarantee scope, \( F(1, 141) = .18, p = .67 \), and temporal distance, \( F(1, 141) = .62, p = .43 \), were not significant. Specifically, the full-satisfaction guarantee resulted in a higher value of perceived usefulness for distant future decisions (\( M_{\text{distant}} = 3.25 \)) than that for near future decisions (\( M_{\text{near}} = 2.83 \)). The difference was significant, \( t(70) = 2.29, p = .03 \). In contrast, the attribute-specific guarantee resulted in a higher value of perceived usefulness for near future decisions (\( M_{\text{near}} = 3.24 \)) than for distant decisions (\( M_{\text{distant}} = 2.78 \), \( t(71) = 3.07, p < .01 \)).

Also consistent with Hypothesis 2, ANOVAs based on expected service quality and purchase intention showed significant interaction effects between guarantee scope and temporal distance, but no significant main effects. In addition, we found that full-satisfaction guarantees resulted in higher service quality perception (\( M_{\text{distant}} = 3.25 > M_{\text{near}} = 2.86, t(70) = 2.15, p < .05 \)) and purchase intention (\( M_{\text{distant}} = 2.83 > M_{\text{near}} = 2.58, t(70) = 2.00, p < .05 \)) for distant future decisions, compared with the respective measures for near future decisions. In contrast, the attribute-specific guarantees led to lower service quality perception (\( M_{\text{distant}} = 3.03 < M_{\text{near}} = 3.47, t(71) = 2.75, p < .01 \)) and purchase intentions (\( M_{\text{distant}} = 2.46 < M_{\text{near}} = 3.11, t(71) = 3.77, p < .01 \)).
Mediation analysis. To further test whether the perceived usefulness of a service guarantee mediates the interaction effect between guarantee scope and temporal distance, we performed the three-step mediated moderation analysis using a bootstrapping procedure (n = 5,000) proposed by Zhao, Lynch, and Chen (2010) and Preacher, Rucker, and Hayes (2007, model 8). In Step 1, the dependent variable of expected service quality was regressed on the interaction between guarantee scope and temporal distance. Our results showed that the interaction term significantly predicted the expected service quality (β = .83, t = 3.44, p < .01). In Step 2, the mediator of perceived usefulness was regressed on the same interaction term, which also revealed a significant relationship (β = 1.05, t = 3.81, p < .01). In Step 3, a full model that regressed the dependent variable on all independent variables, the mediator, and their interactions was analyzed. This step requires that the mediator should significantly affect the dependent variable, and the interaction effect found in Step 1 should drop in magnitude significantly. Our results confirmed that the main effect of perceived usefulness on the expected quality was significant (β = .36, t = 5.34, p < .01), while the interaction between guarantee scope and temporal distance was no longer significant (β = .45, t = 1.95, p > .05) in the full model. Together, these findings indicated that the interaction between guarantee scope and temporal distance on the expected quality was mediated by perceived usefulness of the service guarantee, thus providing support for Hypothesis 3.

Discussion

The results of Study 1 indicated that full-satisfaction guarantees exerted a greater influence on expected service quality and purchase intentions in the distant future compared to the near future because they were perceived as more useful for temporally distant decisions, while attribute-specific guarantees were more influential for decisions in the near future. These results supported the research hypotheses and the construal fit based account.

However, Study 1 results raised additional issues. First, the study focused on two pure types of service guarantees with directly opposing scopes of coverage. However, a guarantee might combine the wide scope of a full-satisfaction guarantee with the specific performance promises of an attribute-specific guarantee (Wirtz and Kum 2001). A subsequent study examined the extent to which this type of combined guarantee interacted with temporal distance.

Second, the literature has found that attribute-specific guarantees involve lower level construals because they include more detailed and specific representations of service performance than full-satisfaction alternatives (Hart, Schlesinger, and Maher 1992; McDougall, Levesque, and VanderPlaat 1998; Wirtz and Kum 2001). However, less is known about the attribution of concreteness that determines the lower construal levels of attribute-specific guarantees. In particular, it remains unclear whether the lower construal level of attribute-specific guarantees owes to the concreteness of the specific service attribute or exists simply because more specific numbers or words appear that make the attribute-specific guarantees more concrete. These two issues were addressed in Studies 2 and 3, respectively. As in Study 1, Studies 2 and 3 focused on the effects of the scope of guarantee.

Study 2: Combined Guarantees and Temporal Distance

Combined guarantees blend the wide scope of full-satisfaction guarantees with the specific-performance standards of attribute-specific guarantees. Research suggests that combined guarantees are optimal for service firms because they improve perceived value compared to either full-satisfaction or attribute-specific guarantees (Wirtz and Kum 2001). However, previous research did not incorporate the temporal distance of consumers’ purchase decisions when evaluating combined guarantees. Thus, the conditions under which combined guarantees are superior are worthy of closer examination. In the current research, we are interested in whether combined guarantees interact with decision temporal distance in ways that are similar to full-satisfaction or attribute-specific guarantees.

In terms of the richness of information presented in service guarantees, we argue that combined designs are more similar to attribute-specific ones. Both types of guarantees provide detailed examples of what may go wrong that would necessitate consumers to invoke the guarantees. The additional information provided by combined guarantees in terms of the wide scope of the full-satisfaction aspect does not reduce the concreteness of the specific performance standards outlined in the combined guarantee. Therefore, we predict that a combined guarantee will interact with temporal distance in a way that is similar to that of attribute-specific guarantees and propose the following:

Hypothesis 4: Compared to full-satisfaction guarantees, combined or attribute-specific guarantees will lead to the guarantee’s lower (a) perceived usefulness, (b) expected service quality, and (c) purchase intentions for decisions in the distant future but will lead to the guarantee’s higher (a) perceived usefulness, (b) expected service quality, and (c) purchase intentions for decisions in the near future.

Method

A total of 150 MBA students (81 females, 69 males) from the same university participated in this study. The study was a 2 (temporal distance: near vs. distant) × 3 (scope of guarantee: full-satisfaction vs. attribute-specific vs. combined guarantee) between-subjects design.

We manipulated temporal distance (an event for tomorrow vs. 6 months) when giving instructions to the participants. Participants were asked to imagine themselves searching for an
Italian restaurant for tomorrow’s dinner (temporally near) or a
dinner 6 months in the future (temporally distant). The manip-
ulation of the scope of the guarantee was similar to that of
Study 1. We created the combined guarantee by integrating the
wide scope defined in the full-satisfaction condition with the
five service attributes that appeared in the attribute-specific
condition (see Appendix B for details). Also similar to Study
1, we controlled compensation and the invocation process
across the three scope conditions.

Participants were randomly assigned to one of the six
experimental conditions, in which they were asked to imagine
planning a dinner with friends either tomorrow or in 6 months
and were searching for an Italian restaurant. We then showed
participants a poster of the restaurant with a service guarantee
statement and asked them to read it through carefully. Next, we
asked all participants to evaluate the usefulness of the service
guarantee for deciding whether to reserve a table at this resta-
aurant. The perceived usefulness, expected service quality, and
purchase intention of the guarantee were measured using the
same items as in Study 1. All of the questions were based on
7-point scales.

Participants were also asked to indicate the extent to which
they thought these service guarantees were ambiguous (abstract) or
detailed (concrete) on 7-point rating scales anchored at 7 = very abstract and 1 = very concrete.

Results and Discussion

Manipulation Check

Participants in the full-satisfaction condition reported a signif-
ically higher mean value of perceived abstraction \( M = 5.43 \)
compared to the attribute-specific guarantee, \( M = 3.32; t(97) =
6.27, p < .001 \). Thus, the manipulation of the full-satisfaction
and attribute-specific guarantees was successful. In addition,
participants in the combined condition reported a significantly
lower mean value of perceived abstraction, \( M = 3.76, t(99) =
4.95, p < .001 \), compared with the full-satisfaction condition,
whereas yielded no significant difference when compared with
the attribute-specific condition, \( t(98) = 1.39, p > .1 \). Taken
together, these results indicate that participants were more
likely to process combined guarantees as concrete as
attribute-specific ones, which lends some initial support to our
prediction outlined in Hypothesis 4.

Hypothesis testing. Our results showed that when the decision
was for the distant future, the full-satisfaction guarantee
resulted in a higher perceived usefulness \( M = 5.42 \) than the
combined guarantee, \( M = 4.42; t(50) = 2.52, p < .05 \), and the
attribute-specific guarantee, \( M = 4.08; t(48) = 2.97, p < .01 \).
However, there was no significant difference between the
perceived usefulness of the combined guarantee and that of the
attribute-specific guarantee, \( t(48) = .65, p > .1 \). In contrast, when
participants’ decisions were for the near future, the full-
satisfaction guarantee resulted in a lower perceived usefulness
\( M = 4.04 \) than the attribute-specific guarantee, \( M = 5.68; 
\( t(47) = 3.03, p < .001 \), and the combined guarantee, \( M = 5.12,
\( t(47) = 2.13, p < .05 \). Again, there was no significant difference
between the perceived usefulness of combined guarantees and
that of attribute-specific ones, \( t(48) = 1.17, p > .1 \). Given these
results, Hypothesis 4 is supported.

Similar to the perceived usefulness, ANOVAs based on
expected service quality and purchase intentions yielded signif-
ificant interaction effects between decision temporal distance
and type of service guarantee. For distant decisions, the
full-satisfaction guarantee resulted in a higher expected service
quality, \( M = 5.12; t(50) = 2.30, p < .05 \), and a higher purchase
intention, \( M = 5.19; t(50) = 2.22, p < .05 \), than the respective
measures for the combined and the attribute-specific guaran-
tees. However, there was no significant difference between
the combined and the attribute-specific guarantees in expected
quality, \( t(48) = .12, p > .1 \), and purchase intention,
\( t(48) = .14, p > .1 \). In contrast, when participants’ decisions
were for the near future, the full-satisfaction guarantee resulted
in a lower expected quality, \( M = 3.79; t(47) = 3.78, p < .01 \), and
a lower purchase intention, \( M = 4.21; t(47) = 2.06, 
p < .05 \), than the respective measures for the combined
and the attribute-specific guarantees. Again, there was no significant
difference between the last two guarantees in expected service
quality, \( t(48) = 1.41, p > .1 \), and purchase intention, \( t(48) =
.21, p > .1 \).

Discussion

The results from Study 2 indicated that the influence of com-
bined guarantees and attribute-specific guarantees on consumer
decisions was not significantly different when the temporal
distance of the purchase decision was considered. Both combined
and attribute-specific designs were similar in explicitly identify-
ing the service performance promised and were thus both
represented at lower construal levels. As a result, full-
satisfaction guarantees outperformed these two types of guaran-
tees for purchase decisions in the distant future due to the fit
between the construal levels of the full-satisfaction guarantee
and temporally distant decisions, while both attribute-specific
and combined guarantees were more effective than full-
satisfaction guarantees for consumer decisions in the near
future.

Study 3: Attribute-Specific Guarantee With
Abstract Versus Concrete Description

In the previous two studies, we claimed that attribute-specific
guarantees were more concrete than full-satisfaction guaran-
tees because the former, which explicitly identify the coverage,
is perceived as more detailed and concrete (McDougall, Lev-
esque, and VanderPlaat 1998; Wirtz and Kum 2001). However,
attribute-specific guarantees might be perceived as more
detailed and concrete simply because they include wording
with more specific numbers and denotations compared to
full-satisfaction guarantees. CLT research has found that using
an abstract linguistic category to describe benefits—nouns such as
speed, portability, and reliability—leads consumers to
process the information at a higher construal level, whereas using more concrete linguistic categories to describe the same benefits—verbs and adverbs such as “lets you store and retrieve data quickly and reliably wherever you go”—leads consumers to process the information at a lower construal level (Carnaghi et al. 2008; Trope et al. 2007). In Study 2, for instance, the minimum performance standards in the attribute-specific guarantee used phrases such as 20 minutes for service and respond to customers in 30 seconds. Because the full-satisfaction conditions did not identify specific details and included fewer verbs and adverbs, it might be the specificity of the words and phrases used rather than the scope of the service guarantee that determined the low construal level of attribute-specific guarantees. This possible confounding effect was examined in Study 3.

Because the possibility of manipulating the words used in a full-satisfaction guarantee is limited, Study 3 only investigated differences in the wording of attribute-specific guarantees. Specifically, two service guarantees were used, with equivalent specific performance standards using the restaurant scenario from Study 2, and included descriptions with either concrete or abstract wording. For instance, the attribute-specific guarantee with abstract wording stated: “If customers are not satisfied with the following aspects of our service, the dinner will be free! (1) Our food will absolutely have Italian local flavor; (2) Our vegetables are cut fresh the same day; (3) We serve dishes quickly; (4) We response to customer inquiries promptly; and (5) All of our cooks are professionally certified.”

The alternative attribute-specific guarantee with concrete wording stated: “If customers are not satisfied with the following aspects of our service, the dinner will be free! (1) Our food will have 100 percent Italian local flavor; (2) Our vegetables are cut fresh within 24 hours; (3) We serve dishes in 20 minutes; (4) We respond to customer inquiries within 30 seconds; and (5) 100 percent of our cooks are professionally certified.”

Note that the above two guarantees are attribute specific per se. The service scopes defined in these guarantees are detailed and concrete, which is incongruent with the high construal level of distant future decisions. In these situations, whether an attribute-specific guarantee employs abstract or concrete wording does not affect the consumer preference for either type of guarantee. However, for consumers deciding on events for the near future, the temporal distance of the decision fits the construal level of the attribute-specific guarantee. Because guarantees with more specific wording are perceived as more concrete (i.e., at a lower construal level) than equivalent guarantees with more abstract wording (i.e., at a higher construal level), service guarantees with concrete wording should enhance the construal fit between the temporal distance of the decision and the construal level of the attribute-specific design. Thus, we predicted that consumers making purchase decisions in the near future would respond more favorably to attribute-specific guarantees that included more concrete wording compared to guarantees that included more abstract wording.

Method
A total of 172 undergraduate students (86 females, 86 males) participated in this study, which was a 2 (temporal distance: near vs. distant) × 2 (attribute-specific guarantees with concrete vs. abstract wording) between-subjects design. We used the same method to manipulate temporal distance and adopted the same restaurant scenario and procedures as introduced in Study 2.

In addition to the similar measures for perceived usefulness, expected service quality and purchase intention of service guarantee, participants were asked to indicate the extent to which they thought that the words that appeared in the service guarantees were ambiguous (abstract) or detailed (concrete) on a 7-point rating scale anchored at 1 = very concrete and 7 = very abstract.

Results and Discussion
Manipulation Check
A 2 (attribute-specific guarantee with abstract vs. concrete wording) × 2 (temporal distance: near vs. distant) ANOVA was performed, with perceived abstraction of guarantee as the dependent variable. Participants in the abstract-wording condition reported a significantly higher mean value of perceived abstraction (M = 3.93) compared to those in the concrete-wording condition, M = 2.94; t(170) = 3.55, p < .01. Thus, our manipulation was successful.

Results
ANOVA results revealed a significant interaction effect between the temporal distance of decisions and the attribute-specific guarantees for perceived usefulness, F(1,168) = 7.26, p < .01, expected service quality, F(1,168) = 4.05, p < .05, and purchase intention, F(1,168) = 4.82, p < .05.

When the decisions were for near future consumption, attribute-specific guarantees with concrete wording resulted in higher perceived usefulness (M = 5.57) than equivalent guarantees with abstract wording, M = 4.17; t(84) = 4.18, p < .001. However, when the decisions were for distant future consumption, there was no significant difference between concrete-wording (M = 4.51) and abstract-wording, M = 4.42; t(84) = -.27, p > .1, guarantees.

A similar interaction was found for expected service quality and purchase intention. That is, when the decisions were for near future consumption, attribute-specific guarantees with concrete wording resulted in higher expected quality (M = 4.93) and higher purchase intention (M = 5.23) than guarantees with abstract wording, M_q = 4.36, t(84) = 2.72, p < .01; M_p = 4.40, t(84) = 2.92, p < .01. For distant future consumption, however, there were no differences in expected service quality and purchase intention between concrete-wording, M_q = 4.56, M_p = 4.51; t(84) = .29, p > .1 and abstract-wording, M_q = 4.63; M_p = 4.56; t(84) = .17, p > .1, guarantees.
Discussion

The guarantees examined in Study 3 were identical in the specific service attributes that were promised. If the wording of a service guarantee affects the construal level associated with the guarantee, then guarantees that include more abstract wording should be represented at a higher construal level compared to identical guarantees with concrete wording. According to the construal fit account, the former guarantee should be perceived to be more useful than the latter for consumers making temporally distant decisions. However, the abstract-wording guarantees $M = 4.42$ and concrete-wording guarantees $M = 4.51$ were not significantly different.

A comparison of the manipulation checks for Studies 2 and 3 sheds further light on these findings. The guarantee with more abstract wording was perceived as more abstract ($M = 3.93$) than the guarantee with concrete wording ($M = 2.94$). However, the former guarantee was not perceived to be as abstract as the full-satisfaction guarantees, $M = 5.43$, $t(133) = 4.89$, $p < .001$; see Study 2. Therefore, a temporally distant decision matched the construal level of the full-satisfaction design but not the construal level of the attribute-specific guarantee with abstract wording.

The lack of significance was predicted by study Hypotheses 1 and 2, which were supported in Study 1. Because the guarantees with abstract or concrete wording were both attribute-specific, they did not exhibit construal fit when decisions were temporally distant. As a result, there was no difference in the effectiveness of guarantees with the two different types of wording.

For consumer decisions in the immediate future, study results indicated that attribute-specific guarantees with concrete wording were more effective than identical guarantees with abstract wording. This finding implies that service guarantees with concrete wording are represented at lower construal levels and interact with the temporal distance of consumer purchase decisions. However, this interaction is based on the premise that there is a construal fit between the scope of the guarantee and temporal distance. In summary, the results of Study 3 indicated that wording effects are limited by the construal fit between the scope of the guarantee and temporal distance of the decision.

Study 4: Compensation, the Invocation Process, and Temporal Distance

The previous three studies only manipulated the scope of the guarantee while controlling for the compensation level and the difficulty of invoking the guarantee across experimental conditions. In actual situations, however, service providers and consumers care about the compensation level and the difficulty of invoking the guarantee as well as the scope of the guarantee. In designing service guarantees, a common practice balances the level of compensation with the difficulty of invoking the guarantee. One method is to include a moderate level of compensation and to make invoking the guarantee moderately difficult. Most firms adopt this approach by default because it is perceived to be less risky. Alternatively, firms can adopt a trade-off strategy that emphasizes only one element of the guarantee. An important issue is the extent to which a service firm should highlight the level of compensation or the difficulty of invoking the guarantee for full-satisfaction and attribute-specific guarantees. We investigated this issue in Study 4.

Hypothesis Development

CLT claims that when information regarding the desirability and feasibility of a product is available, desirability should receive more weight than feasibility should receive less weight as temporal distance increases (Liberman and Trope 1998; Trope and Liberman 2010). That is, when an outcome is desirable but difficult to obtain, its attractiveness increases over time; when an outcome is less desirable but easy to obtain, its attractiveness decreases over time.

Recent studies have indicated that this idea applies to persuasive messages (Dhar and Kim 2007; Thomas, Chandran, and Trope 2007). For example, Thomas, Chandran, and Trope (2007) demonstrated that feasibility information exerted a greater influence on purchase choices in the near future, whereas desirability information had a greater impact in the more distant future. Following this reasoning, Dhar and Kim (2007) claimed that advertising claims should be congruent with the distance between the consumer and the message. Specifically, to enhance persuasiveness, a message should emphasize higher level aspects such as desirability and de-emphasize lower level aspects such as feasibility when referring to products and sales in the more distant future.

By definition, a service guarantee is a persuasive message that includes both the level of compensation and the process of invoking the guarantee to receive the compensation. From the consumer perspective, the level of compensation determines the value of invoking a service guarantee, whereas the difficulty of the invocation process determines the time and effort that must be invested to receive the compensation. Therefore, compensation tends to reflect the desirability of the guarantee, whereas the difficulty of invoking the guarantee tends to reflect feasibility. According to CLT, consumers will assign more weight to compensation in evaluating a service guarantee for purchase decisions in the distant future and will assign more weight to the invocation process for purchase decisions in the near future. Thus, we predicted that the combined effect of compensation level and the difficulty of invoking the guarantee would be time-contingent. That is, service guarantees that are difficult to invoke but that provide greater compensation are more effective in improving expected service quality and purchase intentions for decisions in the distant future. In contrast, guarantees with lower levels of compensation that are easy to invoke are more effective in improving expected service quality and purchase intentions for decisions in the near future. Because guarantees with moderate levels of compensation and are of moderate difficulty to invoke do not emphasize
either the desirability or feasibility of the guarantee, there should be no trade-offs between desirability and feasibility. Consequently, we predicted that the time-contingent effects of compensation level and the difficulty of the invocation process would not apply to these guarantees.

In designing a meaningful service guarantee, the level of compensation and the difficulty of invoking the guarantee cannot be independent from the scope of the guarantee. Furthermore, Studies 1–3 indicated that the scope of the guarantee interacted with the temporal distance of the purchase decision to determine consumer reactions toward the guarantee. Following the construal fit theory, we thus proposed that there would be a three-way interaction between the temporal distance of a purchase decision, the compensation-invoking trade-off, and the scope of a service guarantee in affecting the effectiveness of service guarantees.

We propose the following research hypotheses (a pictorial illustration of the hypotheses is presented in Figure 1):

Hypothesis 5a: For purchase decisions in the near future, an attribute-specific service guarantee with low-compensation but easy-to-invoke (LC_ETI) will increase (a) expected service quality, (b) purchase intentions, and (c) the perceived usefulness of the service guarantee, while an attribute-specific guarantee with high-compensation but difficult-to-invoke (HC_DTI) will decrease (a) expected service quality, (b) purchase intentions, and (c) the perceived usefulness of the service guarantee.

Hypothesis 5b: For purchase decisions in the distant future, a full-satisfaction service guarantee with HC_DTI will increase (a) expected service quality, (b) purchase intentions, and (c) the perceived usefulness of the service guarantee, while a full-satisfaction guarantee with LC_ETI will decrease (a) expected service quality, (b) purchase intentions, and (c) the perceived usefulness of the service guarantee.

Method

The study was a 2 (temporal distance: near vs. distant) × 2 (scope of guarantee: full-satisfaction vs. attribute-specific) × 3 (compensation-invoking trade-off: high: HC_DTI vs. low: LC_ET or moderate: MC_MTI) between-subjects design. A total of 359 MBA students participated in this study and 325 (90.5%) subjects reported having experience with purchasing package-tour services from travel agencies. The average travel frequency was 2.37 times per year. Approximately one third of the participants had encountered service quality problems, and 16.7% had experience invoking service guarantees.

The manipulation of guarantee scope and temporal distance was similar to that described in previous studies. For the HC_DTI condition, we manipulated high compensation by guaranteeing a full refund and a difficult-to-involve process by suggesting the heavy load and trivial details of such a process. For the LC_ETI condition, we manipulated low compensation by a 30% refund policy and an easy-to-involve process by the statement, “To invoke the guarantee, simply contact us. After confirmation, we will refund you.” Similarly, a 60% refund policy is adopted as a moderate level of compensation for the MC_MTI conditions, together with a moderate level of difficulty of the invocation process, by stating “To invoke the guarantee, please contact us within 15 working days after completing the tour and provide the payment receipt, valid identification documents, and other related documents. After confirmation, we will refund you.”

Participants were randomly assigned to 1 of the 12 experimental conditions. In all conditions, we asked participants to assume that they were planning a tour either in 2 days or in 6 months and were considering a travel agent for package-tour services. We then showed a poster of a service guarantee to participants and asked them to examine it carefully. Next, participants were asked to indicate their perception about the usefulness of the service guarantee, expected service quality and purchase intention toward the travel agent.

For a manipulation check, participants were also asked to indicate the extent to which they thought these service guarantees: (1) were ambiguous (abstract) or detailed (concrete); (2) offered desirable compensation; and (3) had a feasible invocation process. All of the responses were based on 7-point scales.

Results and Discussion

Manipulation Check

A 2 (full-satisfaction vs. attribute-specific) × 2 (near vs. distant) × 3 (HC_DTI vs. LC_ETI vs. MC_MTI) ANOVA was run with perceived abstraction of guarantee as the
Table 1. The Effect of Scope of Guarantee and Temporal Distance on Perceived Usefulness, Expected Service Quality and Purchase Intention (Study 4).

<table>
<thead>
<tr>
<th>Source</th>
<th>ANOVAs</th>
<th>df</th>
<th>Perceived Usefulness</th>
<th>Expected Service Quality</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of guarantee</td>
<td>1 (n=30)</td>
<td>0.534 (0.465)</td>
<td>1.700 (0.193)</td>
<td>0.206 (0.650)</td>
<td></td>
</tr>
<tr>
<td>Compensation and invoking</td>
<td>2 (n=28)</td>
<td>2.808 (0.062)</td>
<td>1.295 (0.268)</td>
<td>4.898 (0.008)</td>
<td></td>
</tr>
<tr>
<td>Temporal distance</td>
<td>1 (n=31)</td>
<td>7.068 (0.008)</td>
<td>1.927 (0.166)</td>
<td>9.053 (0.003)</td>
<td></td>
</tr>
<tr>
<td>Two-way interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of guarantee × Temporal distance</td>
<td>1 (n=29)</td>
<td>0.010 (0.920)</td>
<td>2.881 (0.091)</td>
<td>0.006 (0.939)</td>
<td></td>
</tr>
<tr>
<td>Scope of guarantee × Compensation and invoking</td>
<td>2 (n=31)</td>
<td>0.445 (0.641)</td>
<td>0.694 (0.500)</td>
<td>0.029 (0.917)</td>
<td></td>
</tr>
<tr>
<td>Temporal distance × Compensation and invoking</td>
<td>2 (n=32)</td>
<td>0.019 (0.981)</td>
<td>0.611 (0.543)</td>
<td>0.015 (0.985)</td>
<td></td>
</tr>
<tr>
<td>Three-way interaction</td>
<td></td>
<td>2 (n=30)</td>
<td>3.160 (0.045)</td>
<td>5.630 (0.003)</td>
<td>5.050 (0.007)</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td>347</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $F$-value in each cell; $p$ values are provided in parentheses.

Table 2. Means of Dependent Variables (Study 4).

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Near Future</th>
<th></th>
<th>Distant Future</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attribute-Specific Guarantee</td>
<td>Full-Satisfaction Guarantee</td>
<td>Attribute-Specific Guarantee</td>
<td>Full-Satisfaction Guarantee</td>
</tr>
<tr>
<td></td>
<td>HC_DTI (n=30)</td>
<td>MC_MT1 (n=30)</td>
<td>LC_ETI (n=31)</td>
<td>HC_DTI (n=28)</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>3.57</td>
<td>4.30</td>
<td>4.90</td>
<td>4.39</td>
</tr>
<tr>
<td></td>
<td>4.27</td>
<td>4.87</td>
<td>5.48</td>
<td>5.50</td>
</tr>
<tr>
<td></td>
<td>3.83</td>
<td>4.27</td>
<td>4.97</td>
<td>4.39</td>
</tr>
</tbody>
</table>

Note. HC_DTI = high compensation but difficult to invoke; LC_ETI = low compensation but easy to invoke; MC_MT1 = moderate compensation and moderately difficult to invoke.

An analysis of item reliability showed that measurements for perceived usefulness of the service guarantee ($\alpha = .89$), expected service quality ($\alpha = .94$), and purchase intention ($\alpha = .91$) were sufficiently reliable. Thus, the items were combined to form single indexes for each of the dependent variables for further analysis.

Results

The ANOVA results and the treatment means were summarized in Tables 1 and 2, respectively. Of these, the three-way interaction effects reached significance, which suggest that the effects of service guarantee elements can be interdependent and complex. The specific three-way interaction effects can be described as follows.

For distant future purchase, when the guarantee scope is a full-satisfaction, the HC_DTI design resulted in a greater mean value of perceived usefulness ($M = 5.03$) than both the MC_MT1 design, $M = 4.31$; $t(60) = 2.10$, $p < .05$, and the LC_ETI design, $M = 3.96$; $t(54) = 2.32$, $p < .05$. Nevertheless, when the guarantee scope is attribute-specific, there was no significant difference in perceived usefulness between the dependent variable. The results indicated a significant main effect of scope of guarantee, $F(1, 347) = 33.91$, $p < .01$. Participants in the full-satisfaction condition reported a significantly higher mean value for perceived abstraction ($M = 4.57$) compared to those in the attribute-specific condition ($M = 3.51$). These results suggest a valid manipulation of guarantee scope.

A similar $2 \times 2 \times 3$ ANOVA was conducted with perceived desirability of compensation and perceived feasibility of the invocation process as the dependent variables. The results showed that only the main effects of compensation and invocation process were significant. Participants in the HC_DTI condition reported a significantly higher mean value for desirability of compensation ($M = 4.99$) than those in the LC_ETI condition ($M = 3.33$) and in the MC_MT1 condition ($M = 4.34$), $F(2, 347) = 15.09$, $p < .001$. Additionally, participants in the HC_DTI condition reported the lowest mean value of perceived feasibility of invocation process ($M = 4.17$), the second lowest mean value ($M = 4.86$) in the MC_MT1 condition, and the highest value ($M = 5.49$) in the LC_ETI condition. The differences were significant, $F(2, 347) = 11.13$, $p < .001$. Taken together, these results indicate that our manipulations of compensation and invocation process were also valid.
HC_DTI, MC_MTI, and LC_ETI designs, $M_H = 4.66$, $M_M = 4.48$, $M_L = 4.80$; $F(2,88) = .43$, $p > .10$.

A different pattern was reported for temporally near purchase. That is, when the decision time frame was near, and when a full-satisfaction guarantee was available, there was no difference in perceived usefulness between the HC_DTI, MC_MTI, and LC_ETI designs, $M_H = 4.39$, $M_M = 4.10$, $M_L = 3.90$; $F(2,86) = .69, p > .1$. In contrast, when an attribute-specific guarantee was used, the LC_ETI design resulted in a greater mean perceived usefulness ($M = 4.90$) than both the MC_MTI design, $M = 4.30$; $t(59) = 1.99, p = .05$, and the HC_DTI design, $M = 3.57$; $t(59) = 3.41, p < .01$.

A pictorial illustration of the above three-way interaction effect on perceived usefulness, $F(2,347) = 3.16, p < .05$, is presented in Figure 2. Similar patterns between temporal distance, guarantee scope, and the compensation-invoking design were also found in relation to expected service quality, $F(2,347) = 5.63, p < .01$, and purchase intention, $F(2,347) = 5.05, p < .01$; see also Table 2). Taken together, these results support our Hypothesis 5a and b.

**Mediation Analysis**

Similar to Study 1, we tested the mediation role of perceived usefulness using a bootstrapping procedure ($n = 5,000$) proposed by Zhao, Lynch, and Chen (2010). Because the study was a $2 \times 2 \times 3$ design and the compensation-invoking trade-off was manipulated at three levels, three moderated moderation analyses were performed (Preacher, Rucker, and Hayes 2007, Model 12). The first mediation analysis was based on the HC_DTI and LC_ETI conditions ($n = 237$). Our results showed that the three-way interaction among guarantee scope, temporal distance, and the compensation-invoking trade-off significantly predicted the expected service quality ($\beta = 2.64, t = 3.30, p < .01$) and perceived usefulness ($\beta = 3.05, t = 3.56, p < .01$), respectively. When the full model (i.e., the model that regressed expected quality simultaneously on guarantee scope, temporal distance, compensation-invoking trade-off, perceived usefulness and their two-way interaction terms) was analyzed, the main effect of perceived usefulness on the expected quality was significant ($\beta = .46, t = 8.48, p < .01$), but the three-way interaction was no longer significant ($\beta = 1.25, t = 1.73, p > .08$).

Similarly, the second analysis based on the HC_DTI and MC_MTI conditions ($n = 236$) showed that the three-way interaction among all the independent variables significantly predicted the expected service quality ($\beta = 1.69, t = 3.22, p < .01$) and perceived usefulness ($\beta = 2.04, t = 2.79, p < .01$), respectively. In the full model, the main effect of perceived usefulness on the expected quality was significant ($\beta = .27, t = 4.29, p < .01$), but the three-way interaction became insignificant in the full model ($\beta = .35, t = .49, p > .6$).

The third mediation analysis based on the LC_ETI and MC_MTI conditions ($n = 245$) reported similar results. The three-way interaction term significantly predicted the expected service quality ($\beta = 1.74, t = 2.63, p < .01$) and perceived usefulness ($\beta = 1.38, t = 2.21, p < .05$). The main effect of perceived usefulness on the expected quality was significant ($\beta = .36, t = 5.68, p < .01$) in the full model, but the interaction lost its significance ($\beta = 1.00, t = 1.56, p > .1$).

The above results thus confirmed that perceived usefulness mediated the interaction effects on expected service quality of temporal distance and the scope, compensation, and process of invoking a guarantee.

**Discussion**

Overall, Study 4 demonstrated that temporal distance interacted significantly with the scope of the guarantee and the compensation-invocation trade-off, indicating that service firms should make the level of compensation and the difficulty of invoking the guarantee compatible with temporal distance. In determining the compensation level and the difficulty of invoking the guarantee, our results indicated that MC_MTI...
designs were more effective than LC_ETI designs but less effective than HC_ETI designs for full-satisfaction guarantees and decisions in the distant future, while MC_MTI designs were more effective than HC_ETI designs but less effective than LC_ETI designs for attribute-specific guarantees and decisions in the near future. These results thus supported the prediction that the MC_MTI guarantee, which service firms might view as a safe option, is not the best option when consumer decision time frames are taken into account.

**Theoretical Contributions**

Most research on service guarantees has focused on how these guarantees add value to the firm by providing a competitive edge. Few studies have analyzed the extent to which service guarantees influence consumer purchase decisions (Hogreve and Gremler 2009). By exploring the extent to which the different types of service guarantees are perceived as more useful for different purchasing time frames, the current research contributes to the research literature in several ways.

First, it resolves a long-standing issue in the service guarantee literature, which has reported conflicting results regarding the effectiveness of full-satisfaction guarantees compared to attribute-specific guarantees in persuading target consumers (Hogreve and Gremler 2009). The current research resolves this issue by revealing that the effectiveness of a service guarantee is contingent on the time frame of consumer purchase decisions. In addition, this research indicates that the trade-off between the level of compensation and the difficulty of invoking the guarantee can be determined by taking the temporal distance of the purchase decision into account. By identifying the time-contingent aspect of effective service guarantees, the current research extends our knowledge and presents a new approach to designing effective service guarantees.

**Managerial Implications**

The current research offers a new approach that allows managers to design effective service guarantees without additional investment. By considering the extent to which the consumer decision time frame is congruent with traditional service guarantee elements, managers should be able to provide more effective service guarantee messages to target consumers. As Shugan and Xie (2005) noted, technological developments such as electronic tickets and online payments make advanced selling possible for many services. Thus, for service firms engaging in advance selling, such as vacation packages, concerts, and sporting events, a full-satisfaction service guarantee with high compensation but that is difficult to invoke is more likely to influence consumer decisions than an attribute-specific service guarantee with less compensation but that is easy to invoke.

Results from the current research also apply to the launching of new services. To establish market awareness, service firms might announce the arrival of new service offerings, such as...
a newly developed information technology system or an educational program. Firms that are aware of the influence of temporal distance on consumer information processing might include a time-contingent service guarantee to reduce the higher consumption risks associated with new offerings. Specifically, in the prelaunch stage when the service launch is temporally distant, management should adopt a full-satisfaction guarantee for the new service but switch to an attribute-specific guarantee as the final date for the service launch approaches. Adopting this strategy allows the service guarantee to effectively reduce perceived risk at all stages and increases the chance of a successful new service launch.

Previous research has suggested that combined guarantees provide the optimal guarantee design (Wirtz and Kim 2001). However, the current research indicated that a combined design might not be the best option when the time frame of consumer purchases is taken into account because combined guarantees were as effective as attribute-specific guarantees for consumer decisions in the near future but were less effective than full-satisfaction guarantees for temporally distant decisions. Therefore, service firms must identify the appropriate time frame to ensure the effectiveness of combined guarantees.

Recent advances in information technology have made the implementation of time-contingent service guarantees feasible. For instance, many companies are offering customized communications to provide tailor-made marketing information to their targeted consumers using various customer relationship management (CRM) systems. Based on such available resources, it will be cost-effective for existing companies to provide customized service guarantees that fit into consumers’ natural construal levels of purchases. It is worth noting that a customized service guarantee might be perceived by consumers as unfair, thus the service a firm actually delivered during the consumption stage should be of equal quality to prevent consumers from perceiving the customized service guarantee as unfair.

Limitations and Future Research

The current study also raises several issues relevant to future research on service guarantees. First, only the temporal dimension of psychological distance was examined. Studies that investigate other psychological dimensions, such as social and spatial distance, might reveal alternative ways to improve the effectiveness of service guarantees. Second, the current work is limited to the common forms of guarantee design elements. It is worth further exploring the effects of psychological distance on consumer responses to service guarantees based on other type of compensations, for example, monetary versus nonmonetary compensations. Finally, because consumers might often have to evaluate the different service guarantees offered by different companies for similar products, investigating how consumers compare varying service guarantees and the extent to which congruency effects diminish or increase in multiguarantee situations would improve our understanding regarding the effectiveness of service guarantee designs.

Acknowledgments

The authors thank the editor and the three anonymous reviewers for their insightful comments during the revision process. The two authors contributed equally to this article.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors also acknowledge receiving financial support from the National Natural Science Foundation of China (70832001, 71272075) and the National Social Science Foundation of China (08CTQ008).

Notes

1. We thank one of the reviewers for identifying these issues.
2. The interaction is not significant, $F(1,168) = .22, p > .60$.
3. For instance, to invoke a guarantee, customers are instructed the following: (1) come to the service center within 3 working days after completing the tour; (2) present a written application in person to the office manager and fill out a claim form to apply for the refund; (3) provide the service contract, the payment receipt, valid identification documents, and other related documents; (4) wait for confirmation by phone; (5) after notification, come to service center again with valid identification and collect the refund; (6) applications by phone or e-mail will not be accepted.
4. MC_MTI refers to a service guarantee design that provides moderate compensation and is moderately difficult to invoke.

References


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