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Undoing regret on Dutch television

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PERSONALITY and SOCIAL PSYCHOLOGY bulletin

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1132 Announcement

1027	Psychological Attachment to the Group: Cross-Cultural Differences in Organizational Identification and Subjective Norms as Predictors of Workers' Turnover Intentions Dominic Abrams, Kaori Ando, and Steve Hinkle	
1040	Religious Belief and the Self-Concept: Evaluating the Implications for Psychological Adjustment Bruce Evan Blaine, Pamala Trivedi, and Amy Eshleman	
1053	Constructing Perceptions of Vulnerability: Personal Relevance and the Use of Experiential Information in Health Judgments Alexander J. Rothman and Norbert Schwarz	
1065	Effects of Behavioral Causes and Consequences on Person Judgments Roos Vonk	
1075	When Motivated Thought Leads to Heightened Bias: High Need for Cognition Can Enhance the Impact of Stereotypes on Memory Matthew T. Crawford and John J. Skowronski	
1089	Group Entitativity and Social Attribution: On Translating Situational Constraints Into Stereotypes Vincent Y. Yzerbyt, Anouk Rogier, and Susan T. Fiske	
1104	Management in Childhood: Does Death Conceptualization Moderate cts of Mortality Salience on Acceptance of Similar and Different Others? rian and Mario Mikulincer	
1113	Undoing Regret on Dutch Television: Apologizing for Interpersonal Regrets Involving Actions or Inactions Marcel Zeelenberg, Joop van der Pligt, and Antony S. R. Manstead	
1120	Combining Trait and Stereotype Expectancies in Person Memory Bryan E. Gingrich, David A. Houston, and Michael B. Lupfer	
1130	Call for Nominations	
1131	Announcement	

Undoing Regret on Dutch Television: Apologizing for Interpersonal Regrets Involving Actions or Inactions

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In a series of studies, the authors examined apology as a means of undoing interpersonal regrets. In the first study, 63 cases from a Dutch television show called I Am Sorry were coded on two dimensions. This show provides people with the opportunity to undo regrets arising in social relationships. The results show that people are more likely to undo interpersonal regrets by apologizing when these regrets stem from action than when they stem from a failure to act. Results also show that the time between the occurrence of the regretted interpersonal event and the apology is longer for failures to act than for actions. Both findings are replicated in a series of large-scale surveys using a representative sample of the Dutch adult population. The findings are discussed in relation to Gilovich and Medvec's hypothesis concerning the temporal pattern of the experience of regret.

Regret is the emotional state we experience when realizing that we would have been better off if we had decided or acted differently. It is an aversive state, and people are motivated to avoid it (Zeelenberg & Beattie, 1997; Zeelenberg, Beattie, van der Pligt, & de Vries, 1996). Too often, however, people do not succeed, and hence "regret is a common, if not universal, experience" (Landman, 1993, p. 110). Once experienced, regret will also influence behavior (Zeelenberg & Beattie, 1997; Zeelenberg, van Dijk, Manstead, & van der Pligt, in press). Perhaps the clearest examples of such influence are attempts to undo the regret. The undoing of regrets is the focus of this article. More specifically, we examine the undoing of interpersonal regrets following action and inaction.

Regrets are often experienced in social or interpersonal settings. For example, one might regret not having visited a relative on his or her birthday, or one might regret having accused someone of something he or she

did not do. In a study of verbal expressions of emotions in everyday conversation, Shimanoff (1984) found that regret was the second most frequently named emotion (only love was mentioned more frequently). Some of the regrets expressed in interpersonal situations may, of course, be purely individual. However, Hattiangadi, Medvec, and Gilovich's (1995) analysis of the regrets reported by the "Terman geniuses" shows that more than 25% of the reported regrets were social (e.g., "I should have emphasized social relationships more," "I shouldn't have married so early"). Landman and Manis (1992) studied regrets of more ordinary people: undergraduates, women who had consulted the University of Michigan's Center for Continuing Education of Women, and license renewers. Between 20% and 40% of these samples reported regrets related to marriage and romantic relationships, and between 19% and 55% reported regrets concerning family relationships and one's role as parent. It seems reasonable to conclude that a substantial proportion of our regrets are social or interpersonal in nature.

As noted above, people customarily take some action to undo their regrets. The undoing of interpersonal regrets typically takes the form of apologizing to the person who is affected by one's misbehavior. In The Netherlands, people have the opportunity to do this on television. The TV show I Am Sorry² offers people (here-

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after referred to as regretters) the opportunity to undo their social regrets by apologizing and offering a bunch of flowers to the person who is the target of their regrets (hereafter referred to as regrettees). A variety of interpersonal regrets is depicted in this show, ranging from someone who regrets not helping a friend who has been having a difficult time and someone who regrets having said something bad about a deceased person at his funeral to someone who regrets having slapped his best friend in the face.

This TV show is of some interest to those who conduct research on regret. Much research on the experience of regret focuses on differences between regrets for action and regrets for inaction. Initial work in this field reported that people regret actions with bad outcomes more than inactions with identical outcomes (e.g., Gleicher et al., 1990; Kahneman & Tversky, 1982; Landman, 1987). Gilovich and Medvec (1994, 1995) noticed a discrepancy between these findings and the everyday observation that people tend to regret the things that they did not do when reflecting on their own lives. This led Gilovich and Medvec to suggest that the experience of regret follows a temporal pattern: People regret actions more than inactions in the short run but inactions more than actions in the long run. Gilovich and Medvec proposed several mechanisms to account for the reduction in negative affect arising from regrettable actions and the increase in negative affect arising from regrettable inactions, thereby causing the hypothesized temporal pattern of regret. In a series of elegant studies, they and their colleagues have provided evidence for most of these mechanisms (Gilovich, Kerr, & Medvec, 1993; Gilovich & Medvec, 1994, 1995; Gilovich, Medvec, & Chen, 1995; Hattiangadi et al., 1995; Savitsky, Medvec & Gilovich, 1997).

The TV show IAm Sorry relates to one of the mechanisms that reduces the negative affect arising from regrettable actions more than the negative affect arising from regrettable inactions. Gilovich and Medvec (1995) refer to this mechanism as behavioral repair work or ameliorative behavior (Gilovich & Medvec, 1994). This behavioral undoing can be seen as related to the mental undoing that is studied by counterfactual thinking researchers. Behavioral undoing in the form of an apology is a prime candidate for the undoing of interpersonal regrets, whereas other types of regret may be undone by other forms of mental or behavioral undoing.

If the experience of interpersonal regret typically results in attempts to undo the regretted event, this should hold equally for both regretted actions and regretted inactions. Gilovich and Medvec (1994, 1995) argue, however, that there are two reasons why undoing is more likely to follow actions than inactions. First, in the short run, regrettable actions result in more regret

than regrettable inactions because regret for actions is amplified by the generation of counterfactuals (cf. Kahneman & Miller, 1986). The more regret people feel, the more motivated they will be to undo this regret. Hence, in the short run, people will be more motivated to undo regrettable actions. The second reason follows from a Lewinian perspective (Lewin, 1951). People who experience regret for an action taken have already overcome various forces that prevented them from acting. An initial action alters the tension system and makes subsequent actions, such as behavioral undoing, easier. An initial inaction, however, can lead to inertia (Tykocinski, Pittman, & Tuttle, 1995). If a person is not able to overcome the forces that prevent him or her from initial action, undertaking further action is even more difficult. Hence, behavioral undoing is hindered.

In a first test of whether undoing is more likely to follow actions than inactions, Gilovich and Medvec (1995, p. 387) asked 60 respondents to recall their single most regrettable action and their single most regrettable inaction. When the respondents had these instances in mind, they were asked whether they had done something to undo these regrets. They were also asked for which type of regret, action or inaction, they had engaged in the most effective undoing. A substantial majority of respondents (65%) reported more effective undoing for action than for inaction.

There are three difficulties with the interpretation of these data. First, respondents were asked about their most regrettable actions and inactions. It seems unlikely that these especially intense regrets are representative of regrettable actions and inactions in general. In other words, Gilovich and Medvec's (1995) conclusion that "people do things to alleviate the pain of their regrettable choices, and they are more likely to do so for their actions than for their failures to act" (p. 386) may only apply when the regrets concerned are very intense. Second, participants were asked to report for which regret they had engaged in the most effective undoing. However, Gilovich and Medvec's argument concerns the likelihood that we undertake behavioral undoing following actions and inactions and thus appears to be more closely related to dimensions such as the frequency of attempts to undo the regret than to the dimension of undoing effectiveness. Although Gilovich and Medvec's findings show that we are more effective in undoing our most regrettable actions than our most regrettable inactions, we may nevertheless make more frequent attempts to undo our regretted inactions. A third possible shortcoming of Gilovich and Medvec's study is that it is based on people's recollections of their regrets and subsequent undoings. These recollections of regretted actions and inactions are not always reliable, as is demonstrated by other recent research (Savitsky et al., 1997).

In short, although the findings of Gilovich and Medvec's (1995) study appear to support their theory, the degree of support they offer is rather limited. The evidence is arguably indirect and ambiguous. Because their study is the only test to date of differential undoing following regrettable actions and inactions, more evidence is clearly needed. The studies reported below provide such evidence.

The present study provides the first direct test of the proposition that people are more likely to undo regrettable actions than regrettable inactions. We test this proposition by examining the frequency with which real behaviors are enacted and thereby avoid some of the shortcomings of the Gilovich and Medvec (1995) study. In Study 1, we use a sample of real-life apologies from the Dutch TV show I Am Sorry to test Gilovich and Medvec's hypotheses about the undoing of regrettable events. Each apology was coded either as the undoing of a regretted action or as the undoing of a regretted inaction. Our first prediction, which follows directly from Gilovich and Medvec, is that the majority of apologies will be for regretted actions. At this point, we would like to emphasize that the present research is not about regret per se but rather about its undoing. This is an important distinction. If one considers undoing equivalent to regret,3 our prediction would actually contradict the findings of Gilovich and Medvec. They found more regret for inaction, whereas we predict more apologies following action. If, however, one regards apologies and undoing in general as a consequence of the experience of regret as we do, then our predictions are quite compatible with Gilovich and Medvec's theory.

Our second and more novel prediction concerns the time interval between the occurrence of the regretted event and the undoing. Gilovich and Medvec (1994, 1995) suggest that regrettable actions are more often undone because regret for actions is (initially) more intense. If this is true, this tendency should change over time. The intensity of regret for inactions increases over time, whereas the intensity of regret for actions decreases over time. Hence, in the long run, people will regret inactions more than actions. It follows that more time should elapse before people start undoing regretted inactions than regretted actions. This proposition is also tested in the present study. For each interpersonal regret, action or inaction, the elapsed time between the event and apology was coded. The prediction was that this interval would be longer for inactions than for actions. Although this prediction does not follow directly from Gilovich and Medvec's theory, it is clearly consistent with it. Moreover, to our knowledge such a prediction has never been tested.

Thus, in the present study we test two predictions related to the theory proposed by Gilovich and Medvec

(1994, 1995). We argue that although their theory concerns regret in general, it seems appropriate to focus more narrowly on one specific type of regret (and therefore on one specific type of undoing) in testing one of the model's mechanisms. Although this may limit the generalizability of the results of this particular series of studies, it also provides an opportunity to study the mechanism more closely. The present research is the first (as far as we are aware) to focus on the undoing of interpersonal or social regrets. By examining one component of Gilovich and Medvec's model in the context of interpersonal regrets, we hope to shed more light both on the model and on the nature of such regrets.

STUDY 1: UNDOING REGRET ON DUTCH TELEVISION

Method

Selected for analysis were 82 cases that were drawn from 18 different television shows. These shows were broadcast in 1995 and in the first 2 months of 1996, including a rerun of shows originally broadcast in 1993. There was no selection of shows other than this.

The typical I Am Sorry case contains the following elements. First, the regretter is welcomed in the studio. He or she then describes what the regret is about, and the TV host poses a number of questions to inform the studio and television audience about the details of the case. In the next phase, a film is shown in which the host or one of her collaborators approaches the regrettee and offers him or her a bunch of flowers. The regrettee is told that the regretter feels regret and that he or she wants to make up for the harm done. Next, the regrettee is asked to describe the regretted event from his or her own perspective. The third phase takes place in the TV studio. Now the regretter is waiting for a door to open. If the regrettee accepted the flowers, he or she enters the studio through this door and the regret is undone. This is usually followed by emotional scenes with lots of hugging, kisses, and tears accompanied by applause from the audience. Some cases follow a different sequence. In these cases, someone acts as an arbitrator for two people who are having a dispute. Because these cases (a total of 18 in our initial sample) do not involve undoing by a regretter him- or herself, they were excluded from the analysis.

The remaining 64 cases were coded either as regret resulting from an action or as regret resulting from an inaction. All coding was done by two independent judges who agreed on 61 cases (95.4%). Disagreements were resolved by discussion. The high level of interjudge agreement might be regarded as surprising because almost every action can also be described as an inaction. For example, the inaction "not visiting your mother on her birthday" might also be described by the alternative

TABLE 1: Interpersonal Regrets for Action and Inaction and Median Elapsed Time (in years) Until Undoing

Regret for	Number of Cases 45	Time Elapsed
Action		
Inaction	18	3.5

action "going to the movies on your mother's birthday." In accordance with Gilovich and Medvec's (1994, p. 359) criteria, each case was coded in accordance with what the regretters themselves emphasized. As in Gilovich and Medvec's (1995) study, this made the coding very easy. Only one case was excluded from further analysis because the two judges agreed that it was not possible to decide whether what was regretted constituted an action or inaction.

The judges also coded the elapsed time between the occurrence of the regretted event and the undoing (92.1% agreement; disagreements were resolved by discussion). This was also relatively easy because in most cases a question about the interval was explicitly asked by the host of the show, or information about the interval was spontaneously provided by the regretter and/or the regrettee. However, there were four cases in which the judges found it impossible to estimate the time elapsed since the regretted event. These cases were excluded from the time analysis.

Results and Discussion

Results are summarized in Table 1. As predicted, more cases concerned the undoing of a regretted action (71.5%) than the undoing of a regretted inaction (28.5%), $\chi^2(1) = 11.57$, p < .001. Also as predicted, the median time elapsed since the regretted event was $3\frac{1}{2}$ times as long for inactions than for actions. A Wilcoxon-Mann-Whitney test indicated that this difference was significant, z = 3.41, p < .001.

The present study of real-life undoing demonstrates that apologies for interpersonal regrets are more often made when they stem from actions than when they stem from inactions. It also shows that the apologies for regrettable actions tend to be given earlier than apologies for regrettable inactions. We would like to emphasize that finding the predicted effects using real-life behaviors demonstrates that effects of regret on behavior are not simply laboratory phenomena. This underscores the significance of the phenomenon under investigation and is testimony to the generalizability of Gilovich and Medvec's (1994, 1995) theory concerning the temporal pattern of regret.

The present study overcame two of the possible shortcomings present in Gilovich and Medvec's (1995) study, which we described earlier. First, the present study focused explicitly on the frequency of behavioral undoing instead of its effectiveness. Second, because we observed behavior, our data are not influenced by possible recall biases. However, as in the Gilovich and Medvec study, our focus was on intense regrets,4 which are probably not representative for regrets in general. An obvious additional limitation of this study is that the cases included in the analysis are not a random sample of undoing cases. They were presumably selected by the producers of the show from a larger sample of cases submitted to the program for possible inclusion. Furthermore, the cases submitted to the show are themselves self-selected and may therefore differ from the general population of regretted events in some systematic way. For example, both the self-selection of cases by members of the general public and the selection of cases by the producers of the show may favor actions over inactions not because of any temporal pattern of regret but rather because regretted actions make for better television than do regretted inactions. Although the consistency of the present findings with those from research that employs a quite different research methodology makes an account in terms of selection bias somewhat implausible, we cannot conclusively rule out the possibility that such a bias contributed to the observed pattern of findings.

UNDOING SURVEYS

To overcome the possible problems related to the selection of cases and the focus on intense regrets in Study 1, further studies were conducted to test the generality of the findings of Study 1. The respondents were drawn from a large representative sample of the Dutch adult population. This sample consists of a panel of respondents (N= approximately 2,500) maintained by a large Dutch market research company. Members of this panel receive questionnaires on a video terminal directly linked to the mainframe computer of the market research company. A randomly selected subset of this panel, consisting of 656 males and 554 females, was divided (also at random) into four groups of approximately equal size. Each group was asked one or more questions about the undoing of interpersonal regrets in their daily life.

Studies 2a and 2b: More Undoing Following Action Than Inaction?

The first finding from Study 1 concerned the occurrence of undoing for actions versus inactions. To test whether people are more likely to undo regretted actions than regretted inactions, a sample of adults (N=310;174 males and 136 females, ages ranged from 16 to 85 years, with a median of 44 years) was asked the following question:

Sometimes when we feel regret about something, we say we are sorry in order to make it up again. If you apologize for something, is that generally for something you did but wish you hadn't done or for something you did not do but wish you had?

In response to this question, 198 of the 310 respondents (64%) indicated that they more often apologized after a regrettable action than after a regrettable inaction, $\chi^2(1) = 23.85$, p < .001. This confirms the finding obtained in Study 1 that undoing is more likely to occur after a regretted action than after a regretted inaction.

The same line of theoretical reasoning leads one to expect that people generally experience a greater tendency to undo actions as compared to inactions. To test this more directly, a separate group of respondents (N= 310; 157 males and 153 females, ages ranged from 17 to 83 years, with a median of 47 years) was asked a slightly different question:

Sometimes when we feel regret about something, we say we are sorry in order to make it up again. When would you feel a stronger tendency to apologize as soon as possible: after something you did but wish you hadn't done or after something you did not do but wish you had?

More than two thirds of the respondents (210, 68%) reported that they would feel a stronger tendency to apologize as soon as possible after a regrettable action, $\chi^2(1) = 39.03$, p < .001. This is also consistent with the finding obtained in Study 1. Moreover, the present findings show that it is not the sheer number of regretted actions that is responsible for the findings of Study 1 and Study 2a. People are more inclined to apologize after a regretted action than after a regrettable inaction.

Studies 3a and 3b: Delayed Undoing Following Inaction?

A second finding of Study 1 concerned the elapsed time between the occurrence of the regretted event and the undoing. As expected, there was a longer interval between the regretted interpersonal event and the apology for it when the cause was an inaction as compared to an action. The results of Study 2b, in which respondents were asked about apologizing as soon as possible, suggest the same pattern. Respondents felt a stronger tendency to undo a regretted event as soon as possible when it was an action than when it was an inaction. To provide a more direct test of the prediction concerning the elapsed time between the event and the undoing, a further group of respondents (N = 299; 163 males and 136 females, ages ranged from 16 to 91 years, with a median of 47 years) was asked the following question:

Sometimes when we feel regret about something, we say we are sorry in order to make it up again. Please think

about instances in which you said you were sorry because you did something that you should not have done. How much time was there on average between the event and the apology?

Respondents answered this question on a 7-point scale. The scale points were labeled as follows: 1 (less than a day), 2 (between a day and a week), 3 (between a week and a month), 4 (between a month and 3 months), 5 (between 3 months and half a year), 6 (between half a year and a year), and 7 (longer than a year). The modal answer to this question was less than a day (147 respondents, 49%). This indicates that people apologize for interpersonal regrets arising from actions very quickly. How does this compare with apologizing for interpersonal regrets arising from inactions?

The same group of respondents was also asked to answer this question in relation to their inactions or their failures to act. More specifically, we asked them to "think about instances in which you said you were sorry because you did not do something that you should have done." Here the modal answer was between a day and a week (129 respondents, 43%). A Wilcoxon Signed-Rank test confirmed that apology following regretted actions takes place sooner after the event than does apology after regretted inactions, z = -4.24, p < .001.

In the survey just described (Study 3a), respondents were asked to think about apologies following actions and inactions in general. As noted above, recollections of regretted events can be biased (Savitsky et al., 1997), and it might be argued that the present findings are subject to the influence of these biases. In addition, it might be argued that these data do not reflect what people really do but rather their own theories about what they do. In a further survey (Study 3b) using a different group of respondents (N = 291; 162 males and 129 females, ages ranged from 17 to 89 years, with a median of 43 years), we attempted to overcome this possible limitation. Respondents were explicitly asked to recall their most recent apology for a regretted action or inaction. Focusing on the most recent apology is assumed to be less subject to bias than thinking about apologies in general. We therefore asked them the following question:

Sometimes when we feel regret about something, we say we are sorry in order to make it up again. Please recall the most recent instance in which you said you were sorry because you did something that you should not have done. How much time was there between the event and the apology?

The results of this survey were very similar to those of Study 3a. When our respondents were asked to recall their most recent undoing of a regrettable action and were subsequently asked "How much time was there between the event and the apology?" both the modal and the median answer was less than a day (165 respondents, 57%). When they were asked about the undoing of their most recent regretted inaction, the modal answer was also less than a day (132 respondents, 45%), but the median answer was between a day and a week (101 respondents). A Wilcoxon Signed-Rank Test indicated that undoing occurred significantly more quickly following action than following inaction, z = -2.59, p < .01, consistent with the findings of Study 1 and Study 3a.

In summary, the four surveys provided further support for the two findings of Study 1. Respondents were more likely to undo (i.e., apologize for) regretted actions than regretted inactions, and the time between the occurrence of the regretted event and undoing was longer for inactions than for actions. These findings are consistent with Gilovich and Medvec's (1995) arguments concerning the temporal pattern of regret and are not subject to the selection biases that may conceivably have played a role in Study 1.

A limitation of the present series of studies is that they rely on people's recollections of apologies for regretted actions and inactions. As we discussed earlier, these recollections may be biased. However, the results are consistent with those from Study 1, which do not suffer from these biases because in Study 1 real behavior was observed. Furthermore, the results of Study 3b came from recollections of the most recent apologies, which assured us that these data do really reflect the participants' behaviors.

Another difference between Study 1 and these surveys concerns the difference in elapsed time between the occurrence of the regretted event and the undoing. In Study 1, it took on average more than 2 years for individuals to undo their regret by apologizing for them. In the undoing surveys, respondents indicated that it often took them less than a day. This difference probably stems from the fact that the regrets shown in I Am Sorry are regrets that are not easily undone. If they were easy to undo, the regretters would presumably have undone them earlier without the help of television. Studies 2 and 3 focused either on interpersonal regrets in general or on the most recent interpersonal regret for which apology had been made. A related but slightly different reason for the difference between the two sets of findings arises from the fact that the regrets included in Study 1 were much more intense than the everyday regrets in Studies 2 and 3.

The fact that both predictions (i.e., concerning frequency and time) were supported for both intense and everyday regrets, and in both recollections of behaviors and in observed behaviors, the predictions overcome limitations present in Gilovich and Medvec's initial study

and can thus be seen as lending additional support to Gilovich and Medvec's argument concerning the temporal pattern of regret.

GENERAL DISCUSSION

When we experience regret, we are motivated to undo this aversive feeling. If our regret is interpersonal, the simplest way to undo the regretted event is to say that we are sorry. In the present series of studies, we investigated this particular type of undoing behavior. As predicted, we found (a) that there is a higher frequency of apology for interpersonal regrets that stem from action than for those that stem from inaction and (b) that the elapsed time between the occurrence of the interpersonal regret and the apology is longer for regrets stemming from inaction than for those stemming from action. These predictions were confirmed for the intense regrets, as analyzed in the TV show study (Study 1), and for more everyday regrets, as examined in the survey studies (Studies 2 and 3).

Taken together, these findings are consistent with Gilovich and Medvec's (1994, 1995) views concerning the temporal pattern of regret and undoing after action and inaction. These authors argue that, in the short run, people regret their actions more than their inactions but that, in the long run, they regret their inactions more than their actions. Differential behavioral undoing of actions and inactions is one of the mechanisms proposed by Gilovich and Medvec to account for the temporal pattern of regret. The present research provides stronger and clearer evidence of this differential undoing than the evidence available from Gilovich and Medvec's (1995) own study.

In the studies reported above, we treated apologies as a specific type of behavioral undoing that is motivated by the experience of interpersonal regret. Although there also exist apologies that are not motivated by regret (i.e., phony expressions of regret), the cases we studied were not of this type. The cases in the TV show involved intense regret, as is evident from the behavior of the regretters, and in the survey studies we specifically asked for regrets that were apologized for and not about apologies in general.

A question that remains is whether our findings can be generalized to other regrets and undoings. One might argue that our finding that action regrets result in more undoing than inaction regrets is typical for interpersonal regrets because people are inclined to apologize for the direct harm they have caused others, whereas at the same time, people might be more inclined to undo more individual regrets that stem from inaction. Although our data do not address individual regrets, we do believe for three reasons that our results will also hold

for more individual regrets. First, our predictions were derived from a general theory about regret, which has proven its usefulness in explaining individual regrets. Second, our finding that action regrets result in more undoing replicates Gilovich and Medvec's (1995) finding about regret in general. Third, the concern that things might be different for individual regrets does not apply to our second finding that the elapsed time between the occurrence of the regret and undoing is longer for regrets stemming from inaction than for those stemming from action.

Thus, although Gilovich and Medvec's (1994, 1995) theory is about regret in general, the present findings show that predictions derived from their theory are upheld in the specific case of apologies stemming from interpersonal regrets. Although this nicely demonstrates the scope of their theory, we also recognize the desirability of showing that purely individual regrets have similar effects on subsequent behavior.

NOTES

1. This refers to the regrets displayed in Hattiangadi et al.'s (1995, pp. 180-181) Table 1. These are only the first regrets mentioned by each participant. The percentage of participants experiencing social regrets would be much higher if all regrets were included.

2. This show is produced by Endemol, hosted by Caroline Tensen, and broadcast nationwide by RTL-4. The Dutch title of the show is *Het Spijt Me.* Since June 8, 1997, Twentieth Television has been broadcasting a very similar show in the United States under the name *Forgive or Forget* (Ockhuysen, 1998).

3. Note that in cognitive dissonance theory, the two concepts are seen as identical and that regret is typically operationalized as the reversal or undoing of an initial decision (e.g., Festinger, 1964; Wicklund & Brehm, 1976). Although we agree that the two are very much related, we explicitly view behavioral undoing as a consequence of regret (see also Zeelenberg, 1996; Zeelenberg et al., in press).

4. Although it is not sure that the cases in I Am Sorry are representative of the things people regret most, which was the focus in the Gilovich and Medvec (1995) study, the cases do typically involve very

serious regrets.

REFERENCES

Festinger, L. (1964). Conflict, decision, and dissonance. Stanford, CA: Stanford University Press.

Gilovich, T., Kerr, M., & Medvec, V. H. (1993). The effect of temporal perspective on subjective confidence. *Journal of Personality and Social Psychology*, 64, 552-560.

- Gilovich, T., & Medvec, V. H. (1994). The temporal pattern to the experience of regret. Journal of Personality and Social Psychology, 67, 357-365.
- Gilovich, T., & Medvec, V. H. (1995). The experience of regret: What, when and why. *Psychological Review*, 102, 379-395.
- Gilovich, T., Medvec, V. H., & Chen, S. (1995). Omission, commission and dissonance reduction: Overcoming regret in the Monty Hall problem. Personality and Social Psychology Bulletin, 21, 182-190.
- Gleicher, F., Kost, K. A., Baker, S. M., Strathman, A. J., Richman, S. A., & Sherman, S. J. (1990). The role of counterfactual thinking in judgments of affect. Personality and Social Psychology Bulletin, 16, 284-295.
- Hattiangadi, N., Medvec, V. H., & Gilovich, T. (1995). Failing to act: Regret of Terman's geniuses. International Journal of Aging and Human Development, 40, 175-185.
- Kahneman, D., & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. Psychological Review, 93, 136-153.
- Kahneman, D., & Tversky, A. (1982). The psychology of preferences. Scientific American, 246, 160-173.
- Landman, J. (1993). Regret: The persistence of the possible. New York: Oxford University Press.
- Landman, J. (1987). Regret and elation following action and inaction. Personality and Social Psychology Bulletin, 13, 524-536.
- Landman, J., & Manis, J. D. (1992). What might have been: Counterfactual thought concerning personal decisions. British Journal of Psychology, 83, 473-477.
- Lewin, K. (1951). Field theory in social science. New York: Harper.
- Ockhuysen, R. (1998, January 22). Endemol weert zich tegen diefstal televisie-idee [Endemol defends itself against theft of television idea]. De Volkskrant, p. 1.
- Savitsky, K., Medvec, V. H., & Gilovich, T. (1997). Remembering and regretting: The Zeigarnik effect and the cognitive availability of regrettable actions and inactions. *Personality and Social Psychology Bulletin*, 23, 248-257.
- Shimanoff, S. B. (1984). Commonly named emotions in everyday conversations. *Perceptual and Motor Skills*, 58, 514.
- Tykocinski, O. E., Pittman, T. S., & Tuttle, E. E. (1995). Inaction inertia: Foregoing future benefits as a result of an initial failure to act. *Journal of Personality and Social Psychology*, 68, 793-803.
- Wicklund, R. A., & Brehm, J. W. (1976). Perspectives on cognitive dissonance. Hillsdale, NJ: Lawrence Erlbaum.
- Zeelenberg, M. (1996). On the importance of what might have been: Psychological perspectives on regret and decision making. Doctoral dissertation, University of Amsterdam.
- Zeelenberg, M., & Beattie, J. (1997). Consequences of regret aversion 2: Additional evidence for effects of feedback on decision making. Organizational Behavior and Human Decision Processes, 72, 63-78.
- Zeelenberg, M., Beattie, J., van der Pligt, J., & de Vries, N. K. (1996). Consequences of regret aversion: Effects of expected feedback on risky decision making. Organizational Behavior and Human Decision Processes, 65, 148-158.
- Zeelenberg, M., van Dijk, W. W., Manstead, A. S. R., & van der Pligt, J. (in press). The experience of regret and disappointment. Cognition and Emotion, 12.

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