

## Replications and Refinements

Under this heading are brief reports of studies providing data that substantiate, challenge, or refine what we think we know. These notes consist of a summary of the study's procedure and as many details about the results as space allows. Additional details concerning the results can be obtained by communicating directly with the author. Submissions to this section must provide a meaningful conceptual replication that extends the construct validity of the work.

# Impact of Responsibility for a Misfortune on Schadenfreude and Sympathy: Further Evidence

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**ABSTRACT.** The authors tested the hypothesis that the more individuals are responsible for their own misfortune, the more schadenfreude (i.e., pleasure derived from another's misfortune) and less sympathy the misfortune evokes in others. The results support the hypothesis, thereby providing further evidence for the role responsibility plays in emotional reactions to the misfortunes of others.

**Keywords:** deservingness, emotion, responsibility, schadenfreude, sympathy

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**WHEN BAD THINGS HAPPEN TO OTHER PEOPLE** reactions can take several forms. In his seminal book *The Psychology of Interpersonal Relations*, Heider (1958) distinguished two possible emotional reactions of a person (P) to the misfortune of others (O). First, P can experience sympathy when a negative

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experience for O is also negative for P. Second, P can experience *schadenfreude* (i.e., pleasure derived from another's misfortune) when a negative experience for O is positive for P. Whereas the former emotional reaction "presupposes a sympathetic 'identification,' the latter 'shows a discordance or antagonism between [P] and [O]'" (Heider, 1958, p. 277–278). For this reason, Heider saw *schadenfreude* as harmful to social relations (cf. Leach, Spears, Branscombe, & Doosje, 2003).

Although theoretical accounts of *schadenfreude* date back to the work of philosophers such as Nietzsche, Plato, and Spinoza (Nietzsche, 1887/1967; Plato 427–348 BCE/1925; Spinoza, 1677/2002), empirical research on this emotion did not occur until the late 1990s. These empirical studies showed that *schadenfreude* is more likely to occur when misfortunes happen to high achievers, *tall poppies* (Feather, 1993, 1994), or people who are envied (Smith et al., 1996; Van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006), disliked (Hareli & Weiner, 2002; Van Dijk et al., 2006), or resented (Feather & Sherman, 2002).

In addition to these determinants of *schadenfreude*, several scholars have proposed that the deservingness of a misfortune evokes *schadenfreude*. Presumably, the more a misfortune is seen to be deserved, the more *schadenfreude* is evoked (e.g., Ben-Ze'ev, 2000; Feather, 1994, 1999; Heider, 1958; Ortony, Clore, & Collins, 1988; Portmann, 2000). This finding corroborates research showing that others' deserved outcomes elicit positive emotions in observers, whereas others' undeserved outcomes elicit negative emotions (Feather, 2006). Moreover, research has indicated that the more individuals are responsible for their own outcome, the more they are seen as deserving the outcome (Feather, 1999). Together, this would imply that the more individuals are responsible for their own misfortune, the more positive emotions (i.e., *schadenfreude*) and less negative emotions (i.e., sympathy) this misfortune evokes in others.

Previous research yielded conflicting results concerning the impact of responsibility on emotional reactions of *schadenfreude* and sympathy. Specifically, Van Dijk, Ouwerkerk, Goslinga, and Nieweg (2005) showed that targets who were seen to be responsible for their own misfortune evoked more *schadenfreude* and less sympathy than targets who were not held responsible for their misfortune. However, this finding was contradicted by the results of other studies. For example, although Brigham, Kelso, Jackson, and Smith (1997) found support for the impact of responsibility on sympathy, their results yielded no effect of responsibility on the experience of *schadenfreude*. Similarly, Feather and Sherman (2002) found a significant effect for personal control (a proxy measure for responsibility) on sympathy, but again no effect on *schadenfreude* was obtained. In sum, previous research results in opposing results concerning the relation among responsibility, *schadenfreude*, and sympathy.

In the present study, we provided a further examination of the role of responsibility in emotional reactions to the misfortunes of others. We hypothesized that the misfortune of a responsible target would evoke more *schadenfreude* and less sympathy than the misfortune of a nonresponsible target. Support for

our hypothesis provided further empirical evidence concerning the impact of responsibility for a misfortune on schadenfreude and sympathy.

## Method

### *Participants and Design*

Participants were 130 students (78 women, 52 men;  $M$  age = 21.18 years,  $SD$  age = 3.01 years) from the VU University Amsterdam, who were all paid for their participation. We randomly assigned them to one of the two experimental conditions (responsibility for the misfortune, responsible vs. not responsible).

### *Procedure and Dependent Variables*

On arrival at the laboratory, we led participants to separate cubicles and gave them a booklet containing an experimental scenario in which a person suffered a career-related misfortune, and measures concerning the dependent variables. We manipulated details of the scenario to make the target appear either responsible ( $n = 61$ ) or not responsible ( $n = 69$ ) for his or her misfortune. After they read the scenario, we asked participants to respond to statements pertaining to their reactions to the misfortune of the target on 7-point Likert-type scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). One statement assessed responsibility for the misfortune. Five statements assessed schadenfreude (Cronbach's  $\alpha = .80$ ): "I enjoy what happened to [the target]"<sup>1</sup>; "I'm satisfied with what happened to [the target]"; "I couldn't resist a little smile"; "I actually had to laugh a bit"; and "I feel schadenfreude"<sup>2</sup>. Three statements assessed sympathy ( $\alpha = .83$ ): "I commiserate with [the target] about what happened"; "I feel sorry for what happened to [the target]"; and "I sympathize with [the target]."

## Results

### *Manipulation Check*

An independent samples  $t$  test performed on measures of the target's responsibility for the misfortune yielded a significant effect of our responsibility manipulation,  $t(128) = 9.31$ ,  $p < .001$ . Participants perceived a target in the responsible condition to be more responsible for the misfortune ( $M = 5.92$ ,  $SD = 1.28$ ) than a target in the not responsible condition ( $M = 3.16$ ,  $SD = 1.98$ ). This result indicates that our manipulation of responsibility was successful.

### *Analyses of Variance*

A multivariate analysis of variance performed on the measures of schadenfreude and sympathy yielded a significant multivariate effect of

responsibility for the misfortune,  $F(2, 127) = 5.90, p = .004, P\eta^2 = .09$  (for relevant means, standard deviations, and correlations, see Table 1). As expected, follow-up univariate analyses of variance indicated that participants experienced more schadenfreude toward the misfortune of a responsible target ( $M = 3.16, SD = 0.99$ ) than the misfortune of a nonresponsible target ( $M = 2.58, SD = 1.12$ ),  $F(1, 128) = 9.79, p = .002, P\eta^2 = .07$ . Furthermore, as expected, results indicated that participants experienced less sympathy toward the misfortune of a responsible target ( $M = 4.76, SD = 1.34$ ) than the misfortune of a nonresponsible target ( $M = 5.31, SD = 1.21$ ),  $F(1, 128) = 6.14, p = .015, P\eta^2 = .05$ .

### Discussion

The present study provided a further examination of the impact of responsibility on schadenfreude and sympathy toward another person's misfortune. Results clearly showed that another person's responsibility for a misfortune intensifies schadenfreude while attenuating sympathy for the unfortunate other. Thus, although earlier research on responsibility, schadenfreude, and sympathy yielded opposing findings, the present findings provide important further evidence for the impact of responsibility on emotional reactions to the misfortunes of others.

**TABLE 1. Means and Standard Deviations of Schadenfreude, Sympathy, and Responsibility and Correlations Between These Variables in Relation to Responsibility for Misfortune Manipulations**

Variable	<i>M</i>	<i>SD</i>	Sympathy	Responsibility
Schadenfreude				
Responsible	3.16	0.99	-.24*	.14
Not responsible	2.58	1.12	-.47***	.34***
Overall	2.85	1.10	-.40***	.37***
Sympathy				
Responsible	4.76	1.34	—	-.27**
Not responsible	5.31	1.21	—	-.22*
Overall	5.05	1.29	—	-.31***
Responsibility				
Responsible	5.92	1.28	—	—
Not responsible	3.16	1.98	—	—
Overall	4.45	2.17	—	—

*Note.* Scores are on a 7-point scale. Higher numbers indicate more schadenfreude, more sympathy, or more responsibility.  $n_{\text{resp}} = 61$ ;  $n_{\text{not resp}} = 69$ ;  $N_{\text{overall}} = 130$ .  
\*  $p < .10$ . \*\*  $p < .05$ . \*\*\*  $p < .01$ .

### *Possible Limitations and Future Directions*

A possible limitation of our present (scenario-based) methodology concerns potential experimental demands and social desirability. These methodological considerations may be especially relevant in the context of studying less socially desirable emotions, such as schadenfreude. Future research on schadenfreude should combine a scenario-based approach with other experimental paradigms. For example, it should combine a methodology in which actual (comparison) information is provided, key measures have been filtered among other items, and a cover story is included that masks the true purpose of the study.

In conclusion, one potential fruitful avenue for future research is the relations among responsibility, schadenfreude, and belief in a just world (Lerner, 1980). Lerner argued that individuals need to believe in a just world in which everybody gets what they deserve because this belief enables them to cope with their environment as if it were stable and orderly. Previous researchers have documented that the strength of belief in a just world varies between individuals (Mudrack, 2005; Rubin & Peplau, 1975). It may be worthwhile to investigate whether individuals high in their belief in a just world would perceive targets as more responsible for their own misfortunes and subsequently also experience more schadenfreude and less sympathy toward the targets. Such a research enterprise may provide additional support for the links among responsibility, schadenfreude, and sympathy.

### NOTES

1. About half of the participants were presented with a female target named Marleen, whereas the remaining participants were presented with a male target named Mark. Initial analyses showed no main or interaction effects of the target's gender ( $F_s < 1$ ). Thus, this variable was not included in the reported analyses.

2. We used the term *leedvermaak*, which is the Dutch word for schadenfreude. The first use of this word in the Dutch language has been dated to the year 1811.

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