

## RUNNING HEAD: EMPATHY VERSUS EXPERIENCE

What really helps? Divergent implications of talking to someone with an empathic mindset versus similar experience for shame and self-evaluation in the wake of an embarrassing event

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### Acknowledgements

This article was facilitated by a Social Sciences and Humanities Research Council of Canada grant (#435-2012-0348). We thank Adefemi Badejo, Nicolas Brais, Karis Cochrane, Rosa De Stefano, Gagan Gill, Victoria Gutscher, and Alanna Single for their help with data collection and coding.

### Abstract

What kinds of social interactions help individuals recover from an embarrassing experience? The present experiment examined the possibility that whereas individuals do not benefit from interacting with someone who is merely *trying* to understand and empathize, they do benefit from interacting with someone who has undergone the same experience and thus accurately understands their feelings. The “target” member of 142 dyads performed an embarrassing task in front of the “perceiver,” after which they had a face-to-face discussion. Unbeknownst to targets, some perceivers did the task themselves beforehand, and some perceivers adopted an empathic mindset during the exchange. Perceivers’ previous experience predicted improvements in targets’ self-evaluations that were mediated by more accurate perceptions of targets’ feelings. In contrast, perceivers’ empathic mindset had no benefits for targets, alone or in concert with prior experience. The only apparent benefits of perceivers’ empathic mindset were that perceivers felt more empathy and liking for targets (both undetected by targets), and felt viewed more favorably by targets (not corroborated by targets). These results suggest greater efficacy of perceiver experience over empathic concern in facilitating targets’ recovery from embarrassing events. Perceivers’ dispositional empathy, involving a different type of experience accumulated over time, also predicted benefits to targets.

Most people have suffered an embarrassing event at some point in their life, perhaps being caught unprepared in a work situation, committing a social gaffe, or experiencing a mishap that leaves them feeling ridiculous or ashamed. Unfortunately, once they are in such a predicament individuals tend to exaggerate how harshly they will be judged by others (Savitsky, Epley, & Gilovich, 2001), engage in thought processes that exacerbate feelings of embarrassment and self-criticism (Gilovich, Kruger, & Savitsky, 1999), and may seek social isolation (Chao, Cheng, & Chiou, 2011).

What helps people cope adaptively with such situations and minimize lingering negative affect and self-evaluations? A number of beneficial intrapersonal strategies have been identified, such as adopting a self-compassionate stance (Leary, Tate, Adams, Allen, & Hancock, 2007) or engaging in self-affirmation (Silverman, Logel, & Cohen, 2013). But, as socially awkward events by definition occur in social situations, the question arises as to when the interpersonal responses of other people who witness the experience are apt to leave the target individual feeling better. Indeed, because the discomfort in question has a social dimension the responses of others may have a particularly powerful effect.

In terms of potentially beneficial interpersonal responses, adopting an empathic stance may readily come to mind as the helpful and prosocial – even obvious – thing to do. Yet even though empathy is highly valued, there is good reason to suspect that individuals in an embarrassed state may stand to benefit more from interacting with someone who actually understands their experience, as opposed to someone who is merely trying to empathize and understand. Further, as highlighted by research demonstrating that direct experience of a target's situation fosters more accurate judgments about the target's feelings than does theorizing based on the target's behavior (Zhou, Majka, & Epley, 2017; see also Hodges, Kiel, Kramer, Veatch, &

Villanueva, 2010), the person who actually understands is likely to be someone who has gone through a similar experience, rather than someone trying “top down” to understand and identify with the target’s feelings by imagining them. Accordingly, in the present study we examined how targets who had just had an awkward experience reacted to having an exchange with someone who had just gone through the same experience or someone who was purposefully trying to be empathic; on an exploratory basis we also considered the effects of interacting with someone who was high in dispositional empathy.

### *Similar Experience Versus Empathy*

Several lines of research point to the prediction that interacting with a perceiver who has previously had the same experience as them should improve targets’ feelings in the wake of an embarrassing experience, whereas interacting with a perceiver who is purposefully adopting an empathic mindset toward them should not. Having had the same experience should give perceivers real insight, however generalized, into targets’ likely feelings (Hodges, et al., 2010; Zhou et al., 2017). Notably, even if perceivers’ judgments are based largely on projection processes (Van Boven, Loewenstein, Dunning, & Nordgren, 2013), so long as they experience the event in broadly the same way as targets (Silverman, Gwinn, & Van Boven, 2015) their accuracy should be enhanced. Further, by virtue of paving the way for the outward responsiveness that is key to intimacy-building and social connection (Reis & Shaver, 1988), perceivers’ accurate insight into a target’s feelings should then be predictive of how much interacting with them leaves the target feeling better: Perceivers who know what targets are feeling should be better positioned to respond in a sensitive and supportive way (Kilpatrick, Bissonnette, & Rusbult, 2002; Verhofstadt, Buysse, Ickes, Davis, & Devoldre, 2008). Consistent

with this idea, substantial research indicates that individuals benefit from interacting with others who are interpersonally accurate (see Schmid Mast & Hall, 2018, for a review).

In contrast, a link between purposefully adopted empathic mindsets and accurate understanding is questionable. Although enhanced accuracy motivation, as induced by monetary payment (Klein & Hodges, 2001) or perceived social desirability of empathic accuracy (Thomas & Maio, 2008) can enhance accuracy, because trying to identify with another's feelings centers more on feelings of connection than precise inferences a path from temporary empathic mindsets to accuracy seems unlikely (see also Eyal, Steffel, & Epley, 2018). Indeed, research suggests instead that empathic mindsets are apt to give rise to a variety of egocentric biases. Perceivers trying to empathize tend to experience empathic concern and to evaluate targets positively (e.g., Batson et al., 1997). Yet these reactions center largely on perceivers' private thought processes and feelings, and, due to their associations with self-other merging, sometimes foster complacency rather than outward communication. Exaggerated feelings of transparency or other forms of projection by perceivers can be the end result (Vorauer, Martens, & Sasaki, 2009). However, such reactions could conceivably be mitigated, and the implications for targets more positive, when conscious efforts to empathize are combined with the insight that comes from similar previous experience (see, e.g., Winczewski, Bowen, & Collins, 2016). We tested this possibility in the current experiment.

Finally, our emphasis on the benefits of experience suggests that despite the fact that interacting with someone purposefully trying to be empathic might fail to help targets feel better, interacting with someone high in dispositional empathy could potentially be beneficial. Although a link between dispositional empathy and accurate understanding of targets' feelings is unclear (see, e.g., Zaki, Bolger, & Ochsner, 2008), dispositionally empathic individuals have repeated

practice enacting responsive behaviors in service of their prosocial goals and ample opportunity to learn via social feedback the support strategies that are effective (Barone et al., 2005; Marangoni, Garcia, Ickes, & Teng, 1995). The social skills they develop over time and experience (Muncer & Ling, 2006; Riggio, Tucker, & Coffaro, 1989) may leave them better equipped to help targets feel better in the wake of an embarrassing event. We were able to probe this possibility in our study on an exploratory basis.

*Emphasizing the Target's Perspective: Interpersonal versus Intrapsychic Effects*

The present research complements and extends a rich and fascinating literature on empathic embarrassment, which has focused on how *perceivers* react to observing a target person's embarrassing experience (e.g., Hawk, Fischer, & Van Kleef, 2011; Marcus & Miller, 1999; Marcus, Wilson, & Miller, 1996), by considering the implications of subsequent social interaction for *targets'* experience. Moreover, the present research is unique in examining how targets' psychological state in the wake of a negative event is affected by interacting with someone who has gone through a similar experience versus someone adopting a temporary empathic mindset. In previous research on the effects of common experience, outcomes such as perceivers' attitudes, feelings of compassion, and judgment accuracy have been the focus of analysis rather than effects on targets. Likewise, countless experiments have probed how individuals' efforts to be empathic affect their helping behaviors and attitudes toward targets. Yet these investigations typically do not examine accurate understanding and involve targets who are represented with photographs or transcripts rather than real people. Although it may seem reasonable to assume that more positive and empathic feelings in perceivers will translate into psychological benefits for targets, this is not necessarily the case. Indeed, research on socio-affective responding (akin in many ways to empathy) in the context of social sharing of emotions

highlights the potential for negative effects attached to temporary empathic mindsets (Nils & Rimé, 2012; see also Vorauer, Quesnel, & St. Germain, 2016).

### *Method*

We report our focal measures and all manipulations and exclusions in the main text (see the supplemental document for descriptions of all corollary measures and results, as well as correlations between key variables).

#### *Participants*

Participants were 142 same-sex pairs of previously unacquainted introductory psychology students at a university in western Canada (52.8% female, 94% English first language, 72.6% with a White/European ethnic background,  $M$  age = 18.5 years) who had completed a mass pre-test that included the empathic concern subscale of the Interpersonal Reactivity Index (Davis, 1980) and who took part in the study for partial course credit. This number does not include one pair in which the perceiver did not follow instructions, two pairs in which one member reported having an attentional or social neurodevelopmental mental disorder (e.g., autism), or three pairs who indicated being previously acquainted. These exclusions were distributed relatively evenly across conditions.

The (randomly determined) perceiver in each pair was randomly assigned to the empathic or objective condition and to the prior experience or no prior experience condition. The manipulations were orthogonal and perceivers' empathic concern scores ( $M = 7.08$ ,  $SD = 1.46$ , on the 10-point scale;  $\alpha = .81$ ) did not vary significantly across either factor. Our sample size, which provides almost 50 pairs per predictor, was selected a priori to provide approximately .85 power to detect two-way interactions of medium effect size with  $\alpha = .05$ , two-tailed (Faul, Erdfelder, & Buchner, 2007). We considered in particular the possibility that although the

mindset manipulation on its own might not be helpful, it could be more effective in combination with similar prior experience. No analyses were conducted until data collection was complete apart from surveying responses after the first ten pairs to confirm that the creativity task induced negative feelings.

### *Procedure*

Each pair member arrived at a different location for a study of "social judgment and creativity in first meeting situations" and received an overview of the study. Perceivers in the prior experience condition were then asked to do a "creativity task" in front of the experimenter involving making up a children's story about a little bear, starting with the phrase: "Once upon a time, there was a little bear." This task was based on Leary et al.'s (2007) procedures for creating an awkward and embarrassing experience, and involved speaking into an audio recorder while telling the story. To enhance embarrassment, these perceivers were further asked to draw a picture of the bear. Because individuals do not typically tell children's stories to same-age peers in their everyday lives, and doing so in an entertaining way involves taking risks and overcoming inhibitions, we anticipated that participants would find the task awkward and embarrassing and thus feel self-critical and also anticipate negative evaluation from others as a result of doing it. Perceivers in the no prior experience condition did not do any aspect of the creativity task. Perceivers then completed Heatherton and Polivy's (1991) state self-esteem scale, which is comprised of three subscales assessing performance, social, and appearance state self-esteem ( $\alpha$ s = .80 to .85). These data would allow us to assess the impact of the embarrassing experience, which was manipulated for perceivers but not for targets. Unless otherwise indicated participants responded to all measures on 7-point scales on which higher numbers reflected stronger endorsement.



Next, following Batson et al. (1997), perceivers in the empathic condition were instructed that during their exchange with the other participant they should try to imagine how he or she felt (“try to feel the full impact of the experiences that he/she has had and how he/she feels as a result”), whereas those in the objective condition were instructed that they should take an objective perspective (“try not to get caught up in how he/she feels...just remain objective and detached”).

Pair members were then introduced. The target (who had been waiting alone in another room and was unaware of either manipulation administered to the perceiver) was observed by the perceiver while doing the same creativity task as perceivers in the prior experience condition. Perceivers were seated across the table from targets and instructed to observe quietly. Targets then completed the state self-esteem scale for the first time ( $\alpha_s = .79$  to  $.88$ ), providing a pre-discussion measure. At the same time, perceivers completed the state self-esteem scale according to how they thought targets felt ( $\alpha_s = .80$  to  $.87$ ), which would allow us to explore their pre-discussion accuracy regarding targets’ feelings. Perceivers then responded to a 29-item mood measure – assessing nine affective states – according to how they themselves felt at that time. The items in this measure were taken from the PANAS-X (Watson & Clark, 1994) and Howren and Suls (2001) and assessed feeling ashamed (*ashamed, angry at self, guilty*), nervous (*nervous, shaky, jittery*), shy (*shy, bashful, timid*), self-assured (*proud, strong, confident*), serene (*calm, relaxed, at ease*), angry (*angry, hostile, irritable*), sad (*sad, downhearted, blue, worthless*), jovial (*cheerful, enthusiastic, excited, happy*), and attentive (*attentive, alert, concentrating*); see the supplemental document for all reliabilities. These items, which would be completed by targets after the discussion, were selected to include affective states we expected would be affected by the embarrassing task as well as a range of distinct others so to have enough variability to assess

calibration or tracking accuracy when considered together with targets' responses. Collecting perceivers' responses allowed us to assess projection in these judgments. Perceivers' questionnaire concluded with a reminder about the mindset that they should adopt toward the other person during the upcoming discussion.

Pair members then had a face-to-face 10-minute discussion (audiotaped with permission). They were given a list of discussion topics (e.g., positive and negative academic and social experiences) and instructed that they should go through the topics in order and spend at least a few minutes on each one. Because we were interested in individuals' choice about whether and how much to discuss the creativity task we did not explicitly direct them to talk about it. After the discussion they were separated to complete the final questionnaire.

Targets' questionnaire began with the second administration of the state self-esteem scale ( $\alpha = .85$  to  $.90$ ), providing a post-discussion measure. They further completed the 29-item mood measure according to how they felt during the discussion. Additional questions probed targets' perceptions of perceivers' empathy and positive regard so as to ascertain the extent to which such reactions are transparent to targets. Specifically, targets' perceived positive regard was assessed with four items (e.g., "How much did the other participant like you?";  $\alpha = .93$ ) from West, Magee, Gordon, and Gullet (2014); four parallel items assessed targets' positive regard for the perceiver ( $\alpha = .87$ ). Two items (e. g., "To what extent do you think that the other participant empathized with you during the various stages of the study?"; see Goldstein, Vezich, & Shapiro, 2014) assessed targets' perceived empathy from perceivers ( $\alpha = .71$ ). An additional item told targets that one member of each pair was instructed to try to imagine their partner's feelings or to be objective and asked them to guess their partner's instructions. This last measure was dichotomous.<sup>1</sup>

Perceivers' questionnaire began with the 29-item mood measure, which they answered according to how they thought the target felt during the discussion. They then rated how confident they were in their estimates and indicated how many of their 29 judgments they thought were exactly correct (perceived accuracy). Next they rated their empathic concern for the target along the same six dimensions (e.g., *sympathetic*, *compassionate*;  $\alpha = .86$ ) as in Batson et al. (1997). They also indicated their perceptions of positive regard from the target ( $\alpha = .91$ ) and their own positive regard for the target ( $\alpha = .86$ ), assessed with the same items as presented to targets. A final item assessed whether perceivers remembered their mindset instructions (98% did).

### *Results*

Preliminary analyses revealed no significant interaction effects between any of the predictors on any target affective or self-evaluative outcomes or other key dependent measures. Unless otherwise indicated, all measures were analyzed via multiple regression, with perceivers' prior experience (no experience = 0, prior experience = 1), mindset (0 = objective, empathic = 1), and dispositional empathy (centered) entered as predictors. All significant effects ( $p < .05$ ) are reported apart from those of any covariates.

#### *Effects of Experience*

We tested the implications of the creativity task for state self-esteem and affect by analyzing perceivers' scores on these outcomes. Perceivers' performance and social state self-esteem were lower when they had completed the creativity task as compared to when they had not,  $b = -0.32$ ,  $\beta = -0.17$ ,  $t(138) = 2.00$ ,  $p = .047$ ,  $d = 0.34$ , and  $b = -0.42$ ,  $\beta = -0.19$ ,  $t(138) = 2.23$ ,  $p = .028$ ,  $d = 0.38$ , respectively. Further analyses revealed that in the no prior experience condition perceivers reported higher initial performance state self-esteem ( $M = 5.02$ ,  $SD = 0.92$ )

than targets ( $M = 4.60$ ,  $SD = 1.13$ ),  $t(71) = 2.41$ ,  $p = .019$ ,  $d = 0.41$ ; in the prior experience condition  $M_s = 4.71$  ( $SD = 0.98$ ) and  $4.67$  ( $SD = 0.89$ ) respectively,  $t = 0.28$ ,  $p = .784$ ,  $d = 0.04$ . Perceivers who completed the creativity task also reported greater feelings of shame,  $b = 0.46$ ,  $\beta = 0.26$ ,  $t(138) = 3.17$ ,  $p = .002$ ,  $d = 0.53$ , and marginally less serene feelings,  $b = -0.47$ ,  $\beta = -0.17$ ,  $t(138) = 1.97$ ,  $p = .051$ ,  $d = 0.33$ , than did those who did not do the task. There were no other effects of experience.

#### *Targets' Affective and Self-Evaluative State*

Next we examined the extent to which perceivers' prior experience, empathic mindset, and dispositional empathy predicted how targets felt after their discussion with the perceiver. Our analyses focused on performance state self-esteem, social state self-esteem, feelings of shame, and feelings of serenity, each of which the results for perceivers suggested were affected by completing the creativity task. The analyses of state self-esteem included targets' score from immediately after they had done the creativity task as a covariate to more precisely assess change over time (not possible for the affective states).

These analyses (see Table 1) revealed that targets had higher performance state self-esteem after the discussion if they were paired with an perceiver who had completed the creativity task,  $b = 0.24$ ,  $\beta = 0.12$ ,  $t(137) = 2.13$ ,  $p = .035$ ,  $d = 0.36$ , or who was higher in dispositional empathy,  $b = 0.08$ ,  $\beta = 0.12$ ,  $t(137) = 2.14$ ,  $p = .035$ ,  $d = 0.36$ , whereas perceiver's mindset had no significant effect,  $b = 0.05$ ,  $\beta = 0.02$ ,  $t(137) = 0.40$ ,  $p = .688$ ,  $d = 0.07$ . There were no significant or marginal effects on social state self-esteem. Further, targets felt marginally less shame after the discussion if they were paired with a perceiver who had completed the creativity task,  $b = -0.33$ ,  $\beta = -0.17$ ,  $t(138) = 1.95$ ,  $p = .053$ ,  $d = 0.33$ ; for perceivers' dispositional empathy,  $b = -0.10$ ,  $\beta = -0.15$ ,  $t(138) = 1.73$ ,  $p = .086$ ,  $d = 0.30$ . Here again

perceiver's mindset had no significant effect,  $b = -0.05$ ,  $\beta = -0.02$ ,  $t(138) = 0.28$ ,  $p = .788$ ,  $d = 0.05$ . For serenity there were no significant effects. Exploratory analyses of appearance state self-esteem and the other affective states for which reliability was acceptable (i.e., nervousness, shyness, self-assurance, sadness, and joviality) yielded no effects.

In sum, interacting with a perceiver who had just had the same experience facilitated improvement in targets' self-evaluations and affective state after an embarrassing experience, whereas interacting with a perceiver who purposefully adopted an empathic mindset did not. Interacting with a perceiver who was high in dispositional empathy was also somewhat beneficial.

### *Process Measures*

Perceivers' accurate perceptions of targets' feelings were assessed by computing within-dyad correlations across the 29 affect items between perceivers' estimates of how targets felt during the discussion and how targets reported feeling during the discussion. Responses to positive items were reversed-scored so as to assess perceivers' calibration to targets' particular affective states unconfounded by valence ( $M r = .46$ ,  $SD = .21$ ). The regression analysis with these correlations as the dependent variable revealed that perceivers who had completed the creativity task themselves were better calibrated to targets' affective states than were those who did not,  $b = 0.08$ ,  $\beta = 0.18$ ,  $t(138) = 2.16$ ,  $p = .032$ ,  $d = 0.37$  (see Table 2). A parallel analysis of the extent to which perceivers' estimates were calibrated with their own affective states (projection), that is, the correlation between their own feelings and their estimates of targets' feelings, yielded no significant effects ( $M r = 0.61$ ,  $SD = 0.21$ ).<sup>2</sup>

The analysis of perceivers' empathic concern yielded effects for perceivers' empathic mindset and dispositional empathy,  $b = 0.48$ ,  $\beta = 0.20$ ,  $t(138) = 2.89$ ,  $p = .005$ ,  $d = 0.49$ , and  $b =$

0.42,  $\beta = 0.52$ ,  $t(138) = 7.34$ ,  $p < .001$ ,  $d = 1.25$ , respectively. Thus, whether a temporary mindset or chronic orientation was involved, both empathy predictors were clearly related to feelings of empathic concern. The same pattern was evident for perceivers' perceived positive regard from targets,  $b = 0.35$ ,  $\beta = 0.18$ ,  $t(138) = 2.27$ ,  $p = .025$ ,  $d = 0.39$ , and  $b = 0.25$ ,  $\beta = 0.37$ ,  $t(138) = 4.66$ ,  $p < .001$ ,  $d = 0.79$ , and for perceivers' own positivity toward targets,  $b = 0.37$ ,  $\beta = 0.21$ ,  $t(138) = 2.90$ ,  $p = .004$ ,  $d = 0.49$ , and  $b = 0.32$ ,  $\beta = 0.52$ ,  $t(138) = 7.17$ ,  $p < .001$ ,  $d = 1.22$ . However, analyses of targets' perceived empathy (and estimates of perceivers' assigned mindset), perceived positive regard from perceivers, and own positivity toward perceivers yielded no effects. Further, although there were no effects on perceivers' confidence in their estimates of targets' affective states, there was a positive effect of empathic mindset on perceived accuracy, that is, the number of exactly correct judgments perceivers thought they had made about the targets' feelings,  $b = 1.89$ ,  $\beta = 0.17$ ,  $t(137) = 1.98$ ,  $p = .049$ ,  $d = 0.34$ . A complementary analysis of actual exactly correct judgments revealed no effects.

In sum, perceivers who had prior experience with the embarrassing task made more accurate judgments of targets' feelings in terms of calibration. Both an experimentally assigned empathic mindset and dispositional empathy were associated with perceived positive regard from targets (not corroborated by targets' reports) and positive feelings toward targets and empathic concern (both not perceived by targets). Perceivers who were purposefully trying to adopt an empathic mindset also perceived their judgments of the targets' feelings as more accurate (even though they were not). Notably, perceivers' empathic concern was not significantly or marginally associated with any of the target self-evaluative or affective outcomes (all  $|r|s \leq .11$ ), controlling for pre-discussion feelings where possible), or with targets' perceptions of perceivers' empathy,  $r(139) = .10$ ,  $p = .247$ .

### *Mediation Analyses*

In light of the patterns of results obtained on the target outcomes and process measures we tested whether there was any evidence that enhanced accuracy about targets' feelings helped account for the effects of perceivers' prior experience on targets' post-discussion affective and self-evaluative state. We used the PROCESS macro v2.13 for SPSS (model 4, with 10,000 bootstrap samples) to test the indirect effect of perceiver prior experience on targets' performance state self-esteem after the discussion via perceivers' accuracy in estimating targets' affective states, including all other terms from the regression analysis as covariates. Results indicated a significant indirect effect [95% CI: 0.0041, 0.1436]; for the residual direct effect  $p = .088$ . A parallel analysis of targets' feelings of shame after the discussion also indicated a significant indirect effect [95% CI: -.2399, -0.0143]; for the residual direct effect  $p = .149$ . These results are consistent with the idea that more accurate perceptions of the targets' feelings contributed to the positive implications of perceivers' prior experience for targets' performance state self-esteem and feelings of shame. The mediation models and associated path coefficients are presented in Figure 1.

### *Exploratory Analyses: Behavior Coding*

Parallel mediation tests were precluded for dispositional empathy because it was not associated with enhanced accuracy. However, after observing the effects obtained for dispositional empathy, we had the audiotapes coded in an effort to illuminate its behavioral correlates. In particular, three coders blind to perceivers' dispositional empathy scores and condition (apart from what they could deduce from the recordings for themselves) made three judgments specifically about references to the creativity task. First, so as to assess individuals' choice about whether to talk about the task at all, the coders listened to the entire recordings and

assessed the total amount of time the pair spent talking about the creativity task ( $\alpha = .96$ ; 25 pairs discussed the task, 111 did not, and for three pairs this could not be assessed because there was no recording). On the basis of research pointing to the benefits of positive reframing (e.g., Nils & Rimé, 2012), we also had the coders assess the extent to which one pair member tried to positively reframe the task for the other (e.g., by downgrading its importance or using humor;  $\alpha = .81$ ) and the alternate response of providing validation (e.g., by explicitly agreeing with the other's perspective on the task;  $\alpha = .76$ ); these ratings were made on 7-point scales (1 = *not at all* and 7 = *very much*). All of these judgments were log-transformed to reduce positive skew. When these judgments were entered in the same regression analysis as for our other measures we found that dispositional empathy was negatively associated with time spent discussing the creativity task  $b = -0.23$ ,  $\beta = -0.18$ ,  $t(135) = 2.15$ ,  $p = .034$ ,  $d = 0.37$ , and also a simple dichotomous variable denoting whether the task was discussed at all,  $b = -0.06$ ,  $\beta = -0.23$ ,  $t(135) = 2.72$ ,  $p = .007$ ,  $d = 0.47$ . There were no other significant or marginal effects.

In addition, in light of research linking dispositional empathy to behavioral mimicry as a route to affiliation (Chartrand & Lakin, 2013), we had four independent coders listen to five minutes from the discussions (the first 2.5 minutes and another 2.5 minutes close to the end) and rate mimicry (how much pair members seemed to be copying each other's comments and way of speaking; standardized  $\alpha = .62$ ) as well as tempo similarity (how much pair members seemed to be "marching to the beat of the same drummer;" Bernieri, Reznick, & Rosenthal, 1988; standardized  $\alpha = .81$ ); these ratings were made on 7-point scales (1 = *not at all* and 7 = *very much*). Because these ratings were highly correlated ( $r = .67$ ) they were combined. The analysis indicated a marginal positive association between dispositional empathy and this mimicry index,  $b = 0.07$ ,  $\beta = 0.15$ ,  $t(135) = 1.75$ ,  $p = .082$ ,  $d = 0.30$ .



We proceeded to examine mediation in a post hoc manner, testing the indirect effect of perceiver dispositional empathy on targets' shame after the discussion via time spent discussing the creativity task and behavioral mimicry in parallel, including all other terms from the regression analysis as covariates.<sup>3</sup> There was some indication of a total indirect effect across both mediators [90% CI: -0.0940, -0.0041], but neither of the individual indirect effects was significant or marginal, [90% CI: -0.0708, 0.0005] and [90% CI: -0.0434, 0.0026] respectively. No indirect effects were evident for performance state self-esteem. Coders made a range of other judgments about the discussion as a whole, which were limited by the fact that it was difficult to distinguish actors from perceivers. The full set of coding judgments we attempted and associated results are outlined in the supplemental document.

### *Discussion*

What types of social exchanges help individuals recover from self-critical feelings in the wake of an embarrassing event? The present results reveal that talking to someone who has had a similar experience is beneficial whereas talking to a person who is purposefully trying to be empathic in the moment is not. Specifically, interacting with someone who had just had the same awkward experience as they had left targets feeling better about themselves, whereas interacting with someone adopting a temporary empathic mindset had no effect on targets' feelings either alone or in concert with similar previous experience. Indeed, the only apparent benefits associated with perceivers adopting an empathic mindset were that they felt more empathy and liking for targets, neither of which were detected by targets, and that they felt viewed more favorably by targets, which was not corroborated by targets' actual judgments. Thus any benefits of temporary empathic mindsets that were apparent seemed to go to the empathizers and not to the targets.

The findings for similar previous experience build on research highlighting the benefits of similar experience for accurate inference about others (e.g., Zhou et al., 2017), demonstrating that in the context of social interaction the path from similar experience to enhanced accuracy about others may extend to helping those others feel better in the wake of an awkward event. Moreover, although the manipulation of accuracy was indirect – via experience – the present study provides rare evidence of a more experimental nature for the interpersonal benefits of social judgment accuracy: Most research to date relevant to this issue has been correlational (see Schmid Mast & Hall, 2018).

Notably, despite being helpful to targets, similar previous experience did not increase perceivers' feelings of empathy. Indeed, irrespective of how important empathic concern and positive feelings might be for fostering helping responses outside of interaction contexts, the present study yielded no evidence that these reactions were linked to helping real targets feel better after an embarrassing experience. This is perhaps not surprising given that enhanced empathic concern and positive evaluations stemming from situational or dispositional empathy were not even detected by targets.

Thus, although perceiving that someone else has taken their perspective leads individuals to react positively to that person (Goldstein et al., 2014) and could potentially also aid their recovery from a negative experience, there may be an initial obstacle to overcome in back-and-forth interaction situations centering on clearly communicating empathic concern and perspective-taking to the target of these efforts. However, the internal analyses of the present data reveal that targets' perceptions of perceivers' empathy were not significantly associated with targets' state self-esteem or affect (all  $|r|s < .02$ ), which suggest that benefits to targets of directly perceiving empathy may be unlikely in the context of embarrassing events.

Instead, broadly consistent with research on the efficacy of “invisible” social support (Bolger, Zuckerman, & Kessler, 2000), the current findings point to other processes such as enhanced accuracy as more important to aiding targets’ recovery from an embarrassing experience. Specifically, perceivers who had previously been in the target’s awkward situation were more accurate in gauging which affective states the target was feeling to a greater or lesser degree, which accounted for how interacting with them left targets with higher performance state self-esteem and reduced feelings of shame. There was also tentative evidence that empathy that is repeatedly enacted and practiced over time, that is, dispositional empathy, can have positive implications for targets with respect to shame and state self-esteem in the wake of an embarrassing experience.

The precise behavioral mechanisms underlying the effects of experience and dispositional empathy remain to be identified. Our mediation analyses suggested that accuracy played an important role in accounting for the effects of experience, but – in line with the larger literature in which the mechanisms through which accuracy stimulates positive outcomes remain somewhat of a “black box” (Schmid Mast & Hall, 2018) – the behavioral processes associated with accuracy are currently unclear. Recent perspectives (Carrard & Schmid Mast, 2015) suggest a role for behavioral adaptability – that is, skill at adapting behavior to the needs and preferences of an interaction partner – rather than any specific consistent behavior in accounting for the benefits of accuracy. However, there are challenges in assessing such a nuanced construct that is defined in connection with an interaction partner’s specific needs and goals. Another challenge for future research centers on more directly tackling the causal role of accuracy: In the present research it is possible that shared experience directly gave rise to behaviors that were reassuring or otherwise beneficial for targets and that the enhanced accuracy involved was epiphenomenal.

Regardless, our results did not indicate any role for the communication of empathic concern per se.

### *Bright and Dark Sides of Empathy*

The present results suggest that at least in some contexts the bright side of empathy may be seen only by empathizers: Adopting an empathic mindset led individuals to experience warm feelings and a sense of being positively regarded, whereas at the same time the targets of empathy were in the dark about these positive feelings. Moreover, notwithstanding some tentative indication of benefits associated with interacting with a dispositionally empathic person, we did not find that targets benefitted in any way from being the recipient of feelings of empathic concern per se. The dark side of empathy revealed by the present research centers on this lopsided pattern of benefits to empathizers rather than targets, which in some contexts may serve to exacerbate rather than assuage targets' relative disadvantage and leave empathizers with a sense of having helped someone when they actually have not.

### *Limitations and Future Directions*

Beyond the need to identify the behavioral mechanisms underlying the effects we obtained – which for experience would involve pinpointing the processes stimulated by accuracy, and then testing serial mediation – this work has several limitations. It will be important for future research to replicate the findings and probe the extent to which they generalize to other types of distressing experiences. In particular, as individuals tend to underestimate the impact of embarrassment and social pain on themselves and others (Nordgren, Banas, & MacDonald, 2011; Van Boven, Loewenstein, & Dunning, 2005), the benefits of perceiver experience may well have been greater here than in other cases not characterized by such an “empathy gap.” In addition, previous research indicates that shame is a unique emotion

in terms of being less common and more unpleasant than other negative emotions such as anger and sadness (Duan, 2000), and, possibly because feelings of shame are less familiar or more threatening, people are generally less inclined to feel empathy for shame than for sadness (Duan, 2000). These findings suggest that the effects of temporary empathic mindsets and dispositional empathy may well be different in contexts where targets are experiencing types of negative affect other than shame. Further, conceivably the effects might be stronger in cases where shame and embarrassment are more extreme than was the case in the present research.

Additional limitations include that for reasons that are currently unclear, the effects on targets' feelings were specific to performance state self-esteem and shame and were not apparent for social state self-esteem. Further, because we did not have a no-instructions mindset condition, it is unclear whether the effects that we obtained for the mindset manipulation on perceivers' feelings reflect the positive influence of the empathic mindset instructions or the negative influence of the objective mindset instructions. Recent work by McAuliffe, Forster, Philippe, and McCullough (2018) indicates that greater levels of empathic concern and helping evident under empathic as compared to objective mindset conditions are largely driven by negative changes triggered by the instructions to be objective, and, relatedly, that people spontaneously feel empathic concern for distressed others under baseline conditions. This work would seem to suggest that the effects that we obtained for the mindset manipulation on perceivers' feelings may have been largely driven by negative changes triggered by the instructions to be objective. However, the aforementioned lower baseline levels of empathy for shame as compared to other affective states (Duan, 2000) leave this an open question in the present context: If people do not readily empathize with shame, there may be more room for increases in empathy in response to empathic mindset instructions – and less room for reductions

in response to objective instructions – when targets are experiencing shame as compared to other negative states.

As well, it is possible that the impact of perceiver experience may have been enhanced by how close in time it was to observing the target have that same experience. Relatedly, it would be useful to probe whether prompts to remember similar past experiences have a parallel effect, as this strategy would have implications for intervention. Finally, research by Ruttan, McDonnell, and Nordgren (2015) suggests that in cases where the target fails to endure a negative experience, the effect of prior experience on perceivers' reactions could be more negative, involving, for example, reduced rather than enhanced feelings of compassion. However, the current findings cast doubt on the assumption that the favorability of perceivers' private thoughts and feelings are important to improvement in targets' well-being after an exchange.

### *Conclusion*

Overall the current findings indicate that individuals experiencing shame and self-criticism in the wake of an embarrassing event benefit more from interacting with someone who has been there him or herself and thus accurately understands their feelings than from interacting with someone who is actively trying to understand and identify with those feelings. Our results also suggest that interacting with someone who routinely adopts an empathic stance toward others, and thus has substantial practice in providing social support, may have some benefits in such situations. The fact that having some form of previous experience was important to individuals' ability to improve a target's affective and self-evaluative state, whereas feeling empathic concern was not, potentially has implications both for those seeking to be helpful to others and for those seeking others who can help them.

*Footnotes*

1. Toward the end of the questionnaire, targets were told that in some pairs one person does the creativity task themselves before observing the other person do it whereas others do not. They were then asked to estimate whether their partner had done the creativity task first (yes or no). They were also asked if their partner had told them directly about this (yes or no). The analysis of targets' estimates regarding whether their partner had done the task revealed a significant effect for prior experience,  $b = 0.21$ ,  $\beta = 0.21$ ,  $t(137) = 2.56$ ,  $p = .012$ ,  $d = 0.44$ , whereby targets were more likely to estimate that their partner had done the task when their partner actually had done it, and a marginal tendency for dispositionally empathic perceivers to communicate a sense of shared experience to targets,  $b = 0.05$ ,  $\beta = 0.16$ ,  $t(137) = 1.86$ ,  $p = .065$ ,  $d = 0.32$ , that is, a marginal tendency for targets to be more likely to estimate that their partner had done the task when their partner was high in dispositional empathy. When these analyses controlled for targets' indication of whether the perceiver had told them directly about doing the task (16, or 11%, reported this was the case), the results for dispositional empathy were  $b = 0.05$ ,  $\beta = 0.16$ ,  $t(135) = 1.95$ ,  $p = .053$ ,  $d = 0.31$ ; the results for prior experience were  $b = 0.12$ ,  $\beta = 0.13$ ,  $t(135) = 1.50$ ,  $p = .137$ ,  $d = 0.26$ . Inconsistent with an interpretation of the findings in terms of a "misery loves company" or downward comparison effect (e.g., Wills, 1981), when targets' indication of whether the perceiver had told them about doing the creativity task was entered in the regression analyses of targets' performance state self-esteem and shame it was not associated with significant effects ( $ts < 1$ ) and the effects of experience and dispositional empathy remained virtually unchanged. Further, the mediation analyses for dispositional empathy indicated a marginal *positive* association ( $p = .07$ ) between discussing the creativity task and target shame.

2. Perceivers' estimates of targets' state self-esteem immediately after the creativity task allowed us to also probe their pre-discussion accuracy by computing the absolute discrepancies between their estimates and targets' reported self-esteem at that time. No significant or marginal effects emerged apart from a marginal tendency for prior experience to predict lower discrepancies with respect to social state self-esteem,  $b = -0.28$ ,  $\beta = -0.16$ ,  $t(138) = 1.88$ ,  $p = .062$ ,  $d = 0.32$ .

3. Although we initially sought to simultaneously consider mediation by how much the creativity task was discussed and different aspects of how it was discussed, very high correlations between ratings made specifically in reference to the creativity task clouded interpretation and ultimately precluded such analyses.



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Table 1. *Summary of Regression Analyses for Targets' Post-Discussion Performance State Self-esteem and Feelings of Shame.*

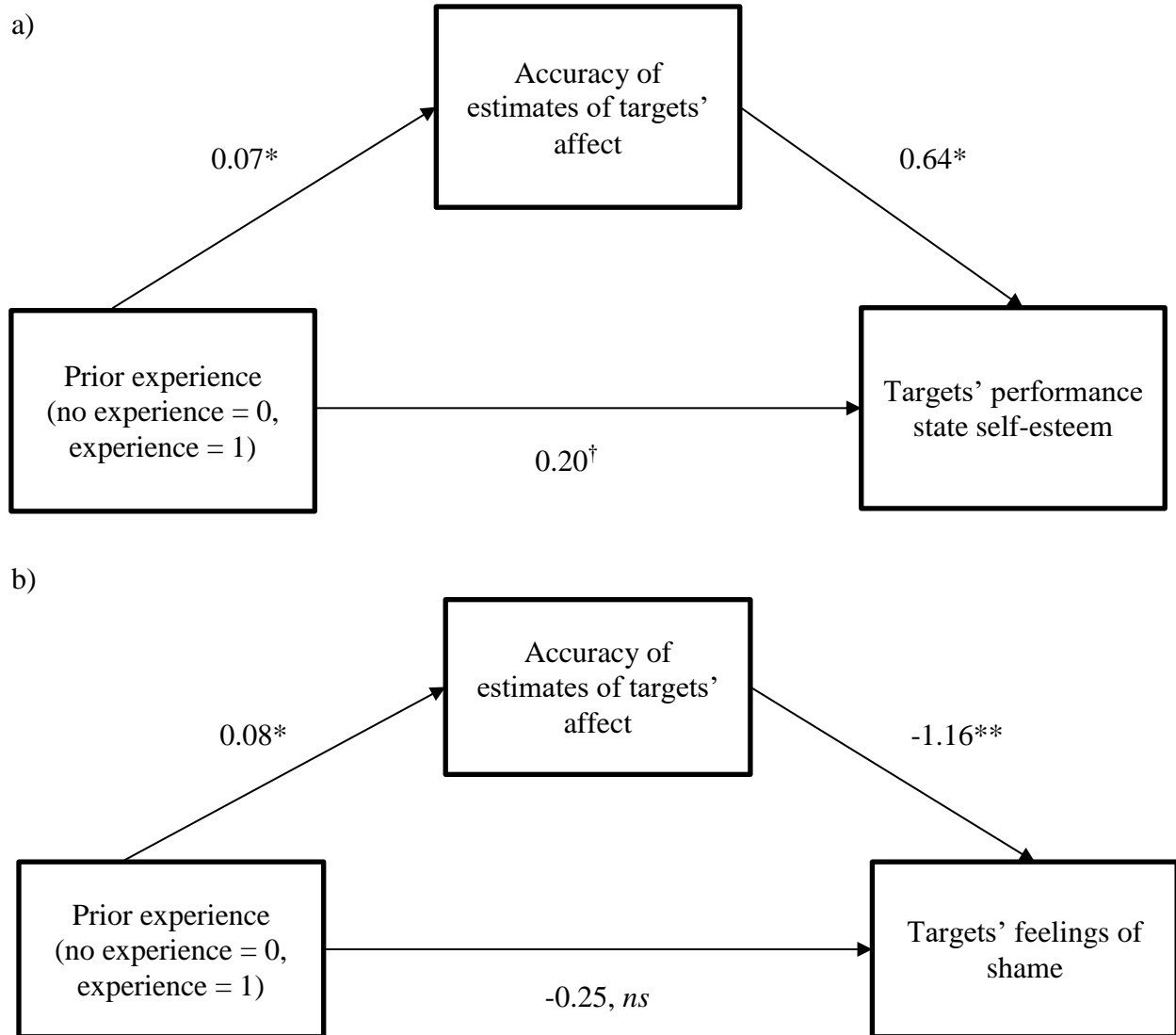
Performance State Self-Esteem							
Predictor	<i>b</i>	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>	LCI	UCI
Pre-disc. perf. SE	0.71	0.72	0.06	12.74	.000	0.60	0.83
Prior experience	0.24	0.12	0.12	2.13	.035	0.02	0.47
Mindset	0.05	0.02	0.11	0.40	.688	-0.18	0.27
Dispos. empathy	0.08	0.12	0.04	2.14	.035	0.01	0.16
Shame							
Prior experience	-0.33	-0.17	0.17	1.95	.053	-0.67	0.00
Mindset	-0.05	-0.02	0.17	-0.28	.778	-0.38	0.29
Dispos. empathy	-0.10	-0.15	0.06	1.73	.086	-0.22	0.02

*Note.* Pre-disc. perf. SE = targets' pre-discussion performance state self-esteem; Prior experience = perceivers' completion (or not) of the creativity task; Mindset = perceivers' empathic mindset; Dispos. empathy = perceivers' IRI empathic concern scores; LCI and UCI = lower and upper 95% confidence intervals for unstandardized regression coefficient.

Table 2. *Summary of Regression Analysis for Accuracy of Perceivers' Estimates of Targets' Affect.*

Accuracy of Perceivers' Estimates of Targets' Affect							
	<i>b</i>	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>	LCI	UCI
Prior experience	0.08	0.18	0.04	2.16	.032	0.01	0.15
Mindset	0.03	0.08	0.04	0.98	.331	-0.04	0.10
Dispos. empathy	0.02	0.11	0.01	1.25	.210	-0.01	0.04

*Note.* Prior experience = perceivers' completion (or not) of the creativity task; Mindset = perceivers' empathic mindset; Dispos. empathy = perceivers' IRI empathic concern scores; LCI and UCI = lower and upper 95% confidence intervals for unstandardized regression coefficient.



*Figure 1.* Path coefficients in a mediation model predicting targets' post-discussion (a) performance state self-esteem and (b) feelings of shame from perceivers' prior experience with the creativity task via the accuracy of perceivers' estimates of targets' affective states.  $^{\dagger}p < .10$ .  $*p < .05$ .  $**p < .01$ .