

The Role of Interpersonal Harm in Distinguishing Regret From Guilt

Marcel Zeelenberg and Seger M. Breugelmans
Tilburg University

Regret and guilt are emotions that are produced by negative outcomes for which one is responsible. Both emotions have received ample attention in the psychological literature; however, it is still unclear to what extent regret and guilt represent distinct psychological processes. We examined the extent to which the distinction between interpersonal harm (negative outcomes for others) and intrapersonal harm (negative outcomes for self) is crucial in differentiating these two emotions. In a series of 3 studies we found that guilt is predominantly felt in situations of interpersonal harm, whereas regret is felt in both situations of interpersonal harm and intrapersonal harm. Moreover, the results show that in situations of interpersonal harm the phenomenology of regret shares many, but not all features with the phenomenology of guilt. We conclude that the emotion processes resulting from interpersonal and intrapersonal harm are clearly distinct, but that regret as an emotion label is applied to both types of processes whereas the emotion label guilt is primarily used to refer to experiences of interpersonal harm. Implications for emotion research are discussed.

Keywords: regret, guilt, experimental content

People often use emotion words to express their feelings about negative events. For example, people might say that they feel regret for having invested their life savings in the wrong stock, or that they feel guilty for having damaged their friend's car. As psychologists, we tend to see these emotion words as indicators of distinct emotional experiences (Sabini & Silver, 2005). When people say that they regret something we assume that they have a different experience than when they say that they feel guilty. However, emotions are fuzzy concepts and there is little evidence for a one-to-one correspondence between emotion processes and emotion labels (Breugelmans & Poortinga, 2006; Frijda, Markam, Sato, & Wiers, 1995; Scherer, 2005). Regret and guilt both refer to experiences in which we are responsible for negative outcomes. Berndsen, Van der Pligt, Doosje, and Manstead (2004) recently argued that the most important distinction between regret and guilt is whether people are responsible for negative outcomes for themselves or for others. However, it is still unclear whether the emotion labels regret and guilt really refer to distinct psychological processes or that they are just two words that people use to refer to the same phenomenological experience in different situations of intrapersonal and interpersonal harm (for an analogous discussion of embarrassment and shame, see Sabini & Silver, 1997).

We present three studies to show that intrapersonal and interpersonal harm indeed lead to phenomenologically distinct emotion

experiences, but that the emotion label regret is applied to both types of experiences whereas the emotion label guilt is almost uniquely used to refer to emotional experiences following harm done to someone else. We do this by studying the ratings of emotions across different situations in Studies 1 and 2 (cf., Smith, Webster, Parrott, & Eyre, 2002) and by looking into the phenomenological experiences of emotions in Studies 2 and 3 (cf., Roseman, Wiest, & Swartz, 1994). Below, we first discuss theoretical and empirical evidence for the distinctness of regret and guilt. Then we discuss the proposal of Berndsen et al. (2004) about the focus of harm as a criterion for distinguishing these emotions and, finally, we discuss how we will solve the unclarity with regard to the distinction between regret and guilt.

Regret and guilt are related emotions, typically occurring in situations in which people feel responsible for a negative outcome or event. This relatedness is apparent in the ways that researchers have defined these emotions. Guilt has been described as "an individual's unpleasant emotional state associated with possible objections to his or her actions, inaction, circumstances, or intentions" (Baumeister, Stillwell, & Heatherton, 1994, p. 245) and as "regret over the 'bad thing' that was done" (Tangney, 1992, p. 199). Similarly, regret has been described as "a more or less painful cognitive and emotional state of feeling sorry for misfortunes, limitations, losses, transgressions, shortcomings or mistakes" (Landman, 1993, p. 36). Some researchers have even treated guilt and regret as more or less the same emotion. For example, Shimanoff (1984) found that regret was the second most frequently named emotion in a study of the use of emotions in everyday language (only love was mentioned more frequently). However, his category of regret actually combined utterances of regret, guilt, and remorse.

There is also empirical evidence that guilt and regret are related. Russell and Mehrabian (1977) asked participants for many different emotion terms, to rate their pleasure–displeasure, arousal–nonarousal, and dominance–submissiveness, each via six 9-point semantic differential items. They found that regret and guilt were

Marcel Zeelenberg, Department of Social Psychology and Tilburg Institute for Behavioral Economics Research, Tilburg University; Seger M. Breugelmans, Department of Cross-Cultural Psychology, Tilburg University.

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Correspondence concerning this article should be addressed to Marcel Zeelenberg, Department of Social Psychology, Tilburg University, P.O. Box 90153, 5000-LE Tilburg, the Netherlands. E-mail: Marcel@uvt.nl

evaluated as equal on all dimensions. Mandel (2003) asked participants to recall a negative academic experience or a negative interpersonal experience and next asked them to rate the degree to which the experience made them feel a number of emotions (0 = *not at all*, 6 = *extremely*), including regret and guilt. In this study guilt and regret were correlated at $r = .52$. In a similar study, Zeelenberg, Van Dijk, Van der Pligt et al. (1998) asked participants to recall a negative emotional experience and rate the extent to which they experienced a number of negative emotions including regret and guilt (1 = *none*, 10 = *very much*). The correlation was $r = .60$. Data by Fontaine et al. (2006) demonstrates that the strong relation between regret and guilt is also found cross culturally. Participants in Belgium, Hungary, and Peru were asked to rate the intensity of regret and guilt (0 = *not at all*, 5 = *very intense*), among a set of a set of other emotions and reactions, in response to local stimuli situations. Multidimensional scaling produced a similar two-dimensional structure across all three countries, with regret and guilt being located very closely together.

Despite the theoretical and empirical relatedness, a number of theorists have argued for differences between guilt and regret, often in terms of morality (e.g., Roseman, 1984). This is nicely summarized by Ben-Ze'ev (2000): "We feel guilty after doing something which is forbidden; we feel regret after doing something which was basically a failure" (p. 498). However, others have argued against this distinction. For example, Tannenbaum (2007) argued that "on the performance view the negative moral evaluation associated with agent-regret is no different from the negative moral evaluation associated with guilt" (p. 45). In a review of the (predominantly conceptual) literature on comparisons of regret and guilt, Landman (1993) arrived at a different distinction: "In general, it seems impossible to imagine experiencing guilt without regret, but quite possible to imagine experiencing regret without guilt. Thus regret is once again the broader concept" (p. 56). So, rather than distinguishing regret and guilt on the basis of their situational appraisals (e.g., morality), Landman claimed that regret applies both to situations in which guilt would be felt and to situations in which guilt would not be felt. However, until recently these proposed distinctions between regret and guilt had not been subjected to empirical scrutiny.

An important first step in distinguishing regret from guilt was made by Berndsen et al. (2004). They argued that these emotions can be differentiated on the basis of the type of harm that is caused by the actor. More specifically, they proposed that "the distinction between *interpersonal* harm and *intrapersonal* harm is crucial to the distinction between *guilt* and *regret*" (p. 55, emphasis in the original). They argued that regret is caused by intrapersonal harm and guilt by interpersonal harm. Note that this distinction is compatible with a distinction on the basis of morality (Ben-Ze'ev, 2000), but that it is inconsistent with the position taken by Landman (1993) that regret is the broader emotion of the two.

In the Berndsen et al. (2004) studies, participants read a number of scenarios that differed in the amount of intrapersonal harm and interpersonal harm that was caused by the target person. Participants rated the extent to which they would feel regret and guilt in each of these situations. Although these scenario studies provided support for their distinction between regret and guilt in terms of both kinds of harm, their results could be questioned for theoretical, empirical, and methodological reasons. Specifically, it is unclear why regret should follow only from intrapersonal harm

and not from interpersonal harm. Before we turn to the studies that we ran to clarify this issue, let us first describe our concerns with respect to the Berndsen et al. studies.

Theoretically, we believe there is no reason why one could not feel regret over harm done to others. Most psychological approaches to regret allow for regret over interpersonal harm. Landman (1996), for example, stated that "Genuine regret signifies that we have standards of excellence, decency, morality, or ethics we still care about" (p. 109; see also, Gilovich & Medvec, 1995; Golding, 1984; Zeelenberg, 1999). Even economic regret theories leave open this possibility (e.g., Loomes & Sugden, 1982). According to these theories one feels regret if an obtained outcome compares badly with an unchosen outcome. These economic theories do not require that the outcomes resulting in regret should be purely individual. Any negative decision outcome would qualify, including negative outcomes for others (i.e., interpersonal harm in the terminology by Berndsen et al., 2004).

Empirically, there is ample evidence that regret can be experienced in situations of interpersonal harm. Hattiangadi, Medvec, and Gilovich's (1995) analysis of the regrets reported by "Terman geniuses" shows that more than 25% of the reported regrets had a social nature (e.g., "I should have emphasized social relationships more" or "I shouldn't have married so early"). In a study of more ordinary people (undergraduates, women who had consulted the University of Michigan's Center for Continuing Education of Women, and license renewers) social regrets were also apparent (Landman & Manis, 1992). Between 20% and 40% of the regrets related to marriage and romantic relationships and between 19% and 55% reported regrets concerning family relationships and one's role as parent. In yet another study, Zeelenberg, Van der Pligt and Manstead (1998) found that interpersonal regrets, just like intrapersonal regrets, motivated efforts to undo the harm (in their study these were public apologies). Finally, in a comparison of individualistic and collectivistic cultures, similar percentages of social regrets were found (Gilovich, Wang, Regan, & Nishina, 2003). In a strict sense, these interpersonal or social regrets do not need to follow from interpersonal harm. Regrets about one's role as a parent, spouse, or friend may also simply reflect an egoistic basis for regret (e.g., "I could have gotten more out of this"). However, we can conclude that a substantial proportion of our regrets are social or interpersonal in nature, leaving open the possibility that regret also follows from interpersonal harm.

Methodologically, we see some potential limitations of the Berndsen et al. (2004) studies. In their first study the scenarios that varied on interpersonal and intrapersonal harm also varied on many other dimensions. For each condition the content of the scenario was different, which allows for the possibility that the associated regret and guilt ratings were scenario-specific effects rather than a consequence of the variations in interpersonal and intrapersonal harm. Their second study used one scenario, but here the manipulations of interpersonal and intrapersonal harm included also different types of harm rather than just the person who experienced the negative outcome (e.g., a loss of money and time in the intrapersonal harm condition and another person being disappointed or fed up with the protagonist in the interpersonal harm condition). These possible confounds of the manipulation of harm with scenario content mean that we should be careful in interpreting the results as evidence for the central role of harm in differentiating regret from guilt.

In this article we present a different view on the role of harm in the distinction between regret and guilt. We follow Berndsen et al. (2004) with respect to the idea that situations of intrapersonal harm lead to different emotional experiences than situations of interpersonal harm. However, we think that the emotion literature that we reviewed above suggests different results when it comes to how people label these experiences by using the emotion words “regret” or “guilt.” Following Landman (1993), we expect that guilt will be primarily applied to label emotional experiences in situations of interpersonal harm but that regret applies to the emotions experienced in situations of both interpersonal harm and intrapersonal harm. These two propositions are tested in three studies.

Study 1 is a conceptual replication of the Berndsen et al. (2004) studies in which the scenario is the same across conditions and in which interpersonal and intrapersonal harm are manipulated within the same domain and between-subjects. We find that ratings of guilt are influenced by a manipulation of interpersonal versus intrapersonal harm but not ratings of regret. Study 2 extends this finding by showing that phenomenological characteristics of guilt, (e.g., feelings and action tendencies; Roseman et al., 1994) are influenced by a manipulation of harm, but phenomenological characteristics of regret are not. In Study 3 we move from hypothetical scenarios to recalled life events of guilt and regret. We find that guilt experiences are predominantly associated with interpersonal harm, whereas regret experiences are associated with both types of harm.

Study 1

Method

Participants (25 men, 25 women; M age = 22 years) were approached individually at several places on the University Campus (e.g., cafeterias, library). They were provided with a one-page questionnaire containing the scenario and the dependent measures. They were randomly assigned to one of the two conditions (Harm: intrapersonal vs. interpersonal). Participants in the intrapersonal condition read the following scenario:

You take a shower before going to bed. You are tired and leave your clothes and shoes in the bathroom. At night, you wake up and go to the toilet. Because it is dark you do not see the shoes and fall hard on the floor. The pain is unbearable and you go the ER. You broke your foot and need plaster for 3 weeks.

Participants in the interpersonal condition read the same scenario, but in their case it was their mother who woke up, went to the toilet and broke her foot. After reading each scenario, participants indicated the level of regret and guilt that they would feel in that situation on an 11-point scale ranging from 0 (*none*) to 10 (*very much*).

Results and Discussion

The results are shown in Table 1. A multivariate analysis of variance (MANOVA) with condition (Harm: Intrapersonal vs. Interpersonal) as the independent variable, and the ratings of regret and guilt as dependent variables revealed a significant multivariate difference between the two conditions, Wilks' $\lambda = .79$, $F(2, 47) = 6.13$, $p < .005$, $\eta_p^2 = .21$. Univariate one-way analyses of variances (ANOVAs) revealed that the manipulation of intrapersonal and interpersonal harm influenced ratings of guilt, with guilt being

Table 1
Regret and Guilt Ratings for Intrapersonal Harm and Interpersonal Harm Conditions in Study 1

Emotions	Harm				$F(1, 48)$	η_p^2
	Intrapersonal		Interpersonal			
	M	SD	M	SD		
Regret	6.28	2.19	7.16	2.17	2.03	.04
Guilt	5.32	2.84	7.76	1.99	12.40*	.21

Note. There were 25 participants per condition. Participants answered based on scales ranging from 0 (*not at all*) to 10 (*very much*).

* $p < .01$.

highest in the interpersonal harm conditions. The manipulation, however, had no effect on ratings of regret.

More interesting, ratings of regret and guilt correlated significantly, $r(50) = .52$, $p < .01$. When we computed the correlations separately for the two conditions we found that regret and guilt correlated significantly in the interpersonal harm condition, $r(25) = .73$, $p < .01$, but not in the intrapersonal harm condition, $r(25) = .33$, $p = .10$. These correlation coefficients are significantly different, $Z = 1.94$, $p < .05$, suggesting that ratings of regret and guilt are more similar in situations of interpersonal harm than in situations of intrapersonal harm.

Study 2

The findings of Study 1 suggested that people use the emotion label regret to denote experiences in situations of intrapersonal harm and of interpersonal harm, but that guilt is mostly used only to denote the emotion experienced in situations of interpersonal harm. However, we did not directly measure experiences of emotion in Study 1. In Study 2, we aimed to replicate the findings of Study 1 with a different scenario. In addition, we added items referring to phenomenological components of regret or guilt experiences. Ratings of emotion components (see Roseman et al., 1994) are often used for comparing and distinguishing emotions (e.g., Bougie, Pieters & Zeelenberg, 2003; Breugelmans & Poortinga, 2006; Van Dijk & Zeelenberg, 2002). We expect a replication of the differences in use of emotion labels (i.e., regret and guilt) between situations of intrapersonal harm and interpersonal harm. We also expected a similar difference between emotion components measuring experiences of regret and those measuring experiences of guilt.

Method

Participants (17 men, 47 women; M age = 19 years) were approached individually at several places on the university campus (e.g., cafeterias, library). They were provided with a one-page questionnaire containing the scenario and the dependent measures. They were randomly assigned to one of the two conditions (Harm: intrapersonal vs. interpersonal). Participants in the intrapersonal [interpersonal] condition read the following scenario:

You take your [mother's] bike for a quick trip to the bakery. When you arrive there, you do not bother to lock the bike. When you return from the shop, 5 min later, you see that your [mother's] bike is stolen.

After reading the scenario, participants were asked about their feelings, thoughts, action tendencies, and emotivational goals. Each of these response types was assessed by means of two items, one for regret and one for guilt. These items took the form of statements about their experience in the situation depicted in the scenario. The items were adopted from studies by Breugelmans and Poortinga (2006); Roseman et al. (1994); and Zeelenberg, Van Dijk, Manstead, and Van der Pligt (1998). The questions and items are shown in Table 2. Participants could answer on 6-point scales ranging from 0 (*not at all*) to 5 (*very strong*). We expected that the guilt components would differ between situations of interpersonal and intrapersonal harm, but the regret items would not differ.

Results and Discussion

The ratings are shown in Table 2. A MANOVA with condition (Harm: Intrapersonal vs. Interpersonal) as the independent variable, and the response items as dependent variables revealed a significant multivariate difference between the two conditions, Wilks' $\lambda = .34$, $F(10, 45) = 8.59$, $p < .001$, $\eta_p^2 = .66$. Univariate one-way ANOVAs showed that a significant difference (in the predicted direction) existed for all the guilt items, and not for the regret items.

The pattern of correlations between ratings of regret and guilt showed a similar, though less pronounced trend as in Study 1. Regret and guilt correlated significantly in the interpersonal harm condition, $r(32) = .37$, $p < .05$, but not in the intrapersonal harm condition $r(32) = .11$, $p = .56$. This difference between the correlations is in the expected direction, but not significant, $Z = 1.04$, $p = .15$. The lower correlations and the ensuing nonsignificant difference between the coefficients may be caused by the difference between the harm done in the scenario of Study 2 (stolen bike) and in the scenario of Study 1 (broken foot).

Study 3

The third study had two objectives. First, we wanted to know whether everyday experiences of regret encompass both situations of interpersonal and intrapersonal harm, in comparison to experiences of guilt, which we expected to be mainly interpersonal. Therefore, we tapped naturally occurring experiences of guilt and regret. Finding an association of regret with both types of situations would validate the results obtained in Studies 1 and 2. The second objective was to examine the experiential content of intrapersonal and interpersonal regret and guilt in more detail, by studying their characteristic emotion components (e.g., Roseman et al., 1994). We expected experiences of regret following from interpersonal harm to share important characteristics with experiences of guilt, and to be distinct from experiences of regret following from intrapersonal harm.

Method

Students (76 men, 20 women; M age = 20 years) participated as partial fulfillment of a course requirement. They were randomly assigned to the regret or guilt conditions.

On arrival in the laboratory, participants were seated in separate cubicles and were handed out a questionnaire. This questionnaire consisted of two sections. In the first section, participants were asked to think back of a time when they experienced the target emotion (i.e., regret or guilt) and to describe this situation as detailed as possible. The second section consisted of a list of 20 emotion components and 6 emotions (see Table 3). Participants indicated the extent to which they had experienced these emotion components and emotions during the episode that they had described in the first section, using 6-point scales ranging from 0 (*I did not experience this at all*) to 5 (*I experienced this very*

Table 2
Mean Scores and Standard Deviations for Each Response Item Intrapersonal Harm and Interpersonal Harm Conditions in Study 2

Response type and item	Harm				$F(1, 54)$	η_p^2
	Intrapersonal		Interpersonal			
	M	SD	M	SD		
What would you think?						
That you missed an opportunity	2.46	1.64	2.54	1.60	0.03	.001
That you violated a moral norm	1.21	1.23	3.25	1.82	24.11*	.31
How would you feel?						
That you should have known better	4.75	0.44	4.79	0.63	0.06	.001
A bad person	2.11	1.47	3.04	1.48	5.54*	.09
What did you want to do?						
Kicking yourself	4.43	1.07	4.61	0.79	0.51	.01
Apologize	2.00	1.58	4.64	0.56	69.09*	.56
What did you want to achieve?						
Undo what had happened	4.64	0.56	4.57	0.99	0.11	.002
Be forgiven	2.25	1.94	4.04	1.17	17.44*	.24
Which emotions would you feel?						
Regret	4.14	1.43	4.57	0.64	2.10	.04
Guilt	3.68	1.81	4.57	0.88	5.53*	.09

Note. There were 32 participants per condition. Entries are mean answers to the questions posed, with the response item as an answer. The first response item for each question was a regret item; the second was a guilt item. Participants answered based on scales ranging from 0 (*not at all*) to 5 (*very strong*).
* $p < .05$.

Table 3

Means and Standard Deviations (Within Parentheses) for Response Items in Three Types of Recalled Emotions (Intrapersonal Regret, Interpersonal Regret, and Interpersonal Guilt) for Study 3

	Intrapersonal regret	Interpersonal regret	Interpersonal guilt	F(2, 87)	η_p^2
	M (SD)	M (SD)	M (SD)		
What emotions did you feel?					
Regret	4.50 _a (0.51)	4.57 _a (0.57)	3.67 _b (1.46)	7.39**	.15
Guilt	2.94 _a (1.35)	4.10 _b (1.06)	4.45 _b (0.71)	14.93**	.26
Disappointment	3.89 _a (1.02)	2.27 _b (1.55)	2.36 _b (1.79)	7.06**	.14
Sadness	2.22 (1.96)	3.13 (1.63)	2.19 (1.63)	3.02*	.06
Shame	2.28 (1.84)	3.13 (1.66)	3.24 (1.19)	2.75	.06
Anger	2.89 (1.71)	3.13 (1.55)	2.48 (1.69)	1.45	.03
What did you think?					
I could change the situation	4.28 _a (0.83)	2.77 _b (1.76)	3.14 _b (1.46)	6.13**	.12
I did something wrong	3.89 (1.18)	4.07 (1.23)	3.90 (1.32)	0.17	.00
The situation was unexpected	1.72 _a (1.60)	2.30 _{a,b} (1.58)	3.05 _b (1.25)	5.95**	.12
I did damage to myself	3.33 (1.53)	3.13 (1.70)	2.69 (1.51)	1.30	.03
I missed an opportunity	3.89 _a (1.41)	1.53 _b (1.59)	1.57 _b (1.56)	16.44**	.27
I am responsible	4.22 (1.00)	4.10 (1.30)	4.24 (0.93)	0.15	.00
I did damage to another	0.83 _a (1.34)	4.20 _b (1.00)	3.88 _b (1.37)	47.27**	.52
I violated a moral norm	1.33 _a (1.53)	3.23 _b (1.61)	2.93 _b (1.66)	8.45**	.16
How did you feel?					
I should have known better	4.28 (0.67)	3.87 (1.20)	3.69 (1.24)	1.69	.04
I am a bad person	1.39 _a (1.42)	3.20 _b (1.58)	2.45 _b (1.58)	7.68**	.15
I deserved better	1.78 (1.66)	0.93 (1.39)	1.05 (1.13)	2.51	.05
I am angry with myself	3.61 (0.98)	4.03 (1.35)	3.79 (1.20)	0.74	.02
What did you want to do?					
To kick myself	3.28 (1.67)	3.67 (1.37)	3.29 (1.33)	0.73	.02
To correct my mistake	2.78 _a (1.86)	3.97 _b (1.27)	4.00 _b (1.33)	5.14**	.11
To punish myself	0.89 (0.96)	1.37 (1.33)	1.43 (1.35)	1.19	.03
To apologize to someone	1.17 _a (1.79)	4.33 _b (0.96)	4.12 _b (1.25)	40.05**	.48
What did you want to achieve?					
Undo what had happened	3.56 (1.54)	3.87 (1.59)	3.17 (1.54)	1.79	.04
Improve myself	3.00 (1.75)	2.53 (1.66)	2.55 (1.63)	0.55	.01
Be forgiven	1.78 _a (1.86)	3.47 _b (1.57)	3.67 _b (1.37)	9.97**	.19
Improve my social relations	1.67 _a (1.81)	3.10 _b (1.79)	3.05 _b (1.50)	5.13**	.11

Note. Intrapersonal regret condition: $n = 18$; interpersonal regret condition: $n = 30$; interpersonal guilt condition: $n = 42$. Means in the same row with different subscripts differ significantly in post-hoc comparisons (Tukey's HSD). Participants indicated the extent to which they had experienced these emotion components and emotions based on 6-point scales ranging from 0 (*I did not experience this at all*) to 5 (*I experienced this very strongly*).

* $p < .05$. ** $p < .01$.

strongly). The emotion components were divided into thoughts ($N = 8$; "What did you think?"), feelings ($N = 4$; "How did you feel?"), action tendencies ($N = 4$; "What did you want to do?"), and motivations ($N = 4$; "What did you want to achieve?"). The emotions were regret, guilt, disappointment, sadness, shame, and anger. The target emotion was first in the list in each condition.

Results

We first turned to the descriptions of regret and guilt experiences that were provided by the participants. These were sorted into two categories: interpersonal and intrapersonal. A trained rater who was unaware of the research questions did the sorting. He was instructed to sort situational descriptions according to whether the situation was primarily about harm done to someone else (interpersonal) or to the person him/herself (intrapersonal). Examples of situations in the interpersonal category were feeling regret over having read someone's private letters or feeling guilt over damaging the car of one's parents. Examples of situations in the intrapersonal category were feeling regret over not having taken a

summer job or feeling guilt over having broken a diet. In cases in which the situation was not entirely clear (<5%) classification was discussed with the second author. All situations could be classified as either intrapersonal or interpersonal.

The data revealed a significant difference between the two emotions with respect to their focus, $\chi^2(1, N = 96) = 8.00, p < .01, \phi = .29$. In the regret condition there were 18 cases of intrapersonal regret and 30 of interpersonal regret. The guilt condition was different. Here we found only 6 cases intrapersonal guilt¹ and 42 cases of interpersonal guilt. Because the small number of intrapersonal guilt situations did not allow for reliable parametric analyses, only the remaining three emotion categories were used in the second phase of the analysis: the comparison of emotional experience. In this second phase we compared how the experiences of interpersonal regret, intrapersonal regret, and interpersonal guilt scored on the emotion components and emotions.

¹ Examples of intrapersonal guilt situations were not living up to one's intentions and failing an exam for not having studied hard enough.

A MANOVA with the 26 items as dependents (20 components and 6 emotions) and emotion category (3) as a between-subjects factor yielded a strong multivariate effect, Wilks' $\lambda = .11$, $F(52, 124) = 4.74$, $p < .01$, $\eta_p^2 = .67$. Table 3 displays the means and the univariate effects for each the 26 items in the three conditions.

Let us first inspect the regret and guilt ratings (that are presented in the upper part of Table 3), to see if our participants indeed recalled the requested emotion. Both intrapersonal and interpersonal regret were rated significantly higher on regret than interpersonal guilt. However, both interpersonal guilt and interpersonal regret were rated higher on guilt than intrapersonal regret.

Let us now inspect the remaining results in Table 3. Ten emotion components and three emotion words show large differences between the three categories in terms of Cohen's (1988) classification of effect sizes. These differences were mainly between both types of regret and between intrapersonal regret and interpersonal guilt.

To obtain an overall view of correspondence between emotions, we calculated rank-order correlations between emotions on the basis of the mean scores of the 20 emotion components in Table 3 (see Breugelmans et al., 2005). This yields a general estimate of the extent to which the ratings of guilt and the both types of regret were similar or different across the 20 components. As expected, interpersonal regret and interpersonal guilt were strongly correlated, $\rho = .92$, $p < .01$. Interpersonal regret and intrapersonal regret did not correlate, $\rho = .20$, $p = .40$, nor did intrapersonal regret and guilt, $\rho = .23$, $p = .34$. These results confirmed that experiences of regret resemble those of guilt in interpersonal situations, but not in intrapersonal situations.

Discussion

The purpose of this study was twofold. First, we wanted to confirm that regret is naturally associated with both situations of intrapersonal harm and situations of interpersonal harm. This expectation was clearly confirmed. When asked to think back of a situation in which they had experienced regret, 37.5% of the participants reported an intrapersonal situation and 62.5% an interpersonal situation. In contrast, with guilt the large majority of participants (87.5%) reported an interpersonal situation. These results nicely fit with those obtained in Studies 1 and 2 that showed that both types of situations, inter- and intrapersonal harm, could evoke regret, whereas guilt is primarily evoked by interpersonal harm.

The second purpose of the study was to examine the emotional experience of regret and of guilt in terms of characteristic emotion components. Both emotions involved thoughts about having done something wrong, having done damage to oneself, and being responsible for what happened, feeling angry with yourself, feeling like kicking yourself, wanting to undo what happened, and wanting to improve yourself. Thus, both regret and guilt involve a clear sense of agency for a negative event, and the intention to change things to undo the event. However, apart from these similarities, the study also clearly showed that the experience of interpersonal regret and interpersonal guilt are more similar than those of intrapersonal and interpersonal regret.

Intrapersonal regret was more strongly associated with thoughts that the situation was still modifiable and that one had missed an opportunity. This illustrates the stronger self-focus of intrapersonal

regret. Interpersonal regret and guilt were stronger associated with thoughts about having done damage to someone else, having violated a moral norm, feeling like a bad person, wanting to correct your mistakes and apologize to someone, being forgiven and improving your social relations. These emotion characteristics clearly show the stronger focus on other people.

As a final support for our contention that regret can be both intrapersonal and interpersonal, ratings of this emotion did not differ significantly between both types of regret. Both types of experiences appear to be equally regret evoking. Or, put differently, the emotion word *regret* applies equally well to situations of interpersonal harm as to situations of intrapersonal harm. However, only experiences of interpersonal regret were also rated high on guilt whereas only experiences of intrapersonal regret were rated high on disappointment. This suggests that experiences of regret range from disappointment about self-inflicted harm to guilt about one's behavior that negatively affects someone else. Guilt, on the other hand, appears to be mainly constrained to the latter situations of interpersonal harm.

General Discussion

We started our research with the question whether regret and guilt could be distinguished on the basis of the type of harm (i.e., intrapersonal or interpersonal) that elicits these emotions (cf. Berndsen et al., 2004). The results of our studies clearly show that the type of harm is not crucial to distinguishing regret from guilt. Although guilt was predominantly linked to situations involving harm done to someone else, regret was linked both to situations of intrapersonal harm and to situations of interpersonal harm. We found this result in scenario experiments with emotion words (Study 1) and emotion components (Study 2) as dependent variables as well as in an autobiographical recall study (Study 3). We also found that the double focus of regret reflects in the phenomenology of this emotion. In situations of interpersonal harm the phenomenological experience of regret shares many features with the phenomenology of guilt. In situations of intrapersonal harm the phenomenology is different, although various central characteristics of regret are present regardless of the focus of harm (e.g., feeling responsible for having done something wrong, feeling that you should have known better, and wanting to undo what happened).

Our findings are most in line with Landman (1993), who posited that regret is a broader emotion than guilt. In other words, regret applies to situations of interpersonal harm, which are also strongly tied to experiences of guilt as well as to situations of intrapersonal harm. This is also in line with theories and empirical studies of regret that suggest that this emotion is felt when an obtained outcome compares badly with another outcome that would have been obtained had one chosen differently (e.g., Loomes & Sugden, 1982; Zeelenberg & Pieters, 2007). Contrary to the claim made by Berndsen et al. (2004), it does not seem to matter whether the bad outcome is related to oneself (intrapersonal harm) or to another (interpersonal harm). Our studies suggest that the focus of harm is important to the emotion of guilt. Baumeister et al. (1994) made a compelling case for the interpersonal nature of guilt. In accordance with this research, we also found that guilt is most frequently, though not exclusively, experienced in situations in which people have caused harm to someone else. Thus, our results support

Berndsen et al.'s assertion that guilt is primarily about interpersonal harm, but not that this is the central feature distinguishing guilt from regret.

We believe that our findings have important consequences for researchers incorporating guilt and regret in their studies. Some studies have reported quite different results for regret and guilt (e.g., Van Kleef, De Dreu, & Manstead, 2006) whereas others find almost no differences (e.g., Zeelenberg, Van Dijk, Van der Pligt et al., 1998). Our observation that regret is a broader emotion than guilt could explain why regret and guilt behave sometimes differently and sometimes similar. We found that in situations of interpersonal harm ratings of emotion words (Studies 1 & 3) as well as reported phenomenological experiences (Studies 2 & 3) of regret and guilt were very similar, but that they were quite distinct in situations of intrapersonal harm. This means that for a proper interpretation of regret and guilt in empirical studies it is important to know whether experiments have an intrapersonal or interpersonal focus.

At a higher level, our findings also have important implications for the way that we as psychologists approach the study of emotions. Many psychologists tend to assume that different emotion words or labels refer to distinct emotional experiences even though the validity of this assumption is far from clear (see Breugelmans et al., 2005; Sabini & Silver, 2005). As a psychological explanation of human behavior, the phenomenological experience of an emotion is much more important than the label attached to this experience (see Zeelenberg & Pieters, 2006). Study 3 showed that in situations of interpersonal harm regret is used to label experiences that are very similar to experiences labeled as guilt. However, the same label was also used in intrapersonal situations for experiences that were phenomenologically quite distinct. Indeed, the difference between the two types of harm was not picked up by the emotion labels in Study 1 but it was by the emotion components in Study 2. These data are a clear illustration of the need to study the experiential phenomenology of emotions instead of mere emotion labels (see Frijda et al., 1995).

We hasten to say that our data should not be interpreted as evidence to the effect that regret and guilt always refer to exactly the same emotion in situations of interpersonal harm. Even theorists who acknowledge the role of interpersonal harm as an elicitor of regret stress that there are differences between the two emotions (e.g., Tannenbaum, 2007). The phenomenological characteristics that we studied were intended to capture the difference between interpersonal and intrapersonal experiences, but they are by no means exhaustive for defining regret and guilt. For example, guilt can be expected to be more closely tied to issues of morality and social bonds than interpersonal regret (e.g., Baumeister et al., 1994; Breugelmans & Poortinga, 2006). Nevertheless, in many cases experiences of guilt will resemble experiences of interpersonal regret. In the words of Kagan (2000) "The emotion of guilt, which is central to human morality, . . . requires the agent to know that a voluntary act has hurt another and the behavior could have been suppressed" (p. 48). It is very hard to imagine a feeling of guilt without any regret.

We also should note that the clear distinction that we made between interpersonal and intrapersonal harm does not imply an absolute divide between two types of emotion. Humans are social animals and it could be argued that every emotion that we experience and every thought that we think is ultimately interpersonal

in nature.² Indeed, research in social neuroscience has shown that the brain structures that are related to the self, are also related to close others (e.g., Decety & Chaminade, 2003; Mitchell, Banaji & Macrae, 2005). On the other hand, it is also apparent that the lack of a specific brain region for the self does not exclude the possibility of distinct sense of the self at a phenomenological level. Thus, we think that the distinction between the two types of harm is important and informative to the psychology of emotions.

Finally, let us return to main issue that motivated our current research. When it comes to studying emotions, we often have to resort to everyday language concepts that are inherently fuzzy (Scherer, 2005). In such situations, having a clear external criterion to decide whether emotions are the same or different is appealing. However, this is not always feasible. Our research has shown that the distinction between intrapersonal and interpersonal harm is not a crucial distinction with respect to disentangling regret and guilt (see Berndsen et al., 2004). Instead, we have obtained data consistent with the idea that regret is the broader emotion that may be felt in situations of both types of harm (Landman, 1993). Although we may not have found evidence for a single, clear criterion for distinguishing regret from guilt, we believe that there is little reason for emotion psychologists to lose heart. We believe that our studies have convincingly illustrated how a componential approach can be used to disentangle emotion processes that are not always very clearly distinguished in everyday language.

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