

Tilburg University

Regret in repeat purchase versus switching decisions

Inman, J.J.; Zeelenberg, M.

Published in:
Journal of Consumer Research

Publication date:
2002

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Inman, J. J., & Zeelenberg, M. (2002). Regret in repeat purchase versus switching decisions: The attenuating role of decision justifiability. *Journal of Consumer Research*, 29(1), 116-128.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Regret in Repeat Purchase versus Switching Decisions: The Attenuating Role of Decision Justifiability

J. JEFFREY INMAN
MARCEL ZEELLENBERG*

The decision-making literature has consistently reported that decisions to maintain the status quo tend to be regretted less than decisions to change it. We examine the consequences of repeat purchasing (maintaining the status quo) versus switching in the context of information regarding the reason for the decision (e.g., prior consumption episode, brand history), and we argue that there are situations in which repeat purchasing may cause as much or even more regret than switching. We contend that this effect depends on whether or not there is a justifiable basis for the decision. In a series of four studies, we show that if there is sufficient motivation to warrant a switch, consumers will feel less regret in the face of a subsequent negative outcome realized via a switch than in one realized via a repeat purchase. Our results imply that feelings of regret are mitigated when the consumer reflects and concludes that the decision was appropriate under the circumstances.

Consumers must often decide whether to continue doing things as they have been doing them or to do them differently. For instance, consumers must decide whether or not to switch car-care centers, vacation destinations, hotels, and laundry detergents. When making these decisions, consumers try to maximize their own satisfaction or utility while choosing an option that protects them from negative emotion (e.g., Luce 1998; Simonson 1992), and regret has been identified as a primary negative emotion (e.g., Inman, Dyer, and Jia 1997; Mellers, Schwartz, and Ritov 1999; Tsiros and Mittal 2000). For example, regret was the most frequently named negative emotion in a study of verbal expressions of emotions in everyday conversation (Shimanoff 1984). Thus, it is important to understand the conditions under which switching versus repeat-purchase decisions result in greater regret.

Samuelson and Zeckhauser's (1988) notion of the status quo effect is particularly relevant in this context. Samuelson and Zeckhauser define the status quo effect as the tendency

to maintain "one's current or previous decision. Faced with new options, decision makers often stick with the status quo alternative, for example, to follow customary company policy, to elect an incumbent to still another term in office, to purchase the same product brands, or to stay in the same job" (p. 8). In other words, having made a decision, people tend to repeat it. While the status quo effect entails an exaggerated preference for inaction (i.e., omission bias) and an exaggerated preference for the current state of affairs, our focus is on the second aspect because both a switch and a repeat decision involve action. Repeating maintains the status quo; switching changes it. Since both of these decisions require an action on the part of the consumer, we can isolate the effect of underlying circumstances on the ensuing regret. Most of the research into omission or status quo bias deals with contexts in which both action and status quo are more clearly defined, so we also raise questions about the applicability of this research in a repeat/switching context. To be precise, we use the term "status quo effect" in this article to describe consumers' tendency to feel more regret following a decision to switch than following a decision to repeat a past decision (e.g., to choose the same brand).

The status quo effect suggests that a decision maker's satisfaction with the outcome of a decision does not depend solely on that particular outcome and on how it compares to alternative outcomes. Rather, these evaluative reactions also depend on how the outcome is achieved; outcomes achieved through decisions to change the status quo generally lead to more intense regret than the same outcomes

*J. Jeffrey Inman is the Thomas Marshall Professor of Marketing at the Katz Graduate School of Business at the University of Pittsburgh, Pittsburgh, PA 15260 (jinman@katz.pitt.edu), and Marcel Zeelenberg is professor of psychology at the Department of Economic and Social Psychology of Tilburg University, PO Box 90153, 5000-LE Tilburg, The Netherlands, (M.Zeelenberg@kub.nl). The authors thank Tracy Bell, Hank Boyd, Adwait Khare, Warren Malueg, Ned Winsborough, and Amy Zastoupil for their assistance with data collection and analysis. Constructive advice from two *JCR* editors (Robert E. Burnkrant and David G. Mick), the associate editor, and the reviewers is also greatly appreciated.

achieved through decisions to maintain the status quo. There is a substantial body of evidence in this regard in both the economics (e.g., Hartman, Doane and Woo 1991; Kahneman, Knetsch, and Thaler 1991; Samuelson and Zeckhauser 1988) and psychology literatures (e.g., Baron and Ritov 1994; Hesketh 1996; Ritov and Baron 1992).

In the context of consumer decision making, the status quo phenomenon suggests that consumers have a tendency to repeat purchase—that is, to select the same brand over subsequent purchase decisions. Furthermore, the status quo effect implies that, given a negative experience, consumers should feel less regret when this experience is the result of a repeat decision than when it is the result of a switch decision. Landman's research (1987) illustrates this phenomenon. Most subjects (81%) examining the two scenarios below felt that the switching Sayer family would feel more regret than the repeating Lowell family:

For years the Lowell family has vacationed in Key West, Florida, during the last 10 days of December. This year they considered vacationing in Sarasota, Florida, but decided to return to Key West after all. Unfortunately, it rained all 10 days in Key West; Sarasota was mostly dry.

For years the Sayer family has vacationed in Sarasota, Florida, during the last 10 days of December. This year they decided to vacation in Key West instead. Unfortunately, it rained all 10 days in Key West; Sarasota was mostly dry. Who feels more regret about their vacation decision, the Lowells or the Sayers? (Landman 1987, p. 529)

Are there conditions under which a decision to switch might result in less regret than a decision to repeat? If so, the implications of the status quo effect may have been overgeneralized to imply that changes to the status quo should invariably produce more regret (e.g., Schweitzer 1994, 1995). We argue that previous research on regret and the status quo effect has largely failed to consider that decisions are typically made in the context of prior experiences and outcomes and that these may have a considerable impact on the regret consumers experience in regards to current decision outcomes. In our view, prior experiences can provide reasons for switching, and these reasons may attenuate the regret consumers feel when their decisions go awry. Recent research suggests that the regret a consumer feels after a negative experience is related to the extent to which s/he blames him or herself for it (e.g., Ordóñez and Connolly 2000). Having good reasons to switch may protect the consumer from regret when s/he opts to switch. If prior experience (e.g., the previous outcome, extent of previous experience with the original course of action) leads a consumer to determine that his/her decision was the most reasonable given the circumstances, then arguably s/he should feel less regret. In other words, decisions supported by good reasons should attenuate postdecision regret.

In the following sections, we discuss the status quo effect literature and the potential role of reasons for the decision as a moderator of this effect. We then present a series of four studies. The first two demonstrate a complete reversal

of the status quo effect and some boundary conditions for this reversal, and the last two address the psychological explanation of these findings. Study 1 both replicates and reverses the status quo effect in a consumer setting by providing information about a previous consumption experience. Study 2 then examines the role of another source of prior information: length of history with the status quo alternative. Study 3 demonstrates that prior-experience information serves as a reason for the subsequent decision of whether to repeat or switch. In study 4, we experimentally manipulate reasons in order to examine whether strong reasons attenuate the status quo effect and in order to test whether the status quo effect is mediated by the perceived justifiability of the decision. We conclude by discussing the four studies' implications and possible directions of future research.

LITERATURE REVIEW

Regret is "the painful sensation of recognizing that 'what is' compares unfavorably with 'what might have been'" (Sugden 1985, p. 77). Kahneman and Miller (1986) use norm theory to explain the finding that changing the status quo results in more regret than maintaining it. They argue that switching produces more regret because maintaining the status quo is considered to be more normal. Relatedly, Simonson (1992) examined subjects' assessments of regret in search patterns for a journal article. Subjects reported that they would feel greater regret if they started searching from the last issue and found the article in the first issue than if they had started searching from the first issue and found it in the last issue. Simonson argues that searching from the beginning is the default option (i.e., the status quo option) and that deviating from this search strategy results in greater regret. Expanding on this reasoning, Kahneman and Miller (1986) posit that people feel more regret after a decision when they can easily imagine a better alternative outcome (e.g., the status quo) than when it is hard to imagine a better outcome. Switching results in more regret because it is easier to mentally change a switching action into a repeat-purchase action and thereby undo the outcome.

Schweitzer (1995) examined the role of the status quo effect in the context of flexible spending accounts (FSA). University staff members were shown a scenario in which they were asked to advise a friend on how much to invest in an FSA. Half of the subjects were shown status quo contributions of \$600 per year, and half were shown status quo contributions of \$1,000 per year. Regardless of status quo contribution condition, respondents were much more likely to recommend the status quo than a change from it. Luce (1998) showed that a status quo effect occurs in the context of consumer choice. She confronted subjects with a choice between five cars and asked them to imagine that they had already tentatively chosen one of those before the others came on the market. She reports that choosing the status quo was associated with lower levels of negative emotion. Luce argues that the status quo effect "may result from a psychological commitment to the status quo situation, per-

haps because deviations from the status quo are associated with increased levels of regret" (p. 429).

If regret is indeed related to self-blame and affected by the reasons supporting the decision, it is interesting to note that, in the typical scenario, the reasons for choosing to maintain the status quo or to switch are not at all clear. For example, in Landman's (1987) scenario with the two vacationing families, subjects knew neither why the Sayers decided to switch to Key West nor why the Lowells decided not to switch. In answering the question about who would feel more regret, subjects might try to explain why the two families decided differently. Since maintaining the status quo is the default option, subjects may well have inferred that the Sayers had less justification for their decision to change destination and therefore determined that the Sayers had made a foolish decision. Thus, a central question is whether decisions to change the status quo are always "abnormal," to use the terminology of norm theory. The robustness of the status quo effect phenomenon suggests they are. We argue that they are not. In our view, switching decisions are only abnormal when there are no good reasons supporting them. Furthermore, we argue that when a situation demands a change from the normal routine, maintaining the status quo is more abnormal than switching. For example, we predict that if a consumer has a negative experience with a hotel chain, s/he should exhibit a tendency to do something about it.

Our line of reasoning is supported, albeit indirectly, by the common expression "if it ain't broke, don't fix it." This saying suggests that one's decision to make a change or not might be based on earlier experiences. The saying also suggests, at least implicitly, that one should make a change when circumstances suggest that a change is in order. Consistent with this reasoning, research on individual decision making has shown that choices are often made in light of prior investments, costs, and outcomes (e.g., Thaler and Johnson 1990). Similarly, game-theoretic research shows that people may base their decisions on a simple win-stay/lose-change heuristic (e.g., Macy 1995). This heuristic implies that a decision maker should maintain his/her strategy by default and change strategy only if previous events give him/her a reason to do so. This leads us to propose that prior experiences can induce a tendency to change strategies and consequently make switching a sounder, more justifiable decision than maintaining the status quo.

Our first objective is to demonstrate the status quo effect in a consumer repeat purchase setting. That is, switching tends to be regretted more than repeating when the subsequent outcome is unsatisfactory. In the absence of information regarding prior experience, subjects' beliefs in an efficient market should lead them to infer that the prior experience was positive. If so, the pattern of results observed in a control (no prior information) condition will be similar to that observed when reinforcing information is provided (e.g., a positive prior experience).

H1: In the absence of prior information or when reinforcing prior information is available, a decision

to switch will be regretted more than a decision to repeat.

Central to our reasoning is the relationship between reasons and regret. We argue that decisions that are not backed up by good reasons are especially likely to produce regret. Thus we predict that if the subsequent outcome ultimately turns out to be negative, the consumer may experience less regret because s/he can rationalize that the choice was the best in light of the circumstances. In other words, good reasons for a choice should inoculate the decision maker against regret. At the same time, bad reasons for a choice should amplify the decision maker's regret because s/he should have known better. Work by Ritov and Baron (1992) suggests that the underlying reasons for the decision might play a role in postdecision regret. They sought to decouple omission bias from the status quo effect, and in contrast to Schweitzer (1994), they found that subjects preferred inaction to action regardless of whether the inaction was associated with a change from the status quo. Across their five scenarios, subjects consistently felt that the result received through an act would result in greater regret, irrespective of whether or not the act maintained the status quo. Interestingly, their scenarios in the inaction/change condition provided a reason for the change, albeit a rather poor one. For example, the airline scenario described a man who was asked to switch flights "for bureaucratic reasons." The man did not object, the plane crashed, and he was injured. These results are consistent with our thesis: subjects may have incorporated the presence of a reason into their assessment and hence indicated less regret even though the outcome was produced by switching away from the status quo.

H2: A strong reason for a decision will result in lower subsequent regret.

Relatedly, when the strong reason (e.g., a negative-experience episode) leads to the need to switch, this should cause a reversal of the status quo effect. Thus, the status quo effect might not only be mitigated (hypothesis 2) but even reversed in the case of negative feedback regarding the earlier outcome. That is, when a strong reason exists for changing, repeat purchase may be regretted more than switching to another alternative. We predict that when negative information on the current course of action is experienced but no avoidance action is undertaken, more regret will be experienced if the subsequent outcome is also negative. In such instances, changing the status quo should be preferred to maintaining it. If this is so, people may regret repeat purchase more than switching. Thus, we anticipate a disordinal decision \times prior-experience interaction:

H3: Regret will be greater in both the negative-prior-experience/repeat and the positive-prior-experience/switch conditions than in the negative/switch and positive/repeat conditions.

These three hypotheses are tested in study 1. The studies reported in this article use scenario-based manipulations that

TABLE 1
STUDIES 1 AND 2: REGRET MEANS ACROSS CONDITIONS

	Study 1		Study 2			
	Repeat	Switch	High history		Low history	
			Repeat	Switch	Repeat	Switch
Pooled average:						
Control	6.56 (1.79)	7.50 (1.71)	6.40 (1.56)	8.09 (1.15)	7.15 (1.39)	7.78 (1.39)
Positive prior experience	6.77 (1.51)	7.56 (1.52)	6.22 (1.61)	8.25 (1.17)	6.69 (1.25)	7.87 (1.65)
Negative prior experience	8.09 (1.16)	5.80 (1.13)	7.98 (1.44)	7.03 (1.45)	8.45 (1.09)	6.30 (1.38)
Airline:						
Control	6.67 (2.09)	7.61 (1.93)	6.18 (1.93)	8.19 (1.60)	7.23 (1.74)	8.11 (1.72)
Positive prior experience	6.66 (1.85)	7.69 (1.91)	6.16 (1.98)	8.82 (1.26)	6.65 (1.59)	8.47 (1.58)
Negative prior experience	8.13 (1.46)	5.55 (1.36)	7.95 (1.74)	6.59 (1.93)	8.47 (1.25)	6.37 (1.47)
Backpack:						
Control	6.42 (2.19)	7.50 (1.86)	6.35 (1.85)	7.82 (1.56)	6.99 (1.66)	7.71 (1.32)
Positive prior experience	7.05 (1.79)	7.44 (1.84)	6.08 (1.97)	7.61 (1.60)	6.83 (1.49)	7.20 (2.19)
Negative prior experience	7.85 (1.67)	6.28 (1.39)	7.67 (2.05)	7.27 (1.65)	8.75 (.96)	6.25 (1.82)
Hotel:						
Control	6.60 (2.28)	7.39 (2.07)	6.67 (1.88)	8.26 (1.35)	7.25 (1.75)	7.51 (1.80)
Positive prior experience	6.59 (2.01)	7.54 (1.78)	6.42 (1.75)	8.33 (1.28)	6.59 (1.68)	7.94 (2.09)
Negative prior experience	8.32 (1.47)	5.57 (1.63)	8.31 (1.56)	7.24 (1.71)	8.11 (1.77)	6.27 (1.64)

NOTE.—Standard deviation is shown in parentheses.

are the norm in status quo research (e.g., Landman's 1987 study described earlier). However, in contrast to the within-subjects design typically employed in this area, we use between-subjects designs to mitigate the potential for demand effects. In fact, recent research on omission bias reports that this bias disappears in a between-subjects design (N'gbala and Branscombe 1997), although it is unclear whether this also holds for the status quo effect.

STUDY 1

Method

Subjects and Design. Two hundred and forty undergraduate business students at a large midwestern university participated in this study and were compensated by extra credit. Two factors—decision (switch or repeat purchase) and prior experience (control, positive, or negative)—were manipulated between subjects and replicated across three product categories.

Procedure. Each subject examined three scenarios about an experience with a service or product. One scenario described an airline, one involved a backpack, and another described a hotel stay.¹ We manipulated prior experience by describing the experience as being either incident-free (positive) or unpleasant in some fashion (negative). No information about prior experience was provided in the control condition. After the prior-experience manipulation, we manipulated decision at two levels (i.e., switch or repeat purchase) by describing the subject in the scenario as either switching to a different alternative or as selecting the same alternative on the next choice occasion. In order to induce

a sense of regret, the second experience was always negative. Scenario order was randomized in all studies.

Measures. After finishing each scenario, subjects completed a three-item regret scale that assessed the subjects' regret in regards to the decision to switch or repeat ($\alpha = 0.75, 0.73, \text{ and } 0.76$ for the airline, backpack, and hotel scenarios, respectively):² "How much would you regret your decision to stay with (switch to) ___?" (anchored by not regret at all/regret very much), "If you could do it over, would you change your decision?" (anchored by definitely would not change/definitely would change), and "How much happier would you have been if you had made a different decision?" (anchored by not much happier/much happier). All items used in this research were on a 10-point scale.

Results

We analyze the data with a 2 (decision: switch/repeat) \times 3 (prior experience: control/positive/negative) MAN-OVA. Means by condition are given in table 1. Hypothesis 1 predicts that the control, the no-prior-experience group, will report greater regret in the switch condition than in the repeat condition. As we show in table 1, this is the case. Regret is greater in the switch condition than in the repeat condition for each scenario in the control group, and this difference is statistically significant in all three scenarios (i.e., airline: $t_{232} = 2.48, p < .01$; backpack: $t_{232} = 2.81, p < .01$; and hotel: $t_{232} = 1.96, p < .05$). Thus, hypothesis 1 is supported, representing the first replication of the status quo effect in a between-subjects design.

²Subjects also completed a three-item believability scale in our studies. This scale was entered as a covariate in the analyses and was insignificant. Thus, it is not discussed further.

¹All scenarios are available from the authors.

Hypothesis 1 also predicts that the results in the control condition will not differ significantly from the results in the positive-prior-experience condition. A MANOVA with only the control and positive-prior-experience conditions results in a decision main effect (Wilks's lambda $F(3, 158) = 4.00, p < .01$), while the decision \times prior-experience interaction fails to achieve significance. These results are replicated in each scenario-level ANOVA. Hypothesis 1 is thus fully supported. In the absence of any information regarding the prior experience, subjects seem to have concluded that the prior experience was relatively positive, thus causing the control-condition results to mirror those of the positive-prior-experience condition.

Hypothesis 2 predicts that regret in the conditions with a valid reason for the subsequent decision (i.e., positive/repeat and negative/switch) will be less than that in the conditions without a valid reason (i.e., positive/switch and negative/repeat). Consistent with our prediction, the pooled mean across the positive/repeat and negative/switch conditions is considerably less than the pooled mean across the positive/switch and negative/repeat conditions. This difference is statistically significant (airline: $t_{232} = 12.14, p < .01$; backpack: $t_{232} = 6.54, p < .01$; and hotel: $t_{232} = 11.06, p < .01$). Thus, the conditions in which the decision was reinforced by a good reason resulted in less regret than the conditions in which the decision seemed inconsistent with the prior experience. This supports hypothesis 2.

Hypothesis 3 predicts that the status quo effect will reverse in the negative-prior-experience condition, leading to switching being regretted less than repeating. Coupled with the status quo effect in the control and positive-prior-experience conditions, a disordinal interaction between decision and experience should obtain. The MANOVA results reveal this predicted interaction (Wilks's lambda $F(6, 460) = 10.58, p < .001$). Furthermore, neither the decision nor the prior-experience main effect is significant. In order to completely test our prediction of a status quo effect reversal, we contrast the regret across decision conditions in the presence of a negative experience. Repeating is regretted significantly more than switching in all three scenarios (airline: $t_{232} = 6.13, p < .01$; backpack: $t_{232} = 3.68, p < .01$; and hotel: $t_{232} = 6.17, p < .01$). As we predicted in hypothesis 3, the status quo effect reverses in the negative-prior-experience condition.

STUDY 2

The findings of study 1 suggest that the status quo effect makes repeat purchase less subject to regret than switching. However, when strong reasons are presented for the subsequent decision, there is less resulting regret and the status quo effect disappears. We now extend these findings by demonstrating that a second source of reasons, the amount of previous experience or history with the good or service, also influences the amount of regret associated with a choice. We draw on recent work in the quality literature to predict that consumers, in the case in which they have extensive experience with the good or service, will feel less regret for repeat purchase and greater regret for switching.

Rust et al. (1999) develop a Bayesian data integration and updating model of quality perceptions and show that the impact of a single outcome on consumers' perceptions of quality is moderated by consumers' amount of previous experience. In other words, consumers integrate new information, such as a specific transaction, with their cumulative quality perceptions (e.g., Bolton and Drew 1991; Boulding et al. 1993). Consumers with a longer history of using a brand have more strongly held beliefs about the brand's quality than consumers with a shorter usage history. Since the updated quality perception is a blend of the prior belief and the perception of the specific encounter or experience, the relative weight placed on the prior belief should be greater for consumers with a longer brand history. Across two experiments, Rust et al. (1999) find that a single experience has less impact on more experienced consumers (i.e., they update their quality perceptions to a lesser degree) than on less experienced consumers. Boulding, Kalra, and Staelin (1999) replicate these findings in a service setting.

In terms of the status quo effect and reasons, this research suggests that a greater amount of experience or history with a brand may increase consumers' commitment to the status quo alternative and moderate the effect demonstrated in study 1. We therefore predict that the status quo effect reversal demonstrated in study 1 will only be evident for low levels of prior history with the status quo alternative. Specifically, one should experience more regret for switching in the face of an extensive brand history than for switching in the face of a limited brand history. In contrast, repeating should result in less regret when it is prefaced by an extensive brand history than when it is prefaced by a limited brand history. In other words, extensive history should rotate the experience \times decision interaction predicted by hypothesis 3, resulting in a history \times decision interaction:

H4: Extensive brand history will decrease regret in the repeat condition (compared to low history) and increase it in the switching condition.

To our knowledge, the only other research examining the role of amount of history in the status quo effect is Hesketh (1996), who found evidence—in a vocational-training context—that longer-tenured employees were more committed to the status quo. However, the more-tenured employees differed from less-tenured employees in that they were also older, had lower qualification levels, and saw less potential for future promotion. Since a multivariate analysis was not performed, it is unclear whether the resistance to changing the status quo was due to tenure or to these other factors. In order to increase internal validity, we experimentally manipulate the amount of brand history in study 2.

Method

Subjects and Design. Subjects were 406 undergraduate students at a large midwestern university who participated in the study in return for extra credit. The study was a 2 (decision: switch/repeat) \times 2 (history: high/low) \times 3 (prior

experience: control/positive/negative) between-subjects design replicated across three categories.

Procedure. The procedure was identical to study 1. Subjects were asked to read three scenarios, one about an airline, one about a backpack, and one about a hotel. Subjects gave their reactions to each scenario immediately after reading the scenario. In addition to the three-item regret scale, subjects completed a manipulation check for brand history. The check asked them, "How much experience did you have with ___ prior to the present trip (purchase)?" (anchored by very little/very much). The history manipulation appears to have been successful because there is a significant difference between the manipulation-check means in the high- and low-history conditions in each scenario.

Results

The results across conditions are shown in table 1. We analyze our data with MANOVA. As in study 1, hypothesis 3 is supported by the significant-prior-experience \times decision interaction (Wilks's lambda $F(6, 784) = 18.64, p < .001$). Furthermore, both the decision and the prior-experience main effects are significant (Wilks's lambda $F(3, 392) = 5.37, p < .01$ and Wilks's lambda $F(6, 784) = 2.19, p < .05$, respectively). The decision main effect is the result of greater regret from switching than from repeating. The experience main effect is only significant in the backpack scenario ($F(1, 394) = 3.67, p < .05$) and results from lower regret in the positive-prior-experience condition.

Turning to the effects of brand history, we find that the history \times decision interaction is significant (Wilks's lambda $F(3, 392) = 5.52, p < .001$), as we predicted in hypothesis 4. Specifically, a high level of history led to lower regret in the repeat condition (airline: $M = 6.7$ vs. 7.4 ; backpack: $M = 6.7$ vs. 7.5 ; hotel: $M = 7.1$ vs. 7.3 for high and low history, respectively) and to higher regret in the switch condition (airline: $M = 7.9$ vs. 7.7 ; backpack: $M = 7.6$ vs. 7.0 ; hotel: $M = 8.0$ vs. 7.3 for high and low history, respectively). In the airline scenario, the difference in the repeat condition is statistically significant ($t_{391} = 3.04, p < .01$). For the backpack scenario, both differences are significant ($t_{391} = 3.53, p < .01$, and $t_{391} = 2.27, p < .01$, for the repeat and switch condition, respectively). And for the hotel scenario, the difference in the switch condition is significant ($t_{391} = 2.99, p < .01$). As we show in table 1, a higher amount of history tends to rotate the experience \times decision interaction by decreasing regret in the repeat conditions and increasing regret in the switching conditions, per hypothesis 4. Regret is less in the extensive-history/repeat conditions than in the low-history/repeat conditions in eight of the nine cases (i.e., three experience conditions \times three product categories), and a sign test is statistically significant ($p < .05$). Conversely, regret is greater in the high-history/switch conditions than in the low-history/switch conditions in each of the nine cases (sign test $p < .01$).

Interestingly, in the conditions in which high history had to be traded off against immediate prior experience, it ap-

pears that prior experience still carried a relatively large weight (e.g., the average regret for repeat was 8.0 vs. a regret for switching of 7.0 in the negative-experience condition). Future research might explore the conditions under which this difference might be completely eliminated or even reversed. Furthermore, an unexpected main effect of history is evident (Wilks's lambda $F(3, 392) = 3.86, p < .01$). This is not a particularly strong finding because the history effect is not significant in any of the three scenarios. Furthermore, interpretation is difficult because there is less regret in the extensive-history condition than in the low-history condition for the airline and backpack scenarios but more regret in the extensive-history condition than in the low-history condition in the hotel scenario.

We again test hypothesis 1's prediction that the results in the control condition will not differ significantly from the results in the positive-prior-experience condition by performing the MANOVA after dropping the negative-prior-experience condition. As in study 1, the decision main effect is significant in both the MANOVA (Wilks's lambda $F(3, 266) = 28.10, p < .0001$) and in each scenario-level ANOVA. The decision \times prior-experience interaction is only marginally significant (Wilks's lambda $F(3, 266) = 2.50, p < .10$). Importantly, the history \times decision interaction remains statistically significant in the MANOVA (Wilks's lambda $F(3, 266) = 2.67, p < .05$) and in each scenario-level ANOVA. As we observed in study 1, the results in the control condition mirror those in the positive-experience condition.

We test hypotheses 2 and 3 by analyzing the results in the low-history condition. As we predicted in hypothesis 2, regret across the strong-reason conditions (negative experience/switch and positive experience/repeat) is substantially lower than regret across the weak-reason conditions (negative experience/repeat and positive experience/switch) in all three scenarios. Furthermore, hypothesis 3 is strongly supported because the experience \times decision interaction is statistically significant in the MANOVA (Wilks's lambda $F(6, 390) = 11.60, p < .001$) as well as in each scenario. Thus, hypotheses 1–3 are all replicated in study 2.

STUDY 3

Our theorizing is based on the argument that people feel more regret for decisions that are not backed up by good reasons. This corresponds with some of the earlier insights into the psychology of regret. For example, Sugden (1985) argues that regret arises from self-recrimination and is most pronounced when the decision was unreasonable or indefensible. He argues that regret "depends upon something more than the nature of the two consequences you are comparing. It seems to depend also on the extent to which you can defend your original decision to yourself as reasonable, sensible or normal" (p. 86). Our objective in the third study is to formally test the premise that prior information provides a reason for a subsequent decision to change or maintain the status quo. Finding evidence in this regard will support our argument that consumers should feel less regret for

choices that seem to be upheld by the circumstances. We expect to observe three outcomes. First, the proportion of subjects who decide to repeat purchase should be greater when the previous experience is positive than when it is negative.

H5: The probability of repeat purchase will be greater following a positive experience than following a negative experience.

Second, if maintaining the status quo is in fact the default choice, the repeat-purchase percentage in the control group should be closer to the proportion observed in the positive-prior-experience condition than to the that observed in the negative-prior-experience condition.

H6: The probability of repeat purchase in the control condition will be more similar to that of the positive-experience condition than to that of the negative-experience condition.

Finally, subjects should feel a greater need to justify deviating from the status quo. Researchers have found that decision makers often choose the alternative with the greatest number of supporting reasons (e.g., Montgomery 1983). If consumers feel that repeating is inherently more justifiable than switching, they should, to compensate, provide a greater number of reasons for a decision to switch than for a decision to repeat.

H7: More reasons will be given for switching than for repeating.

Method

Procedure. Seventy-one undergraduate students participated in the experiment. The stimuli were identical to those used in study 1, except that the outcome of the subsequent decision was not described. Subjects were asked to read each scenario, to record which alternative they would choose, and to list as many reasons as they wished for having made this decision.

Results

The results are consistent with hypothesis 5. Subjects were much more likely to choose the original alternative again when the prior experience was positive (80%) than when it was negative (7%). Furthermore, this pattern was observed for each of the three scenarios (airlines: 65% vs. 0%, backpacks: 83% vs. 13%, and hotels: 91% vs. 9%). Since our variable is categorical (i.e., choice of the original good or service), we analyze the results using logistic regression. As we expected, prior experience exerts a strong influence on repeat purchase, as evinced by the log likelihood (LL) of 186.3 versus the intercept-only model LL of 284.6 ($\chi^2(2) = 98.3, p < .001$). As in studies 1 and 2, the effect is robust across scenarios, as the LL only marginally improves to 183.4 ($\chi^2(2) = 2.9, NS$) when scenario terms

are added to the model. However, the interaction of prior experience and scenario is significant, as evinced by the LL of 173.6 ($\chi^2(4) = 9.8, p < .05$). This is because of the control condition in the backpack scenario, which we will discuss later.

Further, the repeat purchase proportion in the control group is more similar to that of the positive-prior-experience condition than to that of the negative-prior-experience condition (hypothesis 6). This is the case in the overall sample and for each scenario. In order to statistically assess this difference, we performed two sets of logistic regressions—one with only the negative-prior-experience condition and the control condition and the other with only the positive-prior-experience condition and the control condition. In the comparison of the control condition to the negative-prior-experience condition, the repeat-purchase proportion is significantly different between the two groups for the total sample ($\chi^2(1) = 66.4, p < .001$) as well as for each scenario (airlines: 86% vs. 0%, backpacks: 52% vs. 13%, and hotels: 78% vs. 9% for control vs. negative prior experience, respectively). In contrast, the repeat-purchase proportions in the positive-prior-experience condition and the control condition are not significantly different from one another for the total sample ($\chi^2(1) = 1.2, NS$), and only one significant scenario-level difference emerges (backpack: $\chi^2(1) = 5.4, p < .05$). However, in the backpack scenario, the proportion of repeat purchases in the control group (52%) was closer to the positive-prior-experience group (83%) than to the negative-prior-experience group (13%).

Finally, we analyzed the reasons that subjects gave for their decision. Subjects who chose to switch gave more reasons (2.2) than subjects who chose to repeat (1.8). This difference was statistically different ($F(1, 202) = 11.98, p < .001$), providing support for hypothesis 7. As one would expect, the content of the reasons was quite different as well. The subjects who switched tended to cite the poor quality of the prior experience, while the subjects who repeated tended to mention the familiar nature of the status quo alternative. Interestingly, several subjects wrote “if it ain’t broke don’t fix it,” which is suggestive of folk knowledge (e.g., Friestad and Wright 1994) about maintaining the status quo.

STUDY 4

The results of study 3 suggest that information about a prior experience with a product or service can provide reasons for consumers to switch to an alternative. However, we have not examined the effect of reasons for the decision beyond those provided by prior experience. This is the purpose of study 4. We argue that postdecision regret should be mitigated in the presence of a strong reason. In order to control for multiple interpretations and for between-subjects variability, we provide specific reasons as part of each scenario. Furthermore, we formally test our main thesis that reasons for a decision make it more justifiable and inoculate the decision maker against regret. That is, the perceived

justifiability of the decision should mediate the effects of experience and decision:

H8: The status quo effect will be eliminated when there is a strong reason for the decision but will still be present when there is a weak reason.

H9: The effects of reason and decision on subsequent regret will be mediated by the perceived justifiability of the decision.

Method

Reason Stimuli Development. We began by using the reasons given by subjects in study 3 to generate a list of relatively strong and weak reasons for the second decision in each scenario. We also developed two additional scenarios, one involving a frequently purchased product (deodorant) and the other involving the purchase of clothing (jeans). We then pretested the strength of these reasons with a sample of undergraduate students. Specifically, respondents were shown each scenario up to the second decision and were asked to evaluate several possible reasons for the subsequent decision. We used the following criteria to select reasons: (a) the strong-reason evaluation had to be significantly greater than the weak-reason evaluation, and (b) the reason evaluation had to be consistent across experimental conditions (Perdue and Summers 1986). Strong and weak reasons were readily identified for the airline, backpack, deodorant, and jeans scenarios. However, only one reason in the hotel scenario (exterior corridors) was rated as relatively weak, and this reason exhibited a significant experience × decision interaction. Thus, a hotel scenario was not included in the study. Using the pretest results, we changed the reasons for the backpack scenario slightly. The reason treatment levels for each scenario were as follows:

	<i>Strong reason</i>	<i>Weak reason</i>
Airline	Better flight times	Curbside check-in
Backpack	Greater durability and separate pocket for cell phone	Attractive salesperson recommended it
Deodorant	Formula changed, carefully examined packages for active ingredients	Liked package shape
Jeans	Tried on many, liked comfort, fashion, and durability	Liked their recent TV ad

Subjects and Design. Ninety-two undergraduate business students at a large midwestern university participated in the study in return for extra credit. The study was a 2 (decision: switch/repeat) × 2 (reason strength: strong/weak) between-subjects design with replication across four product categories (airline, backpack, deodorant, and jeans). For example, a subject in the switch–strong reason condition read

a scenario for each product category in which the protagonist had a strong reason for switching.

Procedure. As in the previous studies, we manipulated the decision at two levels (i.e., switch or repeat purchase) by describing the subject in the scenario as either switching to a different alternative or selecting the same alternative on the subsequent choice occasion. Reason strength was manipulated via the description of the subject’s underlying reason for the choice. In order to induce a sense of regret, the second experience was always negative, regardless of condition. After reading the scenario, subjects completed the same three-item regret scale used in the first two studies as well as a decision-justifiability scale. The latter scale assessed the perceived justifiability of each decision via three questions ($\alpha = 0.91, 0.95, 0.94,$ and 0.92 for the airline, backpack, deodorant, and jeans scenarios, respectively): “How justifiable is the decision to repeat (switch)?” (anchored by strongly justifiable/weakly justifiable), “How easy to defend is the decision to repeat (switch)?” (anchored by easy to defend/not easy to defend), and “How logical is the decision to repeat (switch)?” (anchored by very logical/very illogical).

Results

Since we seek to examine the mediating effect of justifiability and the experimental design is between subjects with a replication across categories, we analyze the data using seemingly unrelated regression. When the independent variables are the same in each model (as was the case in studies 1 and 2), seemingly unrelated regression yields identical results as estimating each model separately, so MANOVA was an appropriate method for those studies. Unfortunately, MANOVA is not feasible in study 4 because it cannot incorporate different independent variables across models and thus cannot include the perceived justifiability of the decision in each scenario (subjects provided a justifiability judgment for each decision). Thus, we use a system of equations to estimate the effects simultaneously across categories.

First, we examine the parameters estimated across categories, which is analogous to estimating the overall effect of the independent variables in MANOVA. Both the reason-strength main effect ($b = -0.33, p < .05$) and the decision main effect ($b = 0.38, p < .01$) are significant. Since reason is coded as a 1 for the strong-reason condition and -1 for the weak-reason condition, the negative sign of the parameter indicates that strong reasons result in less regret. This supports hypothesis 2. The switch condition is coded as a 1, and the repeat condition is coded as a -1 . Thus the positive parameter estimate implies that, consistent with the status quo effect, switching was regretted more than repeating. Importantly, the reason strength × decision interaction is significant ($b = -0.36, p < .05$) and is driven by the absence of a status quo effect in the strong-reason condition. That is, examining the means pooled across scenarios (see table 2), the difference in regret between repeat and

TABLE 2
STUDY 4: REGRET MEANS ACROSS CONDITIONS

	Repeat	Switch
Pooled average:		
Strong reason	7.22 (1.62)	7.33 (1.59)
Weak reason	7.40 (1.43)	8.73 (1.07)
Airline:		
Strong reason	7.29 (2.04)	7.54 (1.79)
Weak reason	7.26 (1.87)	8.56 (1.49)
Backpack:		
Strong reason	7.33 (1.80)	7.02 (2.09)
Weak reason	7.14 (1.44)	8.68 (1.59)
Deodorant:		
Strong reason	7.59 (1.93)	7.71 (1.84)
Weak reason	7.49 (2.09)	9.08 (1.00)
Jeans:		
Strong reason	6.67 (2.36)	7.05 (1.96)
Weak reason	7.71 (1.74)	8.62 (1.73)

NOTE.—Standard deviation is shown in parentheses.

switch is significant in the weak-reason condition ($t_{91} = 2.36$, $p < .05$) but not in the strong-reason condition ($t_{91} = 0.18$, NS). Thus, hypothesis 8 is supported.

The results are consistent with our thesis across product categories. The reason-strength parameter is significant for the backpack ($b = -0.37$, $p < .05$), jeans ($b = -0.65$, $p < .01$), and deodorant scenarios ($b = -0.32$, $p < .10$), while the decision parameter is significant for the airline ($b = 0.39$, $p < .05$), deodorant ($b = 0.43$, $p < .05$), and backpack scenarios ($b = 0.31$, $p < .10$). Furthermore, the reason-strength \times decision interaction parameter is significant for the backpack ($b = -0.46$, $p < .01$) and deodorant scenarios ($b = -0.37$, $p < .05$) and is negative but insignificant in the airline ($b = -0.26$, NS) and jeans scenarios ($b = -0.13$, NS). Comparing the means between decision conditions for the strong versus the weak reason, we find that the status quo effect does not obtain in the strong-reason condition for any of the scenarios (all t_{91} 's < 0.64 , NS). However, the difference between the switch and the repeat conditions is significant in the weak-reason condition for all four scenarios (i.e., airline: $t_{91} = 3.02$, $p < .01$; backpack: $t_{91} = 3.15$, $p < .01$; deodorant: $t_{91} = 3.22$, $p < .01$; jeans: $t_{91} = 1.65$, $p < .10$).

Having established that reasons impact the regret experienced over decisions gone awry, we now proceed to test whether this effect is mediated by the justifiability of the decision (hypothesis 9). For mediation to occur, three conditions must be satisfied (Baron and Kenny 1986). First, the independent variables must exert a significant effect on the dependent variable. This condition is satisfied, as we already discussed. Second, the independent variables must exert a significant effect on the potential mediator, which, in this instance, is perceived justifiability. Results of a seemingly unrelated regression show that this is the case because the reason effect ($b = -0.82$, $p < .01$), the decision effect ($b = 0.72$, $p < .01$), and the reason \times decision interaction ($b = -0.39$, $p < .01$) are all significant. As we expected,

stronger reasons are perceived as more justifiable, as are repeat purchases.

The final step of the mediation analysis is to add the mediator to the original analysis and to examine the change in the original parameters. If they fall to insignificance, complete mediation is observed, while if the effect declines but remains significant, partial mediation is observed. When perceived justifiability is added to the model, its parameter is significant ($b = 0.19$, $p < .01$). Thus, when the decision is perceived as more difficult to justify, regret is greater. Furthermore, the parameter estimates for the other variables all decrease, and two of the effects become insignificant while one remains only weakly significant. Specifically, the reason-strength parameter declines from its original value of -0.33 ($p < .05$) to a value of -0.16 and is insignificant. Similarly, the decision parameter drops from its original value of 0.38 ($p < .01$) to a value of 0.18 and becomes insignificant. The change in the interaction parameter is not quite as marked as these, but it does exhibit a decrease, falling from a value of -0.36 ($p < .02$) to a value of -0.28 , and is only weakly significant ($p < .10$).

Table 3 shows that the mediation results are relatively robust across the four product categories. In all four scenarios, the reason-strength and decision effects are reduced substantially when justifiability is added to the model. In addition, inclusion of justifiability in the model reduces the reason \times decision interaction in the backpack and deodorant scenarios. The results of the pooled and scenario-level analyses suggest that justifiability almost completely mediates the main effects of reason strength and decision (repeat vs. switch) on postdecision regret, as well as their interaction. Thus, hypothesis 9's prediction that perceived justifiability attenuates postdecision regret is supported.

DISCUSSION

From a normative perspective, consumers should tend to switch after a bad experience and tend to repeat after a good experience, but the regret literature has identified violations of these behavioral or social norms. That is, the literature suggests that greater regret is experienced after switches than after repeats. Because the regret literature has tended to use impoverished scenarios that force subjects to infer the actor's reasons for the decision, it has obscured the possibility that switching behavior may or may not be the norm depending on the situation. In this article, we have built on Luce's (1998) work on negative emotion and Shafir, Simonson, and Tversky's (1993) work on reason-based choice to argue that when a decision is perceived as justified, the status quo effect is eliminated. We demonstrate that reasons determine the normative status of one's repeat/switch decisions and that such decisions, in turn, affect the experience of regret.

Amplified regret following a repeat purchase occurs when people feel that a regrettable decision not to switch was less reasonable than a regrettable decision to switch. Consistent with this result, we find that subjects reported that in the event of a positive prior experience, the actor who decided

TABLE 3
STUDY 4: MEDIATION ANALYSIS PARAMETER ESTIMATES

	Justifiability	Regret	
		Justifiability omitted	Justifiability included
Pooled model:			
Reason	-.82 (-5.84)	-.33 (-2.28)	-.16 (-1.13)
Decision	.72 (5.14)	.38 (2.63)	.18 (1.26)
Reason × decision	-.39 (-2.80)	-.36 (-2.52)	-.28 (-1.95)
Justifiability	. . .	. . .	.19 (5.32)
Airline:			
Reason	-.27 (-1.39)	-.25 (-1.34)	-.17 (-.92)
Decision	.42 (2.14)	.39 (2.07)	.28 (1.47)
Reason × decision	-.09 (-.48)	-.26 (-1.39)	-.26 (-1.39)
Justifiability	. . .	. . .	.20 (2.62)
Backpack:			
Reason	-1.45 (-6.84)	-.37 (-2.03)	-.02 (-.08)
Decision	.76 (3.58)	.31 (1.69)	.11 (.60)
Reason × decision	-.60 (-2.83)	-.46 (-2.57)	-.35 (-1.96)
Justifiability	. . .	. . .	.23 (3.46)
Deodorant:			
Reason	-.60 (-2.74)	-.32 (-1.73)	-.20 (-1.06)
Decision	1.36 (6.21)	.43 (2.35)	.17 (.82)
Reason × decision	-.74 (-3.36)	-.37 (-2.00)	-.24 (-1.26)
Justifiability	. . .	. . .	.18 (2.39)
Jeans:			
Reason	-1.25 (-5.39)	-.65 (-3.21)	-.34 (-1.57)
Decision	.65 (2.79)	.32 (1.58)	.14 (.69)
Reason × decision	-.11 (-.47)	-.13 (-.65)	-.14 (-.73)
Justifiability	. . .	. . .	.22 (3.28)

NOTE.—*t*-value is shown in parentheses.

to switch would feel more regret than the actor who decided to repeat. In contrast, when the prior experience was negative, subjects indicated that the actor who decided to switch would feel less regret than the actor who decided to repeat. The switching consumer at least tried to prevent further losses, whereas the repeating consumer did nothing despite circumstances suggesting that some avoidance action be taken. This result is extended to the case in which consumers have a longer history of experience with the status quo option (study 2). Study 4 tests this notion with less extreme reasons and supports our prediction that good reasons mitigate postdecision regret. By demonstrating that prior circumstances can result in the reversal of the status quo effect, we extend the status quo effect literature to situations in which information about prior experiences is available. Arguably, situations such as these resemble everyday consumer choice to a greater extent than situations in which such information is unavailable.

In their perceived service quality results, Rust et al. (1999) find that a longer history with an alternative tends to “inoculate consumers to some extent against a single standard outcome” (p. 87). Similarly, we find that a longer history attenuates the ensuing regret caused by the episode immediately preceding the decision. This finding has interesting implications, particularly in light of recent research into the role of regret on subsequent behavior. For example, researchers have found that consumers who regret their choice are less likely to repurchase that alternative on a

subsequent occasion, regardless of the amount of dissatisfaction with the chosen product (Zeelenberg, Inman, and Pieters 2001). Similarly, in another study focusing on consumer dissatisfaction with services, Zeelenberg and Pieters (1999) report that the experience of regret—over and above the effects of dissatisfaction—promotes switching to another service provider. Prior history should protect the brand from such downstream behaviors.

In study 2, we implicitly assumed that the brand history was positive. Future research is needed to examine the relative effects of negative versus positive brand history because it may be that the valance of the historical experience is less important than the mere amount of brand history. For example, Hartman et al. (1991) surveyed long-time utility customers. They divided customers into two groups—one that had experienced an average of three two-hour outages per year and one that had experienced an average of 15 four-hour outages per year. Each household was presented a menu of six alternative electrical utility plans with their present level of service (i.e., the status quo) clearly indicated. The options were configured for each group to represent realistic service alternatives versus the status quo. Despite their markedly different levels of service, the results were quite similar across the two groups. Over 60% of the group with a higher service level chose the status quo plan, compared to 58% of the consumers with a lower service level. This reluctance to switch utility service despite such poor service is consistent with our results in study 2.

Implications for Consumer Research and Practice

These findings have implications for the stream of research on the status quo effect. Namely, they suggest that previous information or experience provides underlying reasons for decisions. If there is sufficient motivation to warrant a switch, then consumers feel less regret in the face of a subsequent negative performance by the chosen alternative. This implies that feelings of regret are mitigated to the extent to which the consumer reflects and concludes that the decision was appropriate given the available information. Consumers who anticipate greater regret for repeat purchase than for switching should be more likely to switch as a result. This phenomenon could result from consumers' high expectations of service providers and product manufacturers. Failures are perceived as intolerable events, and consumers avoid them by switching to alternative providers. For marketing practitioners, this suggests that a larger-share brand might design its communications to position itself as the normative alternative.

It is interesting to note that the difference in regret between repeating and switching was greater in the negative-prior-experience condition than in the positive-prior-experience condition. Examining study 1, we find that regret is directionally greater in the negative/repeat condition ($M = 8.1$) than in the positive/switch condition ($M = 7.6$). Furthermore, regret is less in the negative/switch condition ($M = 5.8$) than in the positive/repeat condition ($M = 6.8$). This difference is statistically significant for all three scenarios. The pattern is similar in study 3. Regret is significantly greater in the negative/repeat condition than in the positive/switch condition ($M = 8.5$ vs. 7.9 , $t_{136} = 1.79$, $p < .10$) and is directionally less in the negative/switch condition than in the positive/switch condition ($M = 6.3$ vs. 6.7). This effect may result from negative previous experience, which causes decision makers to consider changing and induces them think about their reasons for changing. Prior research has found that causal search and counterfactual processing tend to be more elaborate following negative outcomes than following positive outcomes (e.g., Van den Bos, Vermunt, and Wilke 1997). Hence, the decision to switch or repeat is likely to be the product of a more effortful process following a negative prior outcome than following a positive prior outcome. This should amplify decision regret in negative-prior-experience conditions.

Status quo effects have intriguing implications for policy makers as well. When forecasting acceptance of new programs and policies, officials must take into account the status quo nature of longer-standing policies and programs. Our findings imply that communications campaigns should be designed with the aim of convincing the public that a good reason exists for a change. Such a need-for-change communications strategy might also be used in public service campaigns about teen smoking and underage drinking as well as in school referendums, etc. The recent failure of the Mississippi state flag referendum is a good example. Voters did not perceive a good reason to change the flag design, and the referendum failed.

Our finding that decision justifiability attenuates post-

decision regret might be expected to extend to contexts involving the omission bias (Zeelenberg et al. 2002). Kahneman and Tversky (1982) were the first to document the phenomenon that acts of omission are regretted much less than acts of commission. They showed subjects a scenario describing two investors, Paul and George. Paul considered switching his investment, but did nothing (omission), while George switched investments (commission). Although both investors incurred the same loss, the vast majority (92%) of the subjects indicated more regret for George, who had acted, than for Paul, who had decided not to act. Since the reasons for choosing to act or not to act in Kahneman and Tversky's (1982) scenario are unclear, subjects might have tried to infer why the two actors decided differently. If so, they might conclude that George had less justification for his decision to act than Paul had for his decision not to act. Our results suggest that the results would be reversed if subjects had been provided with information (e.g., the investments' relative performance) that suggested a better reason for George's decision than for Paul's.

Limitations and Future Research

We focused here only on regret. It would be worthwhile to examine the role of other decision-related emotions. One likely candidate is disappointment, the feeling experienced in comparing a received outcome versus prior expectations (e.g., Bell 1985). Disappointment has been shown to influence postchoice valuation (Inman et al. 1997; Zeelenberg and Pieters 1999) independently of regret effects. However, more work is needed to examine the relative effect of each on decision making in general and on the status quo effect in particular. Furthermore, in our studies we did not consider that consumers might delay their decision to cope with regret (Cooke, Meyvis, and Schwartz 2001). Research suggests that consumers might either avoid feedback (e.g., Janis and Mann 1977) or avoid decisions altogether (e.g., Luce 1998) as mechanisms of dealing with potential regret. This represents an interesting direction for future work.

This research has examined some interesting issues with respect to the experience of regret. Our findings suggest that the reason that prior experience and decision interact is that the norm differs in the two cases. Future research should explore consumers' reactions when other behavioral norms are placed into conflict with these. For example, switching behavior may be a norm in its own right in a new or turbulent market. If many people switch even when past experience was good, arguably they should feel less regret if the subsequent experience is negative. Furthermore, when multiple conflicting norms are available, future research should examine which particular norms are focused on to enhance or minimize feelings of regret. Finally, we have argued subjects feel less regret when existing information implies that their chosen alternative is superior. Conversely, if a person is asked to choose among alternatives on the basis of no information, there may be little ensuing regret. That is, if there is no good reason to pick any particular alternative, there is little reason to kick oneself. Together, these predictions

suggest that regret may have its greatest impact when the evidence for the chosen alternative is mixed. This suggests a somewhat circumscribed role for regret.

[Received June 1999. Revised August 2001. David Glen Mick served as editor, and Joel Huber served as associate editor for this article.]

REFERENCES

- Baron, Jonathan and Ilana Ritov (1994), "Reference Points and Omission Bias," *Organizational Behavior and Human Decision Processes*, 59 (September), 475-498.
- Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (December), 1173-1182.
- Bell, David E. (1985), "Disappointment in Decision Making under Uncertainty," *Operations Research*, 33 (January-February), 1-27.
- Bolton, Ruth N. and James S. Drew (1991), "A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes," *Journal of Marketing*, 55 (January), 1-9.
- Boulding, William, Ajay Kalra, and Richard Staelin (1999), "The Quality Double Whammy," *Marketing Science*, 18 (4), 463-484.
- Boulding, William, Ajay Kalra, Richard Staelin, and Valarie A. Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, 30 (February), 7-27.
- Cooke, Alan D. J., Tom Meyvis, and Alan Schwartz (2001), "Avoiding Future Regret in Purchase-Timing Decisions," *Journal of Consumer Research*, 27 (March), 447-459.
- Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 21 (June), 1-31.
- Hartman, Raymond S., Michael J. Doane, and Chi-Keung Woo (1991), "Consumer Rationality and the Status Quo," *Quarterly Journal of Economics*, 106 (February), 141-162.
- Hesketh, Beryl (1996), "Status Quo Effects in Decision-Making about Training and Career Development," *Journal of Vocational Behavior*, 48 (June), 324-338.
- Inman, J. Jeffrey, James S. Dyer, and Jianmin Jia (1997), "A Generalized Utility Model of Disappointment and Regret Effects on Post-choice Valuation," *Marketing Science*, 16 (2), 97-111.
- Janis, Irving L. and Leon Mann (1977), *Decision Making: A Psychological Analysis of Conflict, Choice, and Commitment*, New York: Free Press.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), "The Endowment Effect, Loss Aversion, and Status Quo Effect: Anomalies," *Journal of Economic Perspectives*, 5 (Winter), 193-206.
- Kahneman, Daniel and Dale T. Miller (1986), "Norm Theory: Comparing Reality to Its Alternatives," *Psychological Review*, 93 (April), 136-153.
- Kahneman, Daniel and Amos Tversky (1982), "The Psychology of Preferences," *Scientific American*, 246 (January), 136-142.
- Landman, Janet (1987), "Regret and Elation following Action and Inaction," *Personality and Social Psychology Bulletin*, 13 (December), 524-536.
- Luce, Mary Frances (1998), "Choosing to Avoid: Coping with Negatively Emotion-Laden Consumer Decisions," *Journal of Consumer Research*, 24 (March), 409-433.
- Macy, Michael W. (1995), "PAVLOV and the Evolution of Cooperation: An Experimental Test," *Social Psychology Quarterly*, 58 (June), 74-87.
- Mellers, Barbara A., Alan Schwartz, and Ilana Ritov (1999), "Emotion-Based Choice," *Journal of Experimental Psychology: General*, 128 (September), 332-345.
- Montgomery, Henry (1983), "Decision Rules and the Search for a Dominance Structure: Toward a Process Model of Decision Making," in *Analyzing and Aiding Decision Processes*, ed. Patrick Humphreys, Ola Svenson, and Anna Vari, Amsterdam: North-Holland, 343-369.
- N'gbala, Ahogni and Nyla R. Branscombe (1997), "When Does Action Elicit More Regret than Inaction and Is Counterfactual Thinking the Mediator of This Effect?" *Journal of Experimental Social Psychology*, 33 (May), 324-343.
- Ordóñez, Lisa D. and Terry Connolly (2000), "Regret and Responsibility: A Reply to Zeelenberg et al.," *Organizational Behavior and Human Decision Processes*, 81 (January), 132-142.
- Perdue, Barbara C. and John O. Summers (1986), "Checking the Success of Manipulations in Marketing Experiments," *Journal of Marketing Research*, 23 (November), 317-326.
- Ritov, Ilana and Jonathan Baron (1992), "Status Quo and Omission Biases," *Journal of Risk and Uncertainty*, 5 (February), 49-61.
- Rust, Roland T., J. Jeffrey Inman, Jianmin Jia, and Anthony Zatorik (1999), "What You Don't Know about Customer-Perceived Quality: The Role of Customer Expectation Distributions," *Marketing Science*, 18 (1), 77-92.
- Samuelson, William and Richard Zeckhauser (1988), "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty*, 1 (March), 7-59.
- Schweitzer, Maurice (1994), "Disentangling Status Quo and Omission Effects: An Experimental Analysis," *Organizational Behavior and Human Decision Processes*, 58 (June), 457-476.
- (1995), "Multiple Reference Points, Framing, and the Status Quo Bias in Health Care Finance Decisions," *Organizational Behavior and Human Decision Processes*, 63 (July), 69-72.
- Shafir, Eldar B., Itamar Simonson, and Amos Tversky (1993), "Reason-Based Choice," *Cognition*, 49 (October-November), 11-36.
- Shimanoff, Susan B. (1984), "Commonly Named Emotions in Everyday Conversations," *Perceptual and Motor Skills*, 58 (April), 514.
- Simonson, Itamar (1992), "The Influence of Anticipating Regret and Responsibility on Purchase Decisions," *Journal of Consumer Research*, 19 (June), 105-118.
- Sugden, Robert (1985), "Regret, Recrimination and Rationality," *Theory and Decision*, 19 (July), 77-99.
- Thaler, Richard H. and Eric J. Johnson (1990), "Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice," *Management Science*, 36 (June), 643-661.
- Tsiros, Michael and Vikas Mittal (2000), "Regret: A Model of Its Antecedents and Consequences in Consumer Decision Making," *Journal of Consumer Research*, 26 (March), 401-417.
- Van den Bos, Kees, Riel Vermunt, and Henk A. M. Wilke (1997), "Procedural and Distributive Justice: What Is Fair Depends More on What Comes First than on What Comes Next," *Journal of Personality and Social Psychology*, 72 (January), 95-104.
- Zeelenberg, Marcel, J. Jeffrey Inman, and Rik G. M. Pieters (2001), "What We Do When Decisions Go Awry: Behavioral Con-

sequences of Experienced Regret," in *Conflict and Tradeoffs in Decision Making*, ed. Elke U. Weber, Jonathan Baron, and Graham Loomes, Cambridge: Cambridge University Press, 136–155.

Zeelenberg, Marcel and Rik Pieters (1999), "On Service Delivery That Might Have Been: Behavioral Consequences of Dis-

appointment and Regret," *Journal of Service Research*, 2 (August), 86–97.

Zeelenberg, Marcel, Kees van den Bos, Eric van Dijk, and Rik Pieters (2002), "The Inaction Effect in the Psychology of Regret," *Journal of Personality and Social Psychology*, 82 (3), 314–327.