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## **Temporal dynamics of guilt: changes in the role of interpersonal and intrapsychic factors**

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### *Abstract*

*Baumeister, Stillwell and Heatherton (1994) argue that guilt serves primarily interpersonal functions and take issue with more traditional intrapsychic accounts of guilty feelings, in which causality, responsibility, and blame are emphasized. We examined the validity of these claims by asking 198 college students to imagine that they destroyed the valued property of either their best friend or mother, under each of three conditions of causal responsibility (accidental, foreseeable, unjustifiably intended). They then rated the reactions they anticipated from the victim (anger, disappointment; change in impression of the perpetrator), their perceived blameworthiness, aspects of causality, and how guilty they would feel immediately after perpetrating the harm as well as an entire day later. Imagined guilt was curvilinearly related to responsibility at time 1, but linearly at time 2. Results suggest that people only weigh interpersonal concerns more heavily after time has elapsed, but that both factors integrally affect feelings of guilt. © 1997 John Wiley & Sons, Ltd.*

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## INTRODUCTION

Analyses of the antecedents to guilty feelings in adults emphasize the crucial role played by one's condition or state of being guilty (legal notion of *mens rea*). A central idea in this literature is that feelings of guilt are aroused by a sense of blameworthiness for one's harmful behaviour (e.g. De Rivera, 1984; Izard, 1977; Shavez, 1985; Smith & Ellsworth, 1985; Wicker, Payne & Morgan, 1983). Viewed, for example, in terms of Heider's (1958) analysis of personal responsibility, the actor should experience progressively greater blameworthiness and ever increasing feelings of guilt upon committing a harmful transgression that was accidental (i.e. unforeseen and unintended), foreseeable (i.e. foreseen, but unintended), justifiably intended (i.e. foreseen, intended, but for justifiable motives), and unjustifiably intended (i.e. foreseen, intended, and unacceptably motivated). However, as McGraw's (1987) research and only a moment of personal reflection will reveal, there is not necessarily a one-to-one correspondence between self-ascribed responsibility and one's feelings of guilt. Many inmates know they are technically 'guilty' of the crimes for which they were sentenced, and yet they may feel no guilt whatsoever for the misdeed. The opposite extreme is also easily imaginable — think, for example, of battered spouses, survivors of murder, victims or natural catastrophes, and war veterans who suffer tremendous feelings of guilt for their plight, but whom others would not hold responsible (*casus quo* assign guilt).

Baumeister, Stillwell and Heatherton (1994), in fact, claim that these traditional accounts mistakenly emphasize the private, intrapsychic, and largely self-evaluative bases for feelings of guilt. From their perspective, guilty feelings derive fundamentally from concern about breaches in interpersonal relationships, and involve a consequent desire to avoid losing the relationship or disrupting communal bonds. Guilty feelings thus serve critical interpersonal functions. Guilt encourages us to attempt to repair a damaged relationship, engage in equity-restoring behaviours, and can be used to reestablish emotional balance by reallocating some of the victim's distress to the perpetrator.

One fallacious, or at least exaggerated, source of guilt according to Baumeister *et al.* includes what they call 'intrapsychic factors' such as intentionality, blame, responsibility, choice, or mitigating circumstances. In their view, 'perceiving the self as responsible is neither necessary nor sufficient to produce guilt feelings' since 'people feel guilty for accidental transgressions as well as for voluntary ones' (1994, p. 261). Concepts such as intent and blame or responsibility therefore matter more after feelings of guilt have already been aroused. People can use excuses such as 'it was an accident' and 'I didn't mean to' or justifications as in 'It was really her fault' to escape from, or reduce, feelings of guilt that none the less are basically interpersonal in origin. At best, intent, self-blame, and responsibility indirectly

impact the magnitude of one's guilty feelings, because of what they imply about the perpetrator's attitude toward the relationship in question.

There is a curious discrepancy between Baumeister *et al.*'s conceptualization of guilty feelings and certain empirical findings, however. Baumeister *et al.* argue that '... voluntary, intentional transgressions represent a greater threat to the relationship than do involuntary or accidental ones, and so a stronger guilt response would be warranted' (1994, p. 262). Well-known findings reported by McGraw (1987), unfortunately, contradict this prediction. McGraw showed that perpetrators of interpersonal harm report greater feelings of guilt after having committed the act unintentionally rather than intentionally even though they see themselves as more blameworthy for the latter. Her findings are reminiscent of those reported in the transgression-compliance area (e.g. Brock & Buss, 1964; Carlsmith & Gross, 1969; Freedman, Wallington & Bless, 1967). Compliance to a request, which appears to occur in the interest of guilt reduction, increased dramatically following accidental transgressions, but not following intentional ones. The findings reported by McGraw are also quite robust — she reports the same pattern of results regardless of whether participants responded to hypothetical imagined events or more narrative, autobiographical accounts of accidental, foreseeable, or unjustifiably intended harm (cf. Studies 1 versus 2). McGraw also reports the same findings using a within- or between-subjects design.

McGraw explains these findings in terms of important temporal dynamics involved in reducing feelings of guilt. Specifically, perpetrators of intentional harm (especially when they know that it will be seen as unjustified) presumably anticipate feeling guilty before causing it, because the desire to violate a norm is present at that time. In order to reduce the projected guilty feelings, perpetrators essentially justify or rationalize the act before it even takes place. In this way, perpetrators can proceed to intentionally commit the act which is so instrumental to achieving the desired goal. In contrast, since there is no *a priori* intention to cause harm in the case of an accident, perpetrators have no effective means of reducing feelings of guilt after the misdeed has taken place. Actors, in this case, thus experience relatively greater immediate post-transgression feelings of guilt.

Like Baumeister *et al.*'s ideas, McGraw's findings are intuitively appealing, but also paradoxical. First, they dispute a long-standing literature which, at the very least, implies that intent, self-blame, and feelings of guilt are positively related to one another (e.g. Fincham & Jaspars, 1980; Heider, 1958). Second, they suggest that one rarely feels guilty for intentionally violating normative standards, yet experiences in everyday life and literature clearly contradict this premise (Gerard, 1993).

It is possible to explain such inconsistencies, however, by juxtaposing McGraw's emphasis on the temporality of events with Baumeister *et al.*'s focus on guilt's interpersonal origins. A logical extension of these analyses is that immediate post-transgression feelings of guilt may not be greater for intentional than accidental harm, but that delayed feelings of guilt would be. In the heat of the moment ensuing immediately after committing a transgression, perpetrators are going to focus more on their behaviour and its results rather than on their relationships with others. In cases where behaviour was intended, perpetrators will be satisfied for having achieved what they desired. This satisfaction will operate against arousing any negatively valenced emotion (including the feeling of guilt). In contrast, a focus on harmful behavioural results that were not intended will probably facilitate negative

emotional reactions. These reactions are evoked because of the unexpected and undesired quality of the event, and concomitant lack of excuses or justifications for its occurrence.

The situation changes as time passes. With time and decreased physiological activation, transgressors can contemplate their accountability for the harmful event, how their involvement in it reflects on them as a person, and how this might impact relationships with others. Perpetrators thus take a broader look at the event, observing the self from the perspective of one's own and significant others' standards or ideals. If a part of those ideals embodies showing consideration for others' welfare, a more positive relationship would be expected between intent, self-blame, and delayed feelings of guilt. In fact, it is these protracted feelings of guilt rather than those experienced earlier that well exemplify the Baumeister *et al.* analysis.

In line with this analysis, the purpose of the present study is to investigate the time course of adults' feelings of guilt in relation to their interpersonal concerns and the intrapsychic factors of intent and self-blame. The most straightforward way to test our hypotheses would be to actually induce feelings of guilt, by placing individuals in experimental situations in which they ostensibly harmed a victim accidentally, foreseeably, or with malevolent intent. We could then take self-report or observational measures of the intensity of respondents' feelings of guilt immediately after the event and after some time had passed. Needless to say, it would be difficult both practically and ethically to successfully manipulate in a tightly controlled fashion a person's level of responsibility for harm.

A more practically feasible method for testing our hypotheses is available, if one is prepared to make two rather modest assumptions. The first is that people are able to imagine that they would cause harm to a victim accidentally, foreseeably or malevolently. This assumption is not at all far-fetched. It has been shown repeatedly that subjects can easily generate examples of such events from their own life histories. McGraw's (1987) own research certainly shows this (Study 2) as do various recent studies of adults' narrative reports of guilt (e.g. Baumeister, Stillwell & Heatherton, 1995; Tangney, 1992). A second assumption is that the guilty feelings reported based on personal experience are not qualitatively different from the guilty feelings reported in response to imagined experiences. This assumption is also not far-fetched, as seen in the similar results reported by McGraw in hypothetical (Study 1) and real-life situations (Study 2) for ratings of guilt and in the factors affecting ratings of guilt<sup>1</sup>.

Recent research thus supports the idea that imagined feelings of guilt in imagined situations yield results similar to reports of guilt based on real-life experiences. We should not be surprised at these findings. After all, Tomkins (1987, 1992) claimed that people have scripts about emotion that are built on past experience and that serve as analogies when reacting emotionally to events impacting the self or others. Oatley's (1992, 1994) analysis of the emotion-eliciting characteristics of narrative

<sup>1</sup>There is much empirical precedence for this assumption, as revealed in studies aimed at identifying individual differences in subjects' proneness to feel guilty and ashamed. These studies show strong links between children's reports of their imagined emotions to imagined situations and parental or teacher reports of the same children's actual emotional responses in real situations (e.g. Ferguson & Stegge, 1995; Tangney, Wagner, Burggraf, Gramzow & Fletcher, 1991). As another example, Lake, Lane & Harris (1995) found that children attributing high (versus low) guilt to a story character were less (versus more) likely to *actually* commit the same transgression themselves.

fiction would also lead us to expect close parallels between emotion reports in response to imagined events and emotion reports in response to real-life equivalents of the same kind of events. Oatley argued that when understanding a story 'we use ourselves to simulate the character whose actions are being described. We personally experience emotions resulting from the plan and the events that result' (Oatley, 1992, p. 156).

In line with Oatley's analysis, Harris (1989) also argued that when adults or children identify with a story character, the simulation process can result in them actually experiencing the emotions that are appropriate for that character or in them imagining the emotions of the story character. We assume that people's emotional reactions (be they imagined or real) to these situations bear some equivalence to their actual emotional responses to real-life equivalents of the same kind of situation. If correct, this conclusion implies that imagined emotional responses to imagined situations can be used to test hypotheses about real emotions in real situations (cf. footnote 1).

Based on these ideas, we decided to test hypotheses about subjects' actual feelings of guilt in response to real-life situations, using their reports of imagined guilt in response to situations drawn from the realm of their own personal experience<sup>2</sup>. Accordingly, we asked college students to imagine themselves having perpetrated incidents of harm that were drawn from incidents that had been generated by other adults in a previous study. Specifically, students imagined that they destroyed the precious, inherited property of a valued other (either their best friend or mother)<sup>3</sup> under each of three conditions of causal responsibility (accidental, foreseeable, unjustifiably intended). They subsequently rated how guilty they imagined themselves to feel immediately after perpetrating the harm as well as an entire day later. In addition, they rated their perceived blameworthiness and causal responsibility and the responses they anticipated from the victim (anger, disappointment, and a changed impression of the perpetrator as a person).

If, as Baumeister *et al.* claim, guilty feelings reflect primarily a concern with maintaining important personal relationships, then reports of imagined guilt should covary positively with events representing increasing threats to the relationship and with measures of the assumed impact of one's behaviour on the victim, regardless of when the reported guilt occurs. If, on the other hand, guilty feelings reflect an interplay between intrapsychic and interpersonal factors, then such relationships should only be found after time has passed.

<sup>2</sup>Although adults can easily generate autobiographical accounts of guilt-provoking incidents, such accounts were not used in the present study, because they are an admixture of information regarding the objective facts of the event and the subjects' own subsequent strategies for disclaiming or accounting for the event as time progressed (e.g. Ferguson, Eyre & Stegge, 1996). Since the very temporal aspects of the event in which we are interested are complexly interrelated to the psychological resolutions that participants seem to automatically offer in recounting painful incidents, the use of autobiographical incidents would not be a wise choice.

<sup>3</sup>The present study is based on the adult data of a larger project designed to ascertain developmental differences in the relationship between emotion, moral responsibility, and counterfactual thinking. The mom and friend conditions were included to test developmental hypotheses about the role that significant others' reactions play in affecting the emotion-responsibility link, but they are not a focus of the present study.

## METHOD

### Participants and design

Students (119 females, 79 males) in an introductory psychology class at a university in the Rocky Mountain region of the U.S.A. participated in the study in return for extra credit. The larger number of females than males is representative of general education classes. A 2 (victim: mom versus best friend)  $\times$  3 (responsibility level: accidental, foreseeable, unjustifiably intended) mixed design was used. Approximately one-half of the males and females received scenarios in which their best friend was presented as the victim; the victim for remaining participants was depicted as their mother. Each student responded to three incidents of property damage, depicted as accidental, foreseeable, or unjustifiably intended.

### Procedure and stimulus materials

Students picked up a packet at the beginning of their General Psychology class, consisting of an informed consent form, scenario descriptions, and three questionnaires. They were instructed to read and sign the informed consent form if they wished to participate. They were then given 50 minutes of class time to complete the questionnaires. The few students who did not finish were told that they had no more than 1 week to return the completed packet.

The to-be-imagined scenarios were drawn from a previous study in which parents generated guilt-eliciting situations. In each scenario included in the questionnaire, the student was depicted as visiting his or her mother's (or best friend's) house. The scenarios took place in the living room, where the perpetrator initially was sitting on the couch, reading. Toward the end of the scenario, the student/perpetrator breaks the valuable and treasured vase belonging to the mother (friend). Perpetrators caused the damage (a) by accident (while walking toward the bookcase to retrieve a book, the family's gigantic dog excitedly jumps up and knocks them into a bookcase, causing the vase to come tumbling to the floor), (b) with foreseeability (en route to the bookcase, perpetrators are not watching where they're walking, thereby running into it, causing it to pitch forward, and the vase to fall), or (c) with unjustifiable intent (just as the perpetrator arrives at the bookcase, the mom/best friend enters the room, arbitrarily and persistently demanding that the perpetrator help out in the house. The perpetrator becomes impulsively angry at the mom/best friend, grabs 'something', and ends up hurling the vase to the ground, breaking it). We ensured that all six possible presentation orders were presented to approximately equal numbers of male and female participants.

### Dependent measures

Following each scenario, participants answered 25 questions on a 7-point scale (1 = not at all, 7 = to an extra extremely great extent). Nine questions that were relevant to the purposes of the present study will be presented here. The remaining

questions addressed other aspects of a larger research project (see footnote 3) and do not need to be reported here. Several different question presentation orders were randomly generated. In half of the presentation orders used, we ensured that participants were first queried about their imagined guilt at time 1 and later about their feelings of guilt at time 2. In the remaining half, participants were first asked about their feelings of guilt at time 2 and later about their time 1 guilty feelings. We placed two further restrictions on these presentation orders. First, no participant ever answered the same questions in the same order across the three scenarios. Second, for all participants, the first posed question about imagined guilt had to appear at least one full physical page earlier than the second question posed about imagined guilt. There were approximately eight questions per page. At the bottom of each page, subjects were instructed not to return to any of the previous pages. Proctors were present during testing, who walked around the room ensuring that participants did not flip back and forth in the questionnaire. No violations were noted, which is understandable given time constraints on completing the packet. The question presentation orders were also randomly coupled to the six scenario presentation orders.

Of the questions posed to participants, the following are relevant for the present purposes: (1) How **GUILTY DO YOU FEEL** that the vase is broken? (2) Now, imagine that an entire day has passed since the incident with the vase. How **GUILTY DO YOU NOW FEEL** that the vase is broken? (3) How much are you to blame that the vase is broken? (4) How **ANGRY** is \_\_\_\_\_ at you for the broken vase? (5) How **DISAPPOINTED** is \_\_\_\_\_ in you for breaking the vase? (6) How much is \_\_\_\_\_'s impression of you as a person **CHANGED**? (7) How much did you **INTEND** to break the vase? (8) How much could you have **AVOIDED** breaking the vase? and (9) How justifiable were your **MOTIVES** for breaking the vase? The victim's anticipated reaction was represented by respondents' average ratings of anger and disappointment for each scenario ( $r = 0.62$ , range = 0.49 to 0.75 across the three scenarios).

## RESULTS

### Manipulation checks

In order to test the main predictions, we first need to assess whether the events depicting the three levels of responsibility were perceived as expected, i.e. as progressively more avoidable, more intentional, worthier of self-blame, and likelier to elicit negative responses from the victim proceeding from the accidental to the unjustifiably intended level. To this end, we subjected the scores for all of the manipulation check questions to separate 2 (victim)  $\times$  3 (level of responsibility) MANOVAs, treating responsibility level as a repeated measures factor<sup>4</sup>. We also tested for linear and quadratic trends across the three levels for all measures except the motive justification question. For this question, it does not make conceptual

<sup>4</sup>All analyses were also carried out including participant sex as a factor. Although some significant effects including sex were obtained, the results for both males and females were fully consistent with those described in the text for the group as a whole.

Table 1. Mean ratings of causality, blame, and anticipated victim reactions at each level of responsibility

	Accidental	Foreseeable	Unjustifiably intended
Avoidability	2.41 (1.21)	5.26 (1.44)	6.43 (0.97)
Intentionality	1.28 (1.01)	1.43 (1.13)	5.32 (1.93)
Self-blame	2.39 (1.35)	5.18 (1.59)	6.51 (0.83)
Victim's anticipated reactions: anger/ disappointment	2.64 (2.79)	4.48 (3.01)	6.05 (2.14)
Victim's anticipated reactions: impression change	1.72 (1.03)	3.11 (1.57)	5.04 (1.68)
Motive justifiability	3.99 (2.45)	2.67 (1.72)	2.31 (1.62)

*Note.* Higher numbers indicate greater presence of the attribute (7-point scale). Standard deviations are in parentheses.

sense to assess changes in perception across the three levels of responsibility, since motive was specified for the unjustifiably intended incident only. All of the MANOVAs revealed statistically significant main effects of level of responsibility, with uniformly significant linear effects and, with few exceptions, additionally significant (albeit smaller) quadratic effects. The linear effects for each of the measures avoidability, intentionality, self-blame, the victim's anticipated reaction, and change in the victim's perception of the perpetrator were, respectively:  $F_s$  (1, 196) 1286.09, 689.13, 1305.84, 891.86, and 774.13,  $ps < 0.001$ . The quadratic effects for each of the measures avoidability, intentionality, self-blame, the victim's anticipated reaction, and change in the victim's perception of the perpetrator were, respectively:  $F_s$  (1, 196) 59.21, 322.96, 43.67, 1.93 (n.s.), and 6.94,  $ps < 0.009$ . Across the three levels of responsibility, perpetrators thus perceived the damage as progressively more avoidable and intended, themselves as more blameworthy, the victim as more disappointed and angry, and the victim as having changed more their perceptions of the perpetrator (mean scores depicted in Table 1).

Several incidental effects were significant in these analyses. For the avoidability question, participants perceived themselves as being able to avoid the damage more when the property belonged to their mother rather than a friend ( $M_s = 4.81$  versus 4.58),  $F$  (1, 196) = 4.51,  $p < 0.04$ . At the same time, they perceived the mother's impression of them as changing less than their friend's ( $M_s = 3.00$  versus 3.58),  $F$  (1, 196) = 14.95,  $p < 0.001$ . The difference between mother's versus friend's perceived change in impression became increasingly greater proceeding from the accidental ( $M_s = 1.63$  versus 1.81) to foreseeable ( $M_s = 2.84$  versus 3.38) to unjustifiably intended ( $M_s = 4.54$  versus 5.54) levels, as revealed in a significant level of responsibility  $\times$  victim interaction,  $F$  (2, 195) = 5.93,  $p < 0.003$ . Only the latter difference was significant by *post-hoc* comparisons ( $p < 0.04$ ).

Finally, the victim  $\times$  level of responsibility MANOVA on scores for the motive justification question revealed a significant main effect of level of responsibility only,  $F$  (2, 195) = 33.25,  $p < 0.001$ . *Post-hoc* comparisons revealed that the perpetrator's motives were seen as significantly more justified in the accidental compared to either the foreseeable or unjustifiably intended scenarios ( $ps < 0.05$ ).



## Main analyses

We have just shown that perpetrators perceive the transgressions as a greater threat to their relationships and more worthy of blame, the greater their self-ascribed causal responsibility. From Baumeister *et al.*'s perspective, we should thus expect perpetrators to report progressively greater feelings of guilt across the three responsibility levels, regardless of the time elapsed. McGraw, in contrast, would predict stronger feelings of guilt for unintended than intended incidents of damage, again presumably regardless of time. We, on the other hand, think that time will play a significant role in which of the predictions is borne out — with the McGraw pattern predicted for time 1, but the Baumeister *et al.* pattern for time 2.

To examine these different possibilities, a 2 (victim)  $\times$  2 (time)  $\times$  3 (level of responsibility) MANOVA was conducted on participants' ratings of immediate and delayed feelings of guilt, treating the latter two factors as repeated measures. The analysis revealed significant effects of time,  $F(1, 196) = 10.12$ ,  $p < 0.002$ , responsibility,  $F(2, 195) = 88.89$ ,  $p < 0.001$ , and time  $\times$  responsibility,  $F(2, 195) = 65.61$ ,  $p < 0.001$ . As seen in Figure 1, guilty feelings declined from time 1 to time 2 for the accidental and foreseeable events, but increased for the unjustifiably intended events. Another way of examining this effect is to conduct separate trend analyses at times 1 and 2. Separate analyses conducted for guilty ratings at time 1 revealed a significant quadratic effect only,  $F(1, 197) = 112.52$ ,  $p < 0.001$ , with feelings of guilt being rated the highest for foreseeable compared to accidental or unjustifiably intended incidents, as seen in Figure 1, revealing partial support for McGraw's perspective. The same analysis conducted at time 2 revealed both a linear

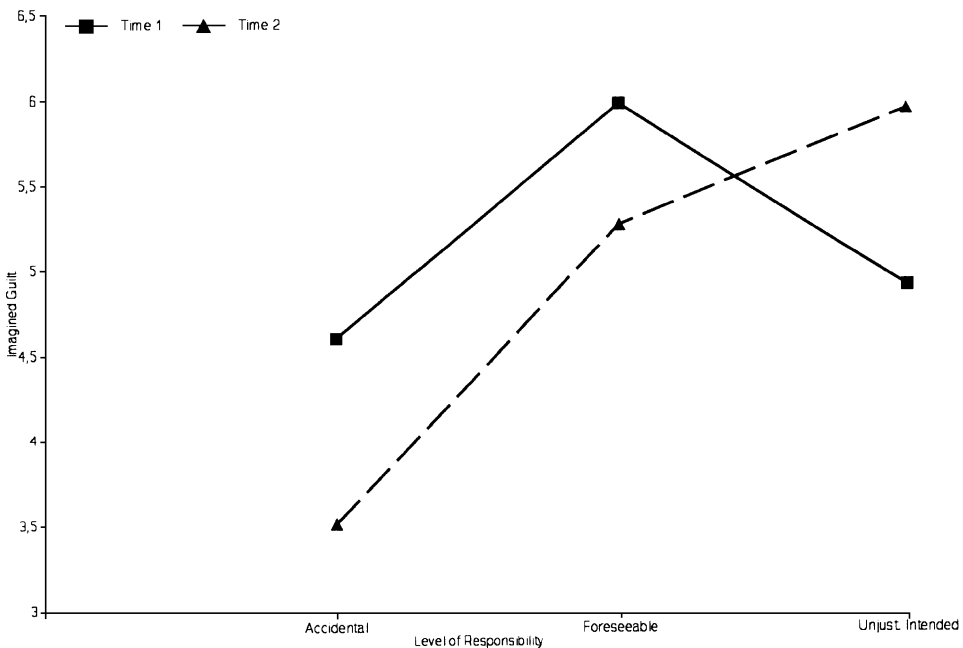


Figure 1. Ratings of imagined guilt as a function of time and responsibility

effect,  $F(2, 196) = 263.39$ ,  $p < 0.001$  and a considerably smaller quadratic effect,  $F(1, 197) = 27.37$ ,  $p < 0.001$ . Across the three levels of responsibility, Figure 1 shows that guilty feelings at time 2 clearly increased in the linear manner predicted by Baumeister *et al.*

### Correlational analyses

To examine the relations between anticipated reactions from the victim and imagined guilt at time 1 versus time 2, two types of correlations were computed. In line with common practice, we computed correlations *across respondents* within each scenario, examining whether the relative rank order of ratings of the victims' reactions more strongly resembled the rank order of time 2 versus time 1 ratings of guilt within each of the three scenarios. However, in this study, it makes even more sense to examine whether the ratings *across the scenarios themselves* were similarly rank ordered for ratings of victim reactions compared to ratings of guilt at time 1 versus time 2. Therefore, we not only computed traditional within-scenario, across-participant correlations between ratings of anticipated victim reactions and imagined guilt at time 1 and time 2 (see Table 2), but the same correlations were also computed for each individual participant across the three scenarios that they rated.

To ascertain whether the correlations at time 1 and time 2 differed across participants and within scenarios, *t*-tests for dependent correlations were conducted. As shown in Table 2, ratings of the victim's expected change in impression are significantly more highly correlated with imagined guilt at time 2 than at time 1 for the foreseeable and unjustifiably intended scenarios. Ratings of the victim's anger and disappointment are significantly more highly correlated with imagined guilt at time 2 than at time 1 for the unjustifiably intended scenario.

Table 2. Correlations between imagined guilt and each of the victim's anticipated reactions at each level of responsibility

	Time 1 guilt	Time 2 guilt	<i>t</i> (195)
Accidental			
Victim's anticipated reactions: anger/disappointment	0.36***	0.28***	-1.44
Victim's anticipated reactions: impression change	0.15*	0.26***	1.68
Foreseeable			
Victim's anticipated reactions: anger/disappointment	0.34***	0.45***	1.58
Victim's anticipated reactions: impression change	0.07	0.33***	3.36**
Unjustifiably intended			
Victim's anticipated reactions: anger/disappointment	0.02	0.24***	2.43*
Victim's anticipated reactions: impression change	-0.02	0.22**	2.70**

Note. Significance levels are for two-tailed tests. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . *t*-values represent tests of the difference between correlations at time 1 versus time 2 for each dependent measure.

The average within-participant, across-scenario correlations between the victim's anticipated anger/disappointment and imagined guilt at time 1 versus time 2, were 0.19 ( $S.D. = 0.73$ ) versus 0.67 ( $S.D. = 0.52$ ), respectively. The corresponding correlations for the victim's anticipated impression change were 0.07 ( $S.D. = 0.75$ ) versus 0.65 ( $S.D. = 0.49$ ), respectively. We then entered Fisher's  $z$  transformations of each participant's correlations as scores into two separate within-subjects analyses of variance, treating time as the only factor<sup>5</sup>. The time 1 versus time 2 differences were significant ( $ps < 0.001$ ) for correlations between victim's anticipated anger/disappointment and guilt,  $F(1, 174) = 53.67$ , and for correlations between victim's anticipated impression change and guilt,  $F(1, 169) = 65.36$ .

## DISCUSSION

The results indicate that reports of imagined guilt covary positively with events representing increasing levels of responsibility, but only after time has elapsed. As such, guilt immediately after the event follows the pattern predicted by McGraw, whereas guilt at a later time shows the trend implied in Baumeister *et al.*'s analysis. Thus, both McGraw's and Baumeister *et al.*'s assertions are legitimate within restricted windows of time. The time-limited validity of their positions testifies to the need to reformulate aspects of each of them.

McGraw argued that perpetrators do not feel guilty after having caused harm malevolently, because they have had the time and opportunity to justify their deed before actually committing it. The present finding of a time-related increase in guilt for unjustifiably intended harm, raises the question of why perpetrators consider the justification to be satisfactory as they are committing the act, but not 1 day later. To parsimoniously account for this shift with time, McGraw would need to argue that perpetrators actually change their minds regarding the justification's adequacy. We suggest, in contrast, that perpetrators do not necessarily undergo a change in attitude regarding how justified they were, but that they take a different perspective on their behaviour at times 1 and 2. Admittedly, perpetrators who malevolently cause harm at time 1 will have perfectly good reasons for acting at that moment. Characteristic of the actors' demeanour, however, is a failure to consider whether these reasons will withstand the scrutiny of other persons, including the victim. Either because of distraction produced by arousal or deliberate decision, perpetrators seem to refuse initially to evaluate their own reasons for acting from the perspective of other persons, thereby failing to consider whether others see their behaviour as justified.

Although we have no independent check on whether the time 2 reports of imagined guilt actually reflected a different perspective when compared to time 1 imagined guilt, correlations between ratings of anticipated responses from the victim and imagined guilt bear us out. The within-participant correlations showed that guilt

<sup>5</sup>Fisher's  $z$  cannot be computed when the correlation coefficient is 1.00, prompting us to replace these values with 0.9999 before computing Fisher's  $z$ . Some participants gave identical ratings of at least one of the variables entering into the correlational analyses, resulting in zero variance, and the need to exclude these individuals from computation of the within-subject correlations. ( $N$ s were 6, 1, 15, and 10 for impression change, anger/disappointment, time 1 guilt, and time 2 guilt, respectively).

was less strongly linked to the two victim reaction measures at time 1 than at time 2. In addition, when each of the events was examined separately, the correlations between guilt and measures of the victims' responses were in most cases lower at time 1 than at time 2 and especially so in the unjustifiably intended scenario. To us, this indicates that the victim's response to the situation in this scenario mattered little in inducing initial feelings of guilt, but that these same responses started to play a larger role in affecting feelings of guilt with the passage of time.

As time passes, perpetrators are likely to be confronted—if only in their own thoughts—with victims' and bystanders' negative emotional reactions to their actions, and thereby with the fact that their behaviour poses a threat to existing and future relationships (cf. Greenspan, 1995). Accordingly, perpetrators can no longer permit themselves to ignore the interpersonal perspective which they disregarded at time 1 and thus they reevaluate their own reasons for acting from an interpersonal perspective. In the case of unjustifiably intended harm, this process will eventually force perpetrators to admit that there really was no justification for their behaviour. This admission would then promote relatively higher post-transgression feelings of guilt.

This interpretation actually aligns neatly with Baumeister *et al.*'s account of feelings of guilt. The relative lack of guilt at time 1 for unjustifiably caused harm likely reflects an impoverished sensitivity to the interpersonal concerns that Baumeister *et al.* deem so essential for feeling guilty. At the same time, our explanatory framework casts doubt on the validity of their claim that responsibility merely plays a secondary role in promoting feelings of guilt. Baumeister *et al.* seem to view assigning a central role to responsibility in explaining guilt-induction as being inconsistent with an interpersonal account. We, on the other hand, can cite at least two reasons for considering notions of responsibility to be a critical ingredient of an interpersonal account of guilt induction. First, as Baumeister *et al.* acknowledge, the effect that harmful behaviour has on the victim's and bystanders' willingness to have a future relationship with the perpetrator will strongly depend on the extent to which they hold the individual responsible for the action. Second, in our view, the very act of evaluating responsibility for harm entails the perpetrator's attempt to look at their behaviour from an interpersonal perspective. That is, when evaluating their own responsibility, perpetrators examine whether there are causes or reasons for the behaviour that will, or at least should be, accepted by others as indicating that they do not deserve to be fully blamed for having caused harm (e.g. Tedeschi & Reiss, 1981).

To cast doubt on our interpretation, one might question the validity of our measures—arguing that participants' ratings of guilt say little about how guilty they would feel in real-life equivalents of the presented situations. One might argue further that participants were simply revealing their 'implicit theories' about guilty feelings, providing reasoned deductions about (a) the links between responsibility and guilty feelings and (b) how the intensity of guilty feelings changes with time. Considering the within-subjects nature of our design, the unrelenting critic could additionally assert that participants were even cued to synthesize on-the-spot, *ad-hoc* theories about the links among responsibility, guilty feelings, and time.

We are suspicious of an unarticulated 'demand' or 'reasoning-based' interpretation. Admittedly, there may have been demands to differentiate among the levels of responsibility or between questions about guilt at times 1 and 2.

However, we find it difficult to fathom how participants could have deduced the complex interactive pattern of results, without relying on knowledge of how guilty they have felt in past situations. After all, the interactive time–guilt–responsibility relation is not even accepted in the psychological literature, let alone being well-explicated in popular culture—so where did participants draw this complex knowledge from? In our view, participants could honour a possible demand to differentiate between scenarios or questions in only one of two ways. First, participants could have provided random responses to the questions across the scenarios, which they obviously did not do. Second, participants could have used their own imaginative capabilities to honour a possible demand to differentiate. Explaining the results in terms of ‘demand’ thus amounts to restating our own interpretation of the results—participants produced the interactive pattern of results by imagining how guilty they would feel at various times in each of the situations presented. Similarly, given the lack of explicit *a priori* knowledge about guilt–time–responsibility relationships, a ‘reasoning’ interpretation also is not inconsistent with our claim that participants’ responses reflect their imagined feelings of guilt.

Those accepting the validity of our measures might still disagree that a change in perspective is what accounts for shifts in guilt with time. That is, since we depicted the perpetrator of unjustifiable harm as being angry, the relative lack of guilt for unjustifiable harm at time 1 might reflect people’s belief that it is impossible to feel anger and guilt simultaneously. Thus, participants may only have imagined themselves as feeling guiltier as anger subsided, regardless of issues of responsibility. We also doubt the validity of this interpretation for two reasons. First, the time 1 pattern of guilty feelings that we report for unjustifiably—or angrily-intended harm (compared to accidental or foreseeable harm) is almost identical to the pattern reported by McGraw. Yet McGraw explicitly asked participants to consider hypothetical events (Study 1) or recall actual autobiographical incidents (Study 2) of unjustifiably intended harm that were ‘. . . not provoked in any way by the recipient of the harm’ (1987, p.251). Thus, McGraw’s participants presumably were not angry about their intentional, unjustifiable actions, but ours were. Nevertheless, regardless of whether respondents were initially angry (our study) or were not (McGraw’s studies), they did not see themselves as experiencing intense immediate feelings of guilt for events that they had intentionally and unjustifiably caused.

Second, this alternative explanation fails to consider why, once the anger has subsided, the person should necessarily report greater feelings of guilt for their angry behaviour, as we found in the present study. Why, for example, would participants not merely report the same degree of guilt or even lower levels at a later point in time? In our view, the ‘why’ question can only be answered by introducing a particular change in perspective that can take place with time. Most well-socialized individuals care about others and do not wish to do them harm. They know, too, that it is in poor taste—at the very least—to damage another’s property. However, they assume this particular perspective on the event only after time has passed and the anger has subsided. Moreover, the anger itself subsides, in part, because they had the time to contemplate the justifiability of their action, and realized in the interim that it was truly unjustified. Not all individuals will react in the same way or undergo this particular shift in perspective. For example, had we changed the relationship between perpetrator and victim to one of arch enemies rather than intimate relatives

or friends, we might easily imagine no shift in perspective. In this case, participants might have maintained a high level of anger by obsessively ruminating over their initial ill treatment and may thus also have later maintained their previously reported low levels of guilt. Our explanation, consonant with that offered by Baumeister *et al.*, nevertheless still holds: the emotion of guilt—in fact, any emotion—represents a particular perspective on the situation. Emotions are not single, isolated events emanating from within an individual, but are constituted intersubjectively between individuals, reflecting a shared understanding and regulation of events (Lutz, 1988). And, when the emotion is a ‘moral’ one (such as guilt or anger), shifts in perspective regarding responsibility play a preeminent role (Greenspan, 1995).

In conclusion, the emotion of guilt must be contextually understood in terms of the individual’s ongoing shifts in perspective on responsibility. Neither guilt nor any emotion is a structured whole, but a dynamic process whose quality will change with the person’s immediate goals and relationships (Fogel, Nwokah, Dedo, Messinger, Dickson, Matusov & Holt, 1992). This view adds a richness to our understanding of emotional experience and acknowledges that measurement needs to pay serious attention to assessing not just the experience of guilt, but experiences of guilt across time, as they reflect ever changing interplays between the person’s internal and external environment.

## REFERENCES

- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, *115*, 243–267.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Interpersonal aspects of guilt: Evidence from narrative studies. In J. P. Tangney and K. W. Fisher (Eds), *Self-conscious emotions: the psychology of shame, guilt, embarrassment and pride* (pp. 255–273), New York: Guilford Press.
- Brock, T. C., & Buss, A. (1964). Effects of justification for aggression and communication with the victim on post aggression dissonance. *Journal of Personality and Social Psychology*, *68*, 403–412.
- Carlsmith, J. M., & Gross, A. E. (1969). Some effects of guilt on compliance. *Journal of Personality and Social Psychology*, *11*, 232–239.
- De Rivera, J. (1984). The structure of emotional relationships. In P. Shaver (Ed.), *Review of personality and social psychology* (Vol. 5, pp. 116–145). Beverly Hills, CA: Sage.
- Ferguson, T. J., Eyre, H., & Stegge, H. (March, 1996). Multifaceted functions of transient and persistent guilt in adults and children. Poster presented at the Southwestern Society for Research in Human Development, Park City, UT.
- Ferguson, T. J., & Stegge, H. (1995). Emotional states and traits in children: The case of guilt and shame. In J. P. Tangney and K. W. Fisher (Eds), *Self-conscious emotions: The psychology of shame, guilt, embarrassment and pride* (pp. 174–197). New York: Guilford Press.
- Fincham, F. D., & Jaspars, J. M. (1980). Attribution of responsibility: From man the scientist to man as lawyer. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 81–138). New York: Academic Press.
- Fogel, A., Nwokah, E., Dedo, J. Y., Messinger, D., Dickson, K. L., Matusov, E., & Holt, S. A. (1992). Social process theory of emotion: A dynamic systems approach. *Social Development*, *1*, 122–142.
- Freedman, J. L., Wallington, S. A., & Bless, E. (1967). Compliance without pressure: The effect of guilt. *Journal of Personality and Social Psychology*, *7*, 117–124.

- Gerard, A. S. (1993). *The Phaedra syndrome: Of shame and guilt in drama*. Atlanta, GA: Rodopi.
- Greenspan, P. S. (1995). *Practical guilt: Moral dilemmas, emotions, and social norms*. Oxford University Press.
- Harris, P. L. (1989). *Children and emotion: The development of psychological understanding*. Oxford: Basil Blackwell.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Izard, C. E. (1977). *Human emotion*. New York: Plenum Press.
- Lutz, C. A. (1988). *Unnatural emotions: Everyday sentiments on a Micronesian atoll and their challenges to Western theory*. Chicago, IL: University of Chicago Press.
- McGraw, K. M. (1987). Guilt following transgression: An attribution of responsibility approach. *Journal of Personality and Social Psychology*, **53**, 247–256.
- Oatley, K. (1992). Integrative action of narrative. In D. J. Stein and J. E. Young (Eds), *Cognitive science and clinical disorders* (pp. 151–170). New York: Academic Press.
- Oatley, K. (1994). A taxonomy of the emotions of literary response and a theory of identification in fictional narrative. *Poetics*, **23**, 53–74.
- Shaver, K. G. (1985). *The attribution of blame: Causality, responsibility, and blameworthiness*. New York: Springer-Verlag.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, **48**, 813–838.
- Tangney, J. P. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin*, **18**, 199–206.
- Tedeschi, J. T., & Reiss, M. (1981). Verbal strategies in impression management. In C. Anataki (Ed.), *The psychology of ordinary explanations* (pp. 271–309). New York: Academic Press.
- Tomkins, S. S. (1987). Script theory. In J. Arnoff, A. I. Rabin, and R. A. Zucker (Eds), *The emergence of personality* (pp. 147–216). New York: Springer Publishing Company.
- Tomkins, S. S. (1992). *Affect, imagery, consciousness* Vol. IV. *Cognition: duplication and transformation of information*. New York: Springer Publishing Company.
- Wicker, F. W., Payne, G. C., & Morgan, R. D. (1983). Participant descriptions of guilt and shame. *Motivation and Emotion*, **7**, 25–39.