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# Does Feeling Empathy Lead to Compassion Fatigue or Compassion Satisfaction? The Role of Time Perspective

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**ABSTRACT**

Research has shown that feeling empathy sometimes leads to compassion fatigue and sometimes to compassion satisfaction. In three studies, participants recalled an instance when they felt empathy in order to assess the role time perspective plays in how empathizers perceive the consequences of empathy. Study 1 revealed that college students perceive empathy as having more negative consequences in the short term, but more positive consequences in the long term. Study 2 showed that service industry professionals perceive the consequences of feeling empathy for customers who felt bad as less negative, and the consequences of feeling empathy for people who felt good as less positive, in the long as opposed to the short term. Because Studies 1 and 2 confounded time perspective with event specificity a third study was conducted in which event specificity was held constant across time perspectives. The same pattern of results emerged. The results of these studies indicate that perceptions of the effects of feeling empathy, whether positive or negative, become less extreme over time. These findings shed light on the relation between empathy and compassion fatigue and satisfaction by suggesting that situations that initially are experienced as stressful can over time make the empathizer stronger.

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Empathy; compassion fatigue; compassion satisfaction; feeling; time

Research is clear regarding the importance of empathy in the development of effective relationships between care providers and clients, and in successful health care provision (Irving & Dickson, 2004). Although empathy plays an important role in making human interactions work (e.g., Irving & Dickson, 2004; Klimecki, Leiberg, Ricard, & Singer, 2014), it can also lead to negative consequences as a result of the costs involved for the one who empathizes (Craig & Sprang, 2010; Figley, 2002). Previous research on feeling empathy for those in need has examined both negative and positive consequences for the empathizer. One factor that might influence whether the consequences are positive or negative is how empathy is defined. Bloom (2017) distinguished between

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experiencing others' emotions (emotional contagion) and wanting others to do well and not suffer without necessarily experiencing their emotions (compassion). Feeling the emotions of others in distress may lead to negative consequences. Indeed Klimecki et al. showed that feeling others' negative emotions led to activation in brain regions associated with experiencing pain, but that these effects could be reduced by compassion training. Similarly, Hunt, Denieffe, and Gooney (2017) suggested that high levels of emotional empathy may be associated with higher risk for burnout among nurses unless accompanied by other resources such as the ability to regulate one's own emotions. In the present research, the influence of another factor, time perspective, was examined to assess its possible role in how empathizers perceive the consequences of feeling empathy. As a background to this research, we review previous research on the relation between empathy, compassion fatigue and compassion satisfaction.

Along with Batson (1987), we define empathy as an other-oriented emotional response elicited by, and congruent with, the perceived welfare of a person in need. As such, empathy includes feelings of compassion, tenderness, warmth and the like (Batson, Håkansson Eklund, Chermok, Hoyt, & Ortiz, 2007). This definition, as opposed to some others (e.g., Goetz, Keltner, & Simon-Thomas, 2010), does not differentiate empathy from compassion.

Although empathy is often considered an important factor underlying positive consequences in health care professions (Irving & Dickson, 2004), there is disagreement as to the relationship between empathy and compassion fatigue (Bride, Radey, & Figley, 1999). Previous research identified empathy as one of the main causes of compassion fatigue (Figley, 2002), which poses a dilemma for professionals in fields in which empathy is necessary (Irving & Dickson). Given that empathy has been empirically associated with both positive and negative consequences, the present research focuses on immediate versus long-term consequences for the empathizer in an effort to better understand when positive or negative consequences of empathy will be experienced. Perhaps the effects of feeling empathy for people in difficult situations are negative in the short term, but positive in the long term. This is consistent with Taylor's (1991) mobilization-minimization hypothesis, which states that negative events mobilize immediate fight or flight reactions followed by processes to minimize the negative impact of such events. It is also possible that the effects of empathy, as with other emotional reactions, may diminish over time.

Walker, Vogl, and Thompson (1997) showed that judgments of the pleasantness as well as unpleasantness of an event become less extreme as the retention interval increased. In subsequent research Walker, Skowronski, Gibbons, Vogl, and Thompson (2003) showed a similar pattern of results on the intensity of emotions associated with autobiographical memories. Similarly, the consequences of feeling empathy for a person in a negative situation may become less negative over time. This notion is reminiscent of findings on "rosy retrospection" (Mitchell, Thompson, Peterson, & Cronk, 1997), in which people's memories of events tend to be more positive than their experience of the events when they occurred. Further, Loewenstein (2005) showed that people have a limited perception of their own feelings and behaviors associated with a certain state when they are not currently in that state. According to Loewenstein's findings, when in an affectively cold state, people fail to fully appreciate how hot states will influence their

own preferences and behavior. When in hot states, people underestimate the impact of those states. Thus, it is probable that the overall impression of a situation changes over time, and that an event that is distressing and takes a great deal of energy at the moment can be seen in a more positive light with increased temporal distance. Perhaps this is because, as Trope and Liberman (2003, 2010) have argued, greater psychological distance from events leads to more abstract construal of the event. Focusing on short-term consequences of empathy may lead to more detailed memories of the event and reliving the affective state to a greater extent.

## Compassion Fatigue and Compassion Satisfaction

Figley (1995) used the term compassion fatigue to describe the emotional, cognitive, and behavioral changes in professionals working with trauma sufferers. We define compassion fatigue as negative cognitive and emotional consequences for the empathizer of feeling empathy. These consequences include feeling sad, inadequate, exhausted, and so forth. The overlap among compassion fatigue and the concept of emotional exhaustion is considerable (Wright & Cropanzano, 1998). Both compassion fatigue and emotional exhaustion are negative reactions to excessive demands. There are, however, two important distinctions. First, compassion fatigue results from contact with other persons, whereas emotional exhaustion may have other sources. Second, compassion fatigue can result from a single exposure to someone in a need situation, whereas emotional exhaustion develops over time.

We define compassion satisfaction as positive cognitive and emotional consequences as a result of feeling empathy. These consequences include feeling strengthened by having been able to help, satisfied with one's own situation, developed as a person, and the like. This is similar to Stamm's (2002) view of compassion satisfaction as the positive consequences, and compassion fatigue as the negative consequences, individuals may experience as a result of working with traumatized or suffering people. Our conception of compassion fatigue is also consistent with Figley's (1995) definition as the behaviors and emotions resulting from knowing about a traumatizing event experienced by a person. Wagaman, Geiger, Shockley and Segal (2015) showed that empathy can increase compassion satisfaction among social workers.

Although compassion fatigue has mainly been associated with health care professionals (Hoffman, 2000; Schwam, 1998) there is also evidence that anyone can experience this psychological state (Kinnick, Krugman, & Cameron, 1996). Conrad and Kellar-Guenther (2006) found that compassion fatigue can result from feeling empathy for someone suffering from a psychological trauma even if the contact is brief. Since most adults experience at least one traumatic event during their lifetime, it is important to extend research on compassion fatigue to a more general population.

It is also possible that the positive consequences of feeling empathy can compensate for its negative consequences. Studies have shown that exposure to needy others can cause a positive self-image and a stronger appreciation of different values in life (Steed & Downing, 1998). Consequently, in order to understand the negative consequences of empathy one must also understand its positive consequences. Among other things,

working with traumas can lead to positive changes in personal maturity as well as a deeper understanding of other people (Ortlepp & Friedman, 2002). Research indicates that emotionally demanding work provides people with an opportunity to develop on both personal and professional levels (Hesse, 2002). Perhaps this is one reason many continue to work with needy others, despite evidence of the negative consequences that may arise from contact with human suffering.

Bride and Figley (2007) asserted that it is important to prevent compassion fatigue because it poses a health risk. One effective strategy is to pay attention to compassion satisfaction and the rewards, as they often outweigh the costs. Another strategy is to pay close attention to one's own well-being, and to maintain a good balance between concern for others and for oneself (Salston & Figley, 2003).

## The Present Research

Previous research has shown that empathy can have both positive and negative consequences for the empathizer. To clarify the consequences of empathy, we conducted three empirical studies in which we sought to include a variety of sample populations. Further, we examined whether people would perceive the consequences of feeling empathy for someone in a negative situation more positively in the long term than in the short term. In the first two studies, participants were asked to indicate how they felt they were affected in the short term by specific examples of feeling empathy for others as well as how they felt they were generally affected by feeling empathy in the long term. Study 1 investigated college students' perceptions of how they are affected by situations in which they feel empathy for people in negative situations. Study 2 investigated service professionals' (hairstylists) perceptions of how they are affected by situations in which they feel empathy for customers in positive as well as negative situations. In the third study, college students were asked to indicate how they felt directly after a specific situation in which they felt empathy for someone in a difficult situation, or how they have been affected in the long term by the situation.

All three studies were conducted in Sweden. Participants in all three studies were informed that their participation was voluntary, they could withdraw at any time, their responses would be treated anonymously and confidentially, and gave their informed consent before data collection. No compensation was offered.

It is important to note that we assessed participants' perceptions of the consequences of feeling empathy rather than the direct consequences of experiencing empathy. Nisbett and Wilson (1977) pointed out that people's introspections are not always accurate. People are not always aware of how stimuli affect them, and can mistakenly believe that stimuli have affected them even when they have not. Further, research in the area of metacognition has shown that people can lack knowledge about their own abilities and what they know. For example, Kelly and Metcalfe (2011) showed that people's beliefs in their ability to assess emotions from facial expressions was unrelated to their accuracy. The present research can provide insight into how people think they are affected by feeling empathy, which may or may not be how they are actually affected by it.

## Study 1

Study 1 was designed to test whether there is a difference in perceptions of the consequences of feeling empathy in the short vs. long term. The results of a pilot study showed that people tend to report more positive consequences of empathy in the long term than in the short term. These results are consistent with Taylor's (1991) notion that negative events mobilize the individual to minimize the impact of the events. She offered several theoretical explanations for this tendency. Perhaps most relevant in the context of compassion satisfaction and compassion fatigue is Taylor and Brown's (1988) work on cognitive adaptation. They suggested that the ability to feel contentment and care about others may be related to one's ability to distort threatening information in a positive direction.

## Method

### *Participants*

Participants were 253 (211 women, 41 men, 1 who did not provide gender information) university students in courses or programs in nursing or behavioral science. The participants' ages ranged between 18 and 53 years (Mdn =25.00, $M = 27.73$, $SD = 7.77$).

### *Material and Procedure*

Two versions of the questionnaire were used in the study. They were identical, except that one focused on the consequences of feeling empathy in the short term whereas the second focused on the consequences in the long term. The questionnaires' first instruction was "Describe an occasion when you felt empathy/compassion for someone in a difficult situation." The next part of the questionnaire consisted of six items in which the participants used a Likert scale ranging from 1 (*Not at All*) to 7 (*Very Much*) to indicate the degree to which they experienced various consequences of feeling empathy in the situation they had described. The question on the survey in the short-term condition read: "How did this occasion make you feel immediately afterward?" The question on the survey in the long-term condition read: "How do occasions when you feel empathy/compassion for people in difficult situations generally affect you in the long term?" The items that participants rated were (a) sad, (b) strengthened by possibly having been able to help, (c) inadequate, (d) satisfied with my own situation, (e) exhausted, and (f) as if it helps me develop as a human being. These items were selected because they were prominent themes in the pilot study mentioned above in which psychiatric staff members described an occasion when they felt empathy for a patient in a difficult situation, how they felt immediately after, and how feeling empathy in such situations affects them generally in the long term. The questionnaire also included a general statement to assess whether the perceived consequences of feeling empathy tended to be positive or negative. This item was worded: "Overall, in the short term the situation resulted in … " (short-term version) or "Overall, in the long term such situations result in … " (long-term version), and responses were made on a Likert scale ranging from 1 (*negative feelings*) to 7 (*positive feelings*). Responses to these seven items were combined

to form an index (Cronbach's $\alpha = .70$). The three negative items were reverse coded, so higher numbers indicate more positive feelings.

Because the scale contained both emotional and cognitive items principle component analysis (PCA) was conducted to determine whether treating the index as unidimensional was justified. Since the correlation matrix contained several correlations above .3, the Kaiser-Meyer-Olkin value was .74 and the Bartlett's Test of Sphericity was significant the data were deemed appropriate for PCA analysis. This analysis yielded two factors: (a) the index including all seven items accounting for 36.80% of the variance (eigenvalue 2.58), and (b) the three negative consequence items (sad, exhausted, inadequate), accounting for 20.96% of the variance (eigenvalue 1.47). To better understand these components, oblimin rotation was performed. The rotated solution showed strong loadings on both components with each item loading high on only one component. It was clear that the components reflected whether the consequences were negative or positive, and not whether the items were cognitive or emotional. Based on this analysis, we chose to proceed with the seven-item index.

Participants were recruited through verbal requests made at regularly scheduled lectures. Students who agreed to participate were assigned to one of the conditions depending on which version of the questionnaire they received. The questionnaire took approximately 10 minutes to complete after which they were collected in envelopes to ensure anonymity and the participants were debriefed regarding the purpose of the study.

## Results and Discussion

There were no significant correlations between gender, age and the empathy consequence index (see Table 1). The data were submitted to a $2 \times 2$ factorial ANOVA with time perspective (short term, long term) and gender (male, female) as between-subjects factors. As expected, participants reported significantly more positive consequences of feeling empathy in the long term ($M = 4.83$, $SD = .92$) than in the short term ($M = 3.87$, $SD = 1.06$), $F(1, 243) = 26.47$, $p < .001$, $\eta^2 = .10$. There was no main effect of gender, $F(1, 243) = 1.70$, $p = .19$, and no Time Perspective × Gender interaction, $F(1, 243) = 0.50$, $p = .48$.

These results are consistent with Taylor's (1991) notion that negative events elicit immediate fight or flight reactions followed by a variety of responses to minimize the impact of the events. Feeling empathy for someone in a negative situation can cause immediate negative reactions, which are then minimized over time. The results are also consistent with previous research showing that other emotional reactions fade with time (Walker, Skowronski, Gibbons, Vogl, and Thompson, 2003; Walker, Vogl, and Thompson, 1997). In our study, the perceived consequences of feeling empathy for a

**Table 1.** Pearson Correlations, Means, Standard Deviations and Reliability for the Variables in Study 1.

| | 1 | 2 | 3 | *M* | *SD* | Cronbach's Alpha |
|---|---|---|---|---|---|---|
| 1. Gender[a] | – | – | – | n.a. | n.a. | n.a. |
| 2. Age | –.07 | – | – | 27.73 | 7.77 | n.a. |
| 3. Empathy Consequence Index | .04 | .05 | – | 4.36 | 1.10 | .70 |

[a]0 = Female, 1 = Male.
n.a. = not applicable.
*$p < .05$, **$p < .01$.

person in a negative situation not only became less negative over time, but actually became mildly positive. This result is consistent with findings that people's memory of events tend to be more positive than their experience of the events when they occurred (Mitchell, Thompson, Peterson, & Cronk, 1997).

Cognitive dissonance theory (Festinger, 1957) asserts that the perception that one has voluntarily subjected oneself to suffering may cause psychological discomfort, which can be alleviated by viewing the negative experience as valuable. For example, soldiers put through difficult training and initiation activities they dislike in the short term often credit these activities with improving their character when looking back on them (see Cialdini, 2001). It is also likely that there is a protective benefit in focusing more on positive than negative aspects in the long term. It is more satisfying to believe that a stressful situation has led to something positive, rather than that a negative event was nothing but negative in both the short and the long term. Situations that are psychologically stressful at the moment seem, over time, to lead to strengthening consequences possibly as a method of coping emotionally (Taylor, 1983; Wilson & Gilbert, 2005).

Study 1 showed that people perceive the consequences of feeling empathy for people in difficult situations more positively in the long term than in the short term. A second study was conducted to test the consequences of feeling empathy for people in positive as well as negative situations.

## Study 2

The main purpose of Study 2 was to further explore the time difference found in Study 1 by including situations in which one has experienced empathy for people who felt good as well as bad. As in Study 1, we expected that the consequences of feeling empathy for people in negative situations would be perceived as more negative in the short term as opposed to the long term. It was less clear what the consequences of feeling empathy for people in positive situations might be as research in this field has focused on negative situations. One possibility is that the consequences of feeling empathy for people in positive situations will be more positive in the short term than the long term. This is consistent with Walker et al.'s (1997) findings that the perceived unpleasantness of unpleasant events and pleasantness of pleasant events both fade with time. Similarly, Walker et al. (2003) showed similar results for the intensity of emotions associated with positive and negative events. Perhaps this pattern would hold for consequences of feeling empathy as well.

Previous research has focused on health care professionals whose work requires them to feel empathy for clients in need situations (Hoffman, 2000; Schwam, 1998). We sought an occupational group whose work requires them to feel empathy for clients who feel good as well as bad. We chose hairstylists because regular customers confide in them their personal thoughts and feelings of both a positive and a negative nature.

## Method

A $2 \times 2$ factorial design was employed with time perspective (short term, long term) and situation type (positive, negative) as within-subjects factors. The dependent

measures were subjective experiences of the consequences of feeling empathy. This questionnaire included both negative and positive empathy situations as well as questions inspired by Stamm's (1997–2005) Professional Quality Of Life Scale (ProQOL R-IV).

### Participants

Ninety-two hairstylists were sent questionnaires. Of these, 51 (48 women, 3 men) ranging in age from 17 to 49 years (Mdn = 28.00, $M$ = 29.22, $SD$ = 8.29) participated in the study.

### Material and Procedure

The questionnaire included instructions to describe two situations; one in which they felt empathy for a customer in a negative situation and one in which they felt empathy for a customer in a positive situation. The questionnaire was comprised of seven Likert-scale items assessing the consequences of feeling empathy. Each of these items appeared four times, once for each of the four combinations of time perspective and situation type. Participants used a scale ranging from 1 (*Not at All*) to 7 (*Very Much*) to indicate the degree to which they had experienced each of three positive (professionally stimulated, as if it contributes to my well-being, and satisfied) and three negative (emotionally drained, depressed, and exhausted) consequences of feeling empathy. The seventh item assessed the predominant feelings that followed as a consequence of feeling empathy on a scale ranging from 1 (*negative*) to 7 (*positive*). These items were combined to form an index with higher values indicating more positive consequences of empathy. As stated above, each of these items was completed four times. Four separate indexes were computed, one for each of the combinations of time perspective and situation type: (a) How are you affected directly after feeling empathy/compassion for customers who feel extremely bad? (Cronbach's $\alpha = .75$), (b) How are you affected generally in the long term by times when you feel empathy/compassion for customers who feel extremely bad? (Cronbach's $\alpha = .75$), (c) How are you affected directly after feeling empathy/compassion for customers who feel extremely good? (Cronbach's $\alpha = .62$), and (d) How are you generally affected in the long term by times when you feel empathy/compassion for customers who feel extremely good (Cronbach's $\alpha = .66$)? Because Cronbach's $\alpha$ values were low for the feeling good conditions, the item "emotionally drained" was removed, which led to values of .69 for short-term good and .74 for long-term good. The analyses were run with both the seven-item and the six-item indexes. The pattern of results and significance decisions were the same for the indexes, so we chose to report the results of the seven-item scale.

Participants were recruited through verbal requests made at the salons. Salons that agreed to participate received written information about the purpose of the study, confidentiality and informed consent together with the questionnaires. To control for possible order effects, four versions of the questionnaire were constructed in which short-term narratives always preceded long-term ones within situation type. The questionnaires were arranged in blocks to ensure that approximately equal numbers of

participants would receive each order. Participants at salons at which more than one stylist agreed to participate were asked not to discuss the study until everyone had completed the questionnaire. Participants were given two days to complete the questionnaire at their leisure.

## Results and Discussion

Since there were only three men in Study 2, we have omitted gender as a factor in the analyses. There were no significant correlations between age and the empathy consequence index, but there were significant positive correlations for feeling good and bad over time (see Table 2). To assess differences in self-reported consequences of feeling empathy and possible order effects a $2 \times 2 \times 4$ mixed ANOVA was conducted with time perspective (short term, long term) and situation type (positive, negative) as within-subjects factors and questionnaire version as a between-groups factor. Ratings of the empathy situations were not affected by the order in which they were presented as there were no significant effects involving the questionnaire version. There was no main effect of time perspective, $F(1, 47) = .92$, $p = .34$. Not surprisingly, there was a significant main effect of situation type such that the consequences of feeling empathy were rated more positively when they were felt for people who felt good ($M = 5.41$, $SE = 0.13$) than for people who felt bad ($M = 3.03$, $SE = 0.13$, $F(1, 47) = 165.75$, $p < .001$, $\eta^2 = .62$. This main effect was qualified by a significant Time Perspective × Situation Type interaction, $F(1, 47) = 30.75$, $p < .001$, $\eta^2 = .03$. Analyses of simple effects of time perspective were conducted separately for each situation type. The consequences of feeling empathy for someone who felt bad were perceived as significantly more negative in the short term ($M = 2.76$, $SD = 1.03$) than in the long term ($M = 3.34$, $SD = 0.98$), $F(1, 50) = 18.77$, $p < .001$, $\eta^2 = .38$. Further, the consequences of feeling empathy for someone who felt good were perceived as significantly more positive in the short term ($M = 5.58$, $SD = 0.95$) than in the long term ($M = 5.17$, $SD = 1.09$), $F(1, 50) = 12.51$, $p = .001$, $\eta^2 = .25$.

The consequences of feeling empathy for customers who felt bad as opposed to good were perceived more negatively, in both the short and the long term. The negative consequences of feeling empathy for someone who felt bad, although reduced, were still present in the long term. Further, the consequences of feeling empathy for customers who felt bad were perceived as less negative, and the consequences of feeling empathy for people who felt good were perceived as less positive, in the long term as opposed to the short term. The intensity of the perceived consequences, regardless of situation type, became less extreme with time. These results suggest that perceived consequences of feeling empathy attenuate with time, regardless of whether they are positive or negative.

**Table 2.** Pearson Correlations, Means, Standard Deviations and Reliability for the Variables in Study 2.

| | 1 | 2 | 3 | 4 | 5 | *M* | *SD* |
|---|---|---|---|---|---|---|---|
| 1. Age | – | | | | | 29.34 | 8.32 |
| 2. Empathy Short Good | .11 | – | | | | 5.64 | .89 |
| 3. Empathy Short Bad | –.21 | –.18 | – | | | 2.70 | .91 |
| 4. Empathy Long Good | .07 | .65** | –.06 | – | | 5.17 | 1.00 |
| 5. Empathy Long Bad | –.23 | –.08 | .37* | –.01 | – | 3.26 | 0.85 |

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

The tendency for the consequences being less extreme over time is consistent with Walker et al.'s (1997) finding that perceptions for the pleasantness of positive and negative events and Walker et al.'s (2003) finding that emotions were strongest directly after an event occurred and faded with time. Further, Levine and Safer (2002) explained that memories of past emotions are in a constant state of flux because they are updated based on present values, intentions, and emotions. Also, according to Trope and Liberman's (2010) construal-level theory (CLT), the increased psychological distance associated with temporal distance may lead to construing events more abstractly.

A limitation of the first two studies was that participants were asked to indicate how they felt they were affected in the short term by specific examples of feeling empathy for others as well as how they felt they were generally affected by feeling empathy in the long term. One could argue that the design of these two studies confounded time perspective and the specificity of the memory. Thus, in Studies 1 and 2 the short-term consequences were assessed with regard to specific instances of feeling empathy whereas the long-term consequences were assessed in terms of general effects of feeling empathy in similar instances. To address this issue we conducted a third study in which participants in the long-term condition were also asked to focus on a specific memory.

## Study 3

The main purpose of Study 3 was to test whether there is a difference in perceptions of the consequences of feeling empathy in the short vs. long term when event specificity is held constant across time perspectives. Based on Studies 1 and 2, we hypothesized that people would perceive the consequences of feeling empathy for someone in a difficult situation less negatively in the long term than in the short term.

## Method

### *Participants*

A questionnaire was distributed to 127 university students in health or behavioral science. Of these, 115 (97 women, 19 men, 11 who did not provide gender information) responded. The 115 participants' who provided information about their age ranged in age from 18 to 48 years (Mdn = 23.00, $M = 24.46$, $SD = 5.70$).

### *Material and Procedure*

Two versions of the questionnaire were used in the study. They were identical, except that one focused on the consequences of feeling empathy in the short term and the other in the long term. The questionnaire began with an open-ended item: "Describe an occasion when you felt empathy/compassion for someone in a difficult situation" followed by an item asking how long ago the event occurred to ensure that the events described had a similar time frame across conditions. The last section of the questionnaire contained either the question, "How did this situation make you feel immediately afterward?" (short-term version) or "How has this situation affected you in the long term?" (long-term version), followed by 22 items in which the participants used a Likert

scale ranging from 1 (*Not at All*) to 7 (*Extremely*) to indicate the degree to which they experienced various consequences of feeling empathy in the situation they had described. These items were selected because they were prominent themes in the pilot study mentioned above.

Responses to the 22 items were combined to form an index (Cronbach's $\alpha = .88$). Ten of the 128 participants failed to complete all 22 items. In these cases the index was computed for the items they did complete. One of these participants was excluded because data were missing for four items resulting in a final sample of 127 participants.

Participants were recruited through verbal requests made at regularly scheduled lectures. Students who agreed to participate were assigned to one of the two conditions with the aid of block randomization. The questionnaire took 10–15 minutes to complete after which they were collected and the participants were debriefed regarding the purpose of the study.

## Results and Discussion

Both gender and age correlated significantly with the empathy consequence index (see Table 3). These correlations showed that women tended to feel worse as a consequence of feeling empathy, and that the older the participants the better they tended to feel. The data were submitted to a $2 \times 2$ factorial ANOVA with time perspective (short term, long term) and gender (male, female) as between-subjects factors. As hypothesized, a significant main effect of time perspective showed that participants' ratings were less positive as a consequence of feeling empathy in the short term ($M = 3.99$, $SD = .99$) than in the long term ($M = 4.63$, $SD = 1.03$), $F(1, 113) = 8.65$, $p = .004$, $\eta^2 = .06$. There was a significant main effect for gender such that women felt less positive as a consequence of feeling empathy ($M = 4.17$, $SD = 1.02$) than men did ($M = 4.96$, $SD = 1.01$), $F(1, 113) = 9.42$, $p = .003$, $\eta^2 = .07$. There was no Time Perspective x Gender interaction, $F(1, 113) = 0.39$, $p = .53$.

To ensure that this result was not due to differences in the time elapsed since the event occurred between conditions the time intervals were examined. The time since the event occurred ranged from 1 day to 14 years in the short-term condition and from 1 day to 8 years in the long-term condition. A Mann-Whitney $U$ test revealed no significant differences between the short-term (Mdn = 3.50 months, $n = 58$) and long-term (Mdn = 1.00 month, $n = 52$) conditions, $U = 1259$, $z = -1.49$, $p = .14$. A similar analysis showed no differences between men (Mdn = 9.50 months, $n = 19$) and women (Mdn = 2.00 month, $n = 98$) concerning the time since the event occurred, $U = 551$, $z = -1.44$, $p = .15$.

**Table 3.** Pearson Correlations, Means, Standard Deviations and Reliability for the Variables in Study 3.

| | 1 | 2 | 3 | *M* | *SD* | Cronbach's Alpha |
|---|---|---|---|---|---|---|
| 1. Gender[a] | – | – | – | n.a. | n.a. | n.a. |
| 2. Age | –.09 | – | – | 24.16 | 5.22 | n.a. |
| 3. Empathy Consequence Index | –.28** | .27** | – | 4.35 | 1.06 | .88 |

[a]0 = Female, 1 = Male.
n.a. = not applicable.
*$p < .05$, **$p < .01$.

As expected, the perceived consequences of feeling empathy for someone in a difficult situation were more positive in the long term than in the short term. We were concerned that participants asked to indicate how they were affected in the long term may have recalled situations that occurred further in the past than those asked to recall how they were affected immediately after, which might make interpretation of any differences in perceived consequences difficult. Similarly, we wanted to rule out possible temporal differences between events recalled by men and women. Analyses of the time since the event occurred showed that these concerns were unwarranted in the present study.

## General Discussion

The present research examined perceptions of empathy experiences in the short and long term. The results across three studies suggest that the perceived consequences of feeling empathy, much like other emotions and experiences, become less extreme over time, regardless of whether they are positive or negative. All three of the studies included feeling empathy for people in negative situations. Taylor (1991) argued that negative situations mobilize immediate reactions followed by behaviors to minimize the impact of the event. Along these lines, feeling empathy for people in negative situations may elicit similar immediate negative reactions followed by tendencies to minimize the effects over time.

Study 2 showed a similar pattern for feeling empathy for people in both positive and negative situations. Taken together the results of all three studies are consistent with the findings that perceptions of the pleasantness of positive and negative events (Walker et al., 1997) and intensity of emotions (Walker et al., 2003) fade with time. How can this pattern of results be explained?

Previous neurological studies have shown a link between self-oriented and other-oriented feelings (e.g., Decety & Grèzes, 2006; Jackson, Meltzoff, & Decety, 2005; Singer et al., 2004; Singer et al., 2006; for reviews, see Gallese, 2003 and Preston & deWaal, 2002). The same neurological structures are activated regardless of whether one experiences the feeling firsthand or vicariously (for reviews, see Decety, 2011; Decety & Ickes, 2009; Singer & Lamm, 2009). For example, there is neurological overlap between firsthand, somatic, pain and empathic pain (Zaki et al., 2016). This means that the empathizer experiences the other's pain, joy, grief or other feelings. Thus, a strength of the present results is that the mechanisms they reflect may not be specific to empathy, but might be applicable to other feelings as well. If the same mechanisms that control perceptions of one's own feelings are employed when perceiving others' feelings, perhaps the results of this study can be understood in terms of general research on feelings. The discrepancy in the extremity of the empathizer's feelings over time may be the same as for feelings generally.

Another possibility is that thinking about the consequences in the short term leads to a lower-level construal and a focus on the details of the event (Trope & Liberman, 2003, 2010). This in turn may have lead people to relive the affective state to a greater degree than when focusing on the long term (Loewenstein, 2005). It is also possible that details of the incident were forgotten due to the passage of time or that other memory biases may have been operating.

## Limitations and Future Directions

The retrospective nature of the judgments made by participants may be subject to memory biases, such as participants misremembering how they felt in the situation. Further, they may be motivated to exaggerate how bad the situation was in the short term or how positive the consequences were in the long term for self-enhancement reasons. Thus, whether the results obtained reflect actual consequences of feeling empathy or effects of memory or inaccurate introspections (Nisbett & Wilson, 1977) remains an open question. A first step in addressing this issue might be to employ a longitudinal design in future research. For example, nurses could respond to an empathy consequence scale directly after experiencing empathy for a client and then respond to the same scale several times at regular intervals to assess changes in perceived consequences over time. This method also has limitations since merely recalling the event might invoke memory bias, but could still contribute to the understanding of empathy effects. Indeed, Walker et al. (2003) used a longitudinal design and were able to address many of the criticisms concerning memory biases.

This research compared perceptions of one occasion of empathy with perceptions of empathy in the long run and showed that feeling empathy feels bad in the short run, but that people perceive it as positive in the long run. Future research might compare the perceived short- and long-term consequences of feeling empathy on workers who suffer from compassion fatigue with the perceived consequences on those who do not. Just as cancer patients who find meaning in their illness cope better (Taylor, 1983) perhaps those who can find meaning in the distress caused by feeling empathy are better able to cope and experience compassion satisfaction. Further, in light of research on CLT (Trope & Liberman, 2003, 2010) the event descriptions should be analyzed to see whether the long-term perspective results in more abstract content than the short-term perspective. Another aim for future research is to further develop and validate the measure of empathy consequences.

A limitation of the present studies is also the gender imbalance as men were underrepresented. Future research could test the effects found in these three studies in samples with equal numbers of men and women.

## Conclusion

The results of the current research suggest that time may heal all wounds – even empathic ones. Perhaps situations that initially are experienced as stressful can strengthen the empathizer over time. However, feeling empathy more often for people who feel bad than good might, in the long run, lead to less joy in life. Learning to feel empathic joy when others feel good might be one way for practitioners to counteract the negative consequences of feeling empathy for those who suffer. Another might be to have practitioners focus on how they have been strengthened by previous stressful situations. Future research could explore this possibility.

## Disclosure Statement

The authors declare that they have no conflict of interest.

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