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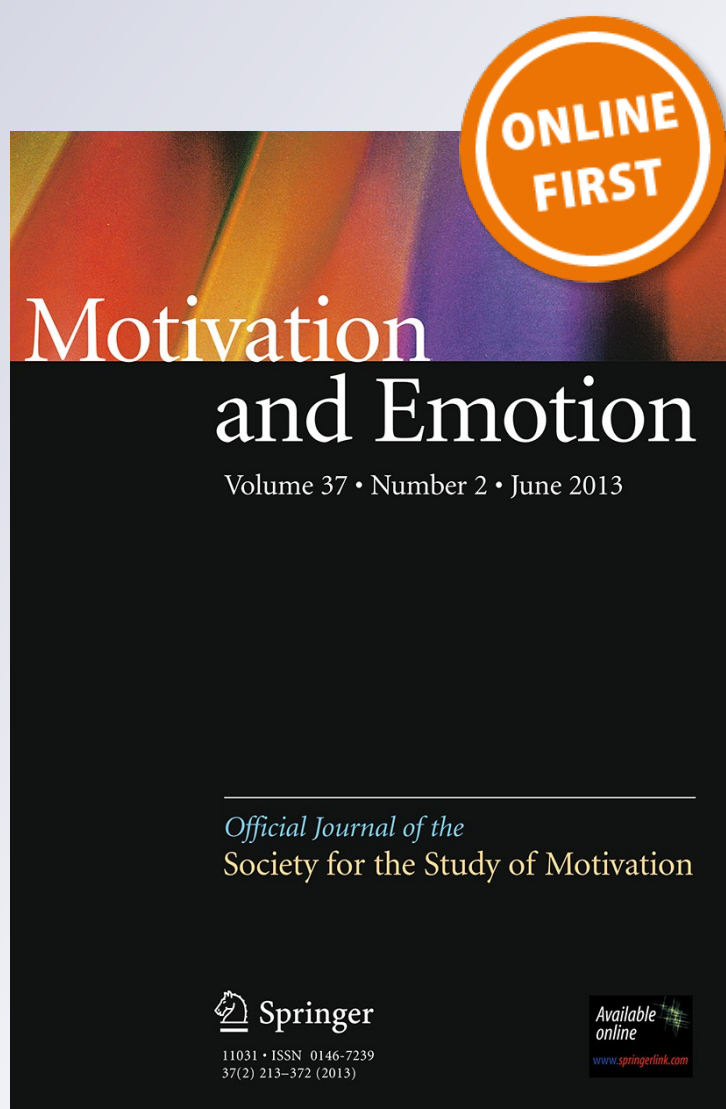
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Embarrassment and empathy before helping: How internal working models come into play

Lena Bethell · Hung-Chu Lin · Robert McFatter

Abstract Prior research has described embarrassment and empathy as predictors of social helping and as self-conscious emotions involving reasoning about the self and others. It remains unclear how cognitive representations of the self and others relate to the two emotions as precursors of social helping. We examined 136 participants' self-report measures of internal working models as well as dispositional embarrassability, empathic concern, personal distress, and perspective taking. Controlling all the other variables, embarrassability was primarily associated with the model of self and personal distress, whereas empathic concern was primarily associated with the model of others and perspective taking. Moreover, the association between personal distress and embarrassability was moderated by the interaction between models of others and perspective taking. The general proneness to distress arousal was also predicted by the interaction between models of self and others. The findings extended prior research linking internal working models and socio-cognitive emotions associated with helping.

Keywords Embarrassment · Empathy · Internal working models · Social helping

Introduction

Imagine a group of high school students sitting in the gymnasium as Tom, known and regularly mocked for his awkwardness, trips on the feet of the tuba player next to him and falls. As the crowd erupts into wild applause and laughter, John, one of the onlookers, feels sorry for Tom and senses the urge to offer comfort. At the same time, however, John experiences qualms with the fear of embarrassment because reaching out to Tom means putting his public-image on the line against the crowd. John is in a quandary, caught between two emotions—empathy towards Tom and fear of embarrassment.

Embarrassment and empathy are common emotions that permeate everyday life and influence behavior. Embarrassment is regarded as a form of social anxiety (Edelmann 1985) due to a threat, actual or perceived, to one's social self (Modigliani 1968, 1971). Empathy allows one to understand and resonate with, both cognitively and emotionally, another person's experiences (Goldberg and Michaels 1985; Hoffman 2000). Both are "self-conscious" emotions, which involve how one gathers information about the self and others and further modulates behaviors so as to become and remain socially attached (Fischer and Tangney 1995; Lewis 1993). Clearly, embarrassment and empathy operate as important social and moral mechanisms in interpersonal relationships.

Underlying one's general template of interpersonal relationships, according to attachment theorists, are internal working models (IWM's)—cognitive representations that one develops of the self and of others (Ainsworth 1990; Bowlby 1969, 1973, 1980; Main 1991). These representations, also known as attachment dimensions (Griffin and Bartholomew 1994), are employed throughout the life span across social encounters to predict and interpret the behavior of others and to act in the interest of security and survival of the self (Bretherton 1985; Sroufe and Waters 1977; Pietromonaco and Barrett 2000).

Surprisingly, however, even though both embarrassment and empathy entail reasoning about the self and others,

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there has been little investigation of how attachment dimensions relate to the two emotions in the context of social helping. When one witnesses another in need, and yet helping implies deviance from group norms, how the competing emotions of empathy and fear of embarrassment are resolved to determine helping behavior may well relate to one's internal working models of self and others.

Embarrassment and the internal working models

Embarrassment is conceptualized as an emotional unease resulting either from an unforeseen disruption of social scripts (Silver et al. 1987), or perceived unfavorable evaluations from others due to violation of social norms (Edelmann 1981). In either situation, embarrassment seems to involve a sense of inadequacy in the self as well as perceived or imagined threat coming from others due to deviance from social expectations. Hence, embarrassability has been identified as an inhibitor of helping when helping requires one to go against the norms (Zoccola et al. 2011).

It is likely that an individual disposed to embarrassment would tend toward self-attention and be anxious about his/her social image. Focusing on negative aspects of the self tends to highlight the gap between social standards and the self, leading to a sense of inadequacy. Viewing others as potentially intimidating and harmful would naturally generate perceptions of negative intention and judgment from others. Thus, one's proclivity to experience embarrassment may link to the tendency to view the self and others as either positive or negative.

Empathy and the internal working models

The construct of empathy has been construed as including cognitive and emotional components (Hoffman, 2000). Cognitive empathy involves perspective-taking, in which the empathizer portrays in mind the experiences of the observed person. Emotional empathy generally involves *other-focused* feelings of concern, sympathy, and compassion, and has been associated with altruistic motivations for prosocial actions (Eisenberg and Fabes 1990). Although empathic emotions can be automatic and contagious in nature, they can also be subjected to cognitive control. *Perspective-taking* facilitates reflecting on another's experiences from the person's standpoint, which, in turn, promotes and regulates emotions organized around the welfare of the observed person (Lamm et al. 2008). An empathizer may, then, be more likely to progress from the initial affective contagion and move into a more modulated state of empathic concern.

In light of this, information about the *self* and *others* is essential to an intersubjective induction process of empathy (Decety and Meyer 2008). It is likely that a positive model of the self would generally involve a sense of competence and helpfulness in taking care of others' needs, rendering one more psychologically available and prone to empathize with others' situations. Also, a positive model of others would normally imply interest in others and viewing others as worthy of attention and regard, making one more likely to experience empathic emotions. Indeed, how one views the self and others as either positive or negative should be highly relevant to empathic emotions.

Internal working models

The notion of IWM's of the self and others has been used as a framework to conceptualize how humans form close socio-emotional bonds (Pietromonaco and Barrett 2000). The IWM's are initially formulated in one's early developmental history within the context of child-caregiver relationship and subsequently carried forward to influence behavior in later interpersonal relationships (Hazan and Shaver 1987). The working model of the self concerns whether one believes himself to be worthy of affection and love, specifically from attachment figures. Negative models of the self thereby reflect anguish over rejection, and are often referred to as the *anxiety* attachment dimension. The working model of others concerns the trustworthiness of attachment figures in response to the individual's needs. Negative models of the world are associated with mistrust in others, and are often referred to as the *avoidance* attachment dimension.

Current work on adult attachment has specified four attachment types based on combined considerations of the two attachment dimensions (Bartholomew and Horowitz 1991). *Secure* adults reveal a sense of self-worth, view others as positive, and feel comfortable with intimacy with others. Lacking a sense of self-value, *preoccupied* adults yearn for closeness to others as a means of feeling worthy as a person, hence, often feel anxious over rejection by others. *Dismissing* adults view others as potentially harmful, and tend to avoid closeness with others and maintain an overly elevated sense of self. *Fearful* adults also avoid closeness with others due to distrust of others, yet rely on others to validate their self-worth. They appear confused about their wants and lack coherent strategies for meeting their attachment needs.

In the literature, dimensional measures have been preferred by attachment researchers over categorical measures due to their greater reliability and statistical power (e.g., Griffin and Bartholomew 1994; Brennan et al. 1998). Moreover, the dimensional approach addresses the limitations inherent in the typological approach, including, e.g., possible blends of attachment types, and relatively smaller number of individuals with insecure attachment. Therefore, the dimensional approach to describing the relations

between the IWM's and emotions before helping was adopted in the present study.

The present study

The purpose of the present study was to examine how IWM's of the self and others underlie the susceptibility to embarrassment (embarrassability) and the propensity to experience empathy when witnessing someone in need. In addition, because both a person's general propensity toward emotional arousal and the cognitive capacity for perspective taking seem to be implicated in the emotions of embarrassment and empathy, we also included measures of dispositions for distress arousal and perspective taking as predictors of the two emotions. We sought to explore the independent differential associations of the four predictors with, and also their possible interaction effects on, the two social emotions. We hoped to illuminate overlooked aspects of interplay of emotional events prior to helping decisions.

Five hypotheses were formulated as follows:

Hypothesis 1 Because embarrassment generally involves a sense of inadequacy in the self (negative evaluations of the self) as well as perceived or imagined threat and negative judgments coming from others (negative views of others), we expected to find that embarrassability would relate to negative models of both the self and others.

Hypothesis 2 Because embarrassment is a special form of social anxiety, it should reflect a person's general proneness toward distress arousal across different interactive contexts. Thus, we expected to find a positive relation between dispositional personal distress and a propensity toward embarrassment.

Hypothesis 3 Social perspective-taking skills have been considered as important elements in the development of embarrassment (Lewis 1993). Thus, it is reasonable to expect that perspective taking would positively relate to embarrassability. On the other hand, errors in perspective judgments may also lead to unwarranted perceptions of negative evaluations from others, hence, undue embarrassment (Miller 2007). Because of these competing possibilities, we predicted that even if there were a relation between perspective taking and embarrassability, the strength of it would merely be modest.

Hypothesis 4 A positive model of the self would generally entail the perception of the self as a protective and helpful person; also, a positive model of others would normally involve valuing others' well-being. Both would make one more psychologically inclined to concern about others' needs. Therefore, we predicted that positive models of self and others would positively relate to a disposition for empathic concern.

Hypothesis 5 Because cognitive perspective taking enhances the observer's ability to understand and vicariously experience the situations of the observed, it should add to the elicited empathy towards the person in need. Hence, we expected to observe a positive relation between perspective taking and empathic concern.

Finally, given the expected associations of the study variables, we also expected to find possible mediated or moderated relations among the variables. Specifically, when predicting embarrassability or empathic concern from the two cognitive representations of the self and others, we expected that the proclivity towards distress arousal and the capacity to take perspectives of others might come into play and potentially serve as mediators or moderators of the associations.

Method

Participants

Participants included 136 college students (113 females, mean age = 23.1 years, ranged from 18 to 56 years). Participation was voluntary, but participants were rewarded with class extra credits. In addition to providing basic demographic information, participants completed four questionnaires. The order of questionnaires were randomized across participants.

Questionnaires

Susceptibility to Embarrassment Scale (SES)

The SES (Kelly and Jones 1997) assesses a person's general susceptibility to embarrassment. Items capture one's propensity to feel emotionally exposed, vulnerable, and concerned about making mistakes in front of others. Participants responded to 25 statements on a 7 point Likert scale (1 = not al all like me to 7 = very much like me). According to Kelly and Jones, the items had internal reliabilities of 0.90, and a test–retest reliability of 0.50.

Interpersonal Reactivity Index (IRI)

The IRI (Davis 1980) assesses a person's dispositional empathy and includes four separate dimensions, each with 7 items—perspective taking (PT), empathic concern (EC), personal distress (PD), and fantasy. The EC subscale assesses one's tendency to experience compassion for others who are less fortunate. The PT subscale measures one's capacity of taking the mental perspectives of others. The PD assesses one's predilection to experience

self-oriented mental discomfort when faced with intense distress with others. Participants responded to items on a 5 point Likert scale (1 = *does not describe me well* to 5 = *describes me very well*). The rating scores were summed to provide scores for each of the four dimensions. For the purpose of this study, the Fantasy subscale was not included in the analyses.

Relationship Scales Questionnaire (RSQ)

The RSQ (Griffin and Bartholomew 1994) assesses the two attachment dimensions: models of the self and others. Participants responded to 30 short statements on a 5 point Likert scale (1 = *not at all like me* to 5 = *very much like me*), tapping four prototypes of attachment—secure, fearful, preoccupied, and dismissing. Following Griffin and Bartholomew's procedure, the models of the self and others were derived from linear combinations of prototype ratings. The self model score (Self) is obtained by subtracting the sum of fearful and preoccupied scores (both have negative self models) from the sum of secure and dismissing scores (both have positive self models). Similarly, the model of others (Others) is obtained from subtracting the sum of fearful and dismissing scores (both have negative models of others) from the sum of secure and preoccupied scores (both have positive models of others). Griffin and Bartholomew suggest that the positivity of the self model dimension may also be interpreted as a reverse measure of the *anxiety dimension*, and the positivity of the others model as a reverse measure of the *avoidance dimension*.

Results

Descriptive statistics and correlations among the study variables are presented in Table 1. Cronbach's alpha for the SES was 0.94. Alphas for the EC, PD, and PT subscales of the IRI were 0.73, 0.79, and 0.74, respectively. Alphas for the four subscales of the RSQ were 0.75, 0.63, 0.46, and 0.48 for Fearful, Dismissing, Secure, and Preoccupied, respectively. All these figures closely corresponded to the reliabilities reported by the authors of the questionnaires (Davis 1980; Griffin and Bartholomew 1994; Kelly and Jones 1997).

Zero-order Correlations

Variables correlated with embarrassability

As predicted in Hypothesis 1, both Self and Others correlated negatively with embarrassability (SES), $r = -0.55$, $p < .005$, and $r = -0.28$, $p < .005$, respectively. Thus, high

Table 1 Means (M), standard deviations (SD), and correlations for the variables in the present study (N = 136)

	SES	Self	Others	EC	PT	PD
SES						
Self	−0.55***					
Others	−0.28**	0.22*				
EC	0.05	−0.06	0.24*			
PT	−0.20*	0.16	0.19*	0.28**		
PD	0.47***	−0.37***	−0.18*	0.06	−0.27**	
M	94.36	9.22	1.19	29.13	25.32	18.65
SD	29.76	7.91	8.98	4.01	4.60	5.18

SES = the Susceptibility to Embarrassment Scale; Self = the model of self derived from the Relationship Scales Questionnaire (RSQ); Others = the model of others derived from the RSQ; EC = the emotional concern subscale of the Interpersonal Reactivity Index (IRI); PT = the perspective taking subscale of the IRI; PD = the personal distress subscale of the IRI. * $p < .05$; ** $p < .005$; *** $p < .0001$

levels of embarrassability were associated with negative models of the self and with negative models of others. Also, as predicted in Hypothesis 2, there was a positive correlation between personal distress (PD) and SES, $r = 0.47$, $p < .005$. Therefore, one's susceptibility to embarrassment reflected his/her proclivity towards personal arousal during intense social interactions. Lastly, as predicted in Hypothesis 3, there was indeed a modest relation between perspective taking (PT) and SES, $r = -0.2$, $p < .05$, suggesting that high embarrassability somewhat reflected poor perspective taking capacity.

Variables correlated with empathic concern

Hypothesis 4 was partially supported in that only the dimension Others correlated positively with empathic concern (EC), $r = 0.24$, $p < .05$. The relation between Self and EC was not significant, highlighting the other-oriented nature of empathic concern. As predicted in Hypothesis 5 and consistent with prior report (Davis 1983), there was a significant correlation between EC and PT, $r = 0.28$, $p < .005$, indicating that those who reported greater proclivity for perspective taking tended to report higher levels of empathic concern.

Path Analysis

Given the significant zero-order correlations, we were interested in exploring possible mediation effects and interactions between the predictors in predicting embarrassability and empathic concern. First, an initial path analysis model using only linear regressions was constructed and estimated, as shown in Fig. 1. A model like this that contains no latent variables may be satisfactorily estimated simply using ordinary least squares (OLS)
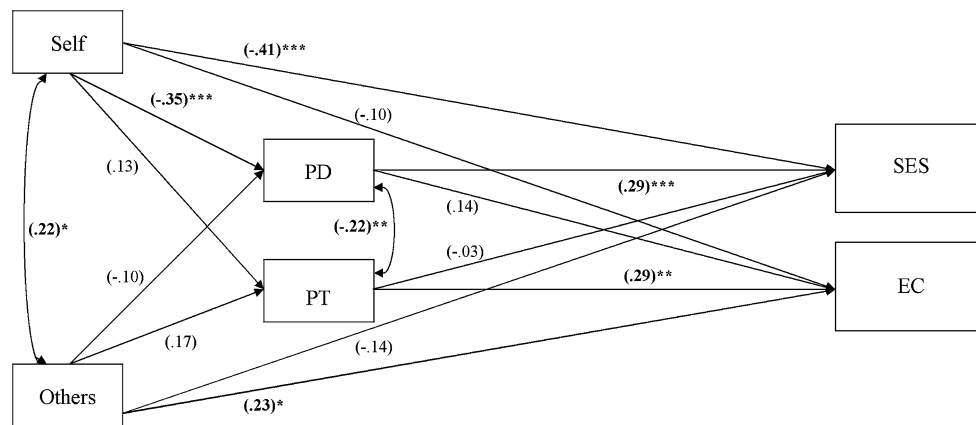
Fig. 1 Path diagrams for the predictions of embarrassability (SES) and empathic concern (EC) from personal distress (PD), perspective taking (PT), and models of self (Self) and others (Others). Path values are standardized regression coefficients (beats). *Bolded* coefficients are significant beta weights. Values on Self and Others were derived from the Relationship Scales Questionnaire. EC, PD, and PT were values of the subscales of the Interpersonal Reactivity Index; and SES was the value on the Susceptibility to Embarrassment Scale. *$p < .05$; **$p < .005$; ***$p < .0005$

regression (e.g., Duncan 1975; Kenny 1979; Land 1973). The model in the figure was estimated using both this OLS approach and an iterative generalized least squares (GLS) method implemented in the SAS Proc CALIS routine. The parameter estimates and significance tests obtained were almost identical for the two methods. The values presented in the figure are from the GLS estimation. The goodness-of-fit measures from the GLS estimation indicated a satisfactory model fit, $\chi^2(1) = 0.78$, $p = .3773$; RMSEA < 0.0001, AGFI = 0.96, CFI = 1.00. Of course, in cross-sectional correlational studies of this kind, it is always possible to find alternative models (perhaps, e.g., with some arrows in Fig. 1 reversed) that fit the data. From a purely model-fitting perspective, the models cannot be distinguished. However, for the reasons outlined in the introduction, we formulated our model as shown in Fig. 1.

Predictions of embarrassability

As Fig. 1 shows, controlling all the other variables, there were two significant direct paths leading to embarrassability, one from Self, and the other from personal distress. Notably, Hypothesis 6 was partially supported in that Self appears to have both direct and indirect effects on embarrassability—the indirect effect being one with personal distress as the mediator. On the other hand, there appears to be not much of a relation at all (direct or indirect) between Others and embarrassability. Therefore, among the two internal representations, the model of self appeared to be more strongly associated with embarrassability. Also, compared to perspective taking, a person's inclination toward distress arousal turned out to be more important when predicting embarrassability.

Predictions of empathic concern

The relation between Others and empathic concern was positive (0.23) and pretty direct (i.e., unmediated by either personal distress or perspective taking). In contrast to the dimension of Others, there appeared to be not much of a relation between Self and empathic concern (direct or indirect). Therefore, among the two attachment dimensions, the model of others appeared to be more important in predicting empathic concern.

Moderated relations

Further regression analyses, including two- and three-way cross-products, were performed to examine whether any of the relations in the model were moderated ones. We found only 2 such moderated relations described as below.

The relation between personal distress and embarrassability

The results indicated that there was a significant three-way Others by perspective taking by personal distress interaction in predicting embarrassability, $t(135) = -2.80$, $p < .05$ (Table 2). Thus, the relation between personal distress and embarrassability varied with different combinations of levels of perspective taking and the model of others. Figure 2 shows this 3-way interaction with predicted levels of embarrassability at two levels of personal distress (1 SD below mean and 1 SD above mean) at low (1 SD below mean) and high (1 SD above mean) values of both perspective taking (PT) and the model of Others. Simple slope testing indicated that three of the regression

Table 2 Results for multiple regression analyses

Criterion	Predictors	Coefficient estimate	t ratio	
SES	Intercept	0.004	0.05	$R^2 = 0.31$
	PT	−0.080	−1.02	$F(7, 128) = 8.22***$
	PD	0.482	6.01***	
	Others	−0.249	−2.92**	
	(PT) × (PD)	−0.129	−1.62	
	(PT) × (Others)	−0.055	−0.63	
	(PD) × (Others)	0.052	0.59	
	(PT) × (PD) × (Others)	−0.200	−2.80*	
PD	Intercept	−0.045	−0.56	$R^2 = 0.18$
	Self	−0.384	−4.63***	$F(3, 132) = 9.36***$
	Others	−0.098	−1.21	
	(Self) × (Others)	0.206	2.21*	

All variables were standardized. SES = the Susceptibility to Embarrassment Scale; PT = the perspective taking subscale of the Interpersonal Reactivity Index (IRI); PD = the personal distress subscale of the IRI; Self = the model of self derived from the Relationship Scales Questionnaire (RSQ); Others = the model of others derived from the RSQ.
* $p < .05$; ** $p < .005$; *** $p < .0005$

slopes shown in Fig. 2 were significantly different from zero, including those for (1) low Others and high PT, slope = 0.50, $t(135) = 3.15$, $p < .005$, (2) low Others and low PT, slope = 0.36, $t(135) = 2.73$, $p < .05$, and (3) high Others and low PT, slope = 0.86, $t(135) = 4.22$, $p < .005$. Thus, individuals holding negative models of others (highly avoidant individuals) showed the usual positive relation between distress and embarrassability—the greater the disposition for distress, the more embarrassability. The same positive relation between distress and embarrassability held for individuals who did not report negative views of others (not highly avoidant), yet were low on perspective taking. On the other hand, individuals who were not highly avoidant and also were high on perspective taking did not show a relation between distress and embarrassability. They tended to show low embarrassability regardless of a general propensity toward personal distress.

The relations between attachment dimensions and personal distress

Both Self and Others were negatively related to personal distress (PD), $r = −0.37$, $p < .005$, and, $r = −0.18$, $p < .05$, respectively. Thus, negative models of the self and others were related to strong propensity toward distress arousal. Moreover, there was a significant Self by Others interaction effect on PD, $t(135) = 2.21$ $p < .05$ (Table 2), such that the relation between the model of others and personal distress varied with different levels of the self. Figure 3 shows this interaction with the predicted values of PD at low (1 SD below mean), mean, and high (1 SD above mean) Others at different levels of Self (1 SD below mean, mean, and 1 SD above mean). Simple slope testing revealed that only the slope of the regression line at low Self values (−0.30) differed significantly from zero, $t(135) = −2.47$, $p < .05$. Hence, the negative relation between model of others and distress disposition only occurred in individuals with negative evaluations of the self.

Discussion

The findings highlighted the egoistic nature of embarrassability by demonstrating its association with the anxious dimension of attachment. It is likely that attachment-relevant events may activate reasoning about both the environmental demands and one's individual characteristics. Individuals who hold negative views of the self may tend to be sensitive about the discrepancy between the self and social demands, and view that discrepancy as a source of public peril. In the face of social threat, negative, self-focused cognitions generally lead to heightened social anxiety, including possible fear of embarrassment, which can be a potent barrier to social helping (Zoccola et al. 2011). In light of this, individuals who suffer from excessively high susceptibility to social arousal or embarrassment may potentially benefit from interventions that focus on attenuating self-focused attention and negative cognitions about the self.

The findings also underscored the potentially important role of perspective taking in affecting how distress disposition related to embarrassability, particularly for individuals who were not highly avoidant. It appeared that a combination of positive views of others and high capacity for perspective taking might be helpful in preventing one from experiencing undue emotion of embarrassment even if the individual is generally prone to anxious arousal. Thus, enhancing cognitive reflections involving positive thoughts of others and clear understanding of others' perspectives may potentially be beneficial to modulating embarrassability.

In prediction of empathic concern, positive models of others and perspective taking appeared to be important.

Fig. 2 Prediction of embarrassability (SES) by personal distress (PD), perspective taking (PT) and model of others (Others). Regression lines indicate the predictions of SES from 2 levels of PD (1 SD below the mean and 1 SD above the mean) at 2 levels of PT (1 SD below the mean and 1 SD above the mean). All variables were standardized. Slopes of the regression lines were tested against the slope of zero. *$p < .05$; **$p < .005$; ***$p < .0001$
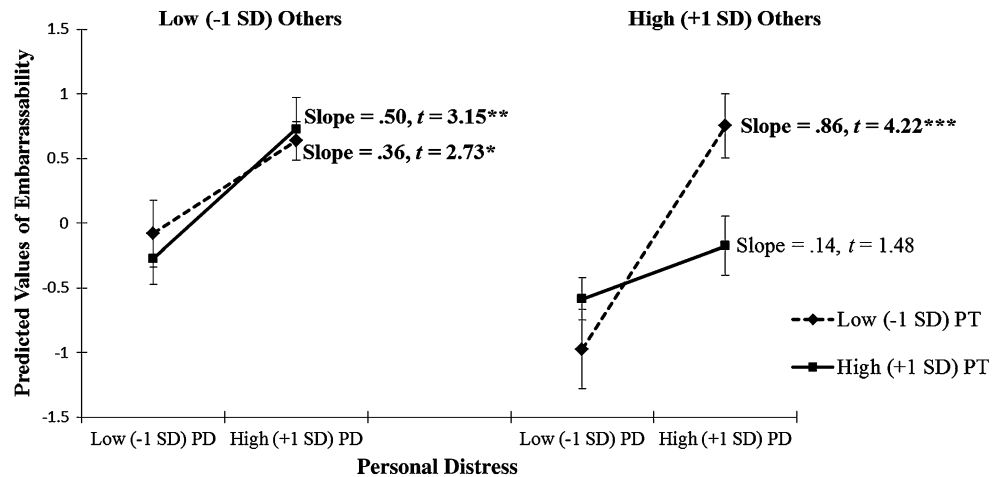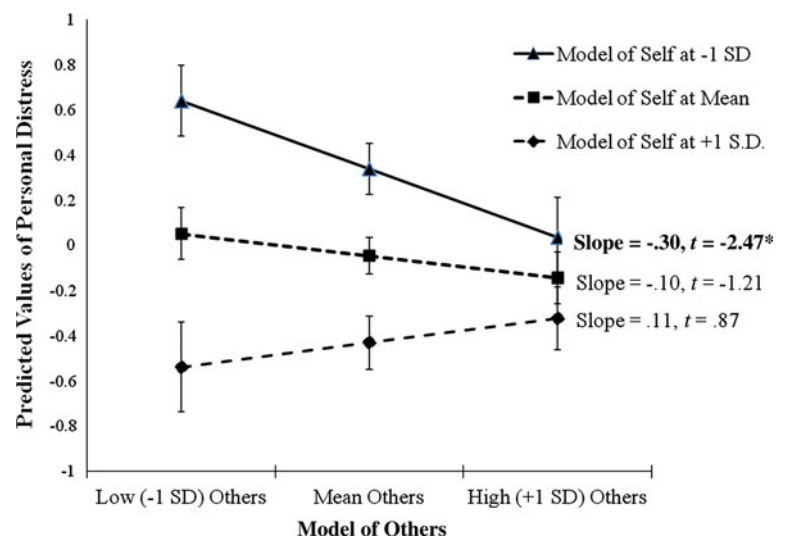

Fig. 3 Prediction of personal distress from models of self and others. Personal distress = the personal distress subscale of the interpersonal Reactivity Index (IRI); Self = the model of self derived from the Relationship Scale Questionnaire (RSQ); Others = the Model of Others derived from the RSQ. *$p < .05$

Holding positive views of others may increase appreciation of the value of others, and valuing the interests of others has been regarded as an antecedent of empathic concern (Batson et al. 2007). Also, recognizing and understanding the perspectives of others may enhance emotions of compassion organized around the welfare of those others and augment altruistic motivations for helping (Eisenberg 1991). Therefore, holding positive models of others along with effectively taking the perspective of others are essential determinants of other-oriented empathic emotions upon the discernment of others' need. These findings have potential implications for intervention programs fostering empathy and reducing levels of aggression. A greater propensity towards empathic concern may be enhanced by proper guidance for framing positive world views as well as promoting perspective-taking ability to be in touch with others' experiences.

To put the findings in a real-life context, it may be helpful to go back to the anecdote described in the beginning of this paper. Upon witnessing Tom's predicament, if John holds positive views of both the self and others (as in the secure type of attachment), he is unlikely to experience distress arousal or fear of embarrassment associated with a desire to help by moving against the crowd. He is likely to experience primarily the emotion of empathic concern for Tom due to a positive regard for Tom's well-being. If John holds negative views of both the self and others (as in the fearful type of attachment), he is likely not to experience the emotion of empathic concern, but heightened levels of personal distress and the fear of embarrassment, which may hinder him from helping. If John holds a preoccupied type of attachment (positive views of others yet negative views of the self), his empathic concern towards Tom may be juxtaposed with fear of embarrassment, rendering him confused with conflicting emotions and not knowing what to do. However, a good perspective taking capacity may help modulate John's embarrassability even when arousal is high and possibly enhance the emotion of empathic concern. If John holds positive views of the self yet negative views of others (as in the avoidant type of

attachment), he is unlikely to experience either empathic concern or fear of embarrassment; instead, John may stay mostly emotionally detached from the experiences of Tom.

One of the limitations in this study concerns the use of only dispositional measures to capture individual differences in embarrassability, empathy, and the IWM's. Variables related to helping may vary across different situations (Latané and Darley 1968; Nezlek et al. 2001) and the IWM's may change with different social partners (Pietromonaco and Barrett 2000). Future research may benefit from incorporating analyses at both trait and state levels and observing possible associations between them. Another limitation concerns our reliance on explicit self-report measures. Emotions and working models elicited by attachment-relevant events may involve attentional, perceptual, and cognitive-emotional processes that are largely not addressed by most self-report measures. Information on reaction time, attributional styles, interactive behaviors, and physiological correlates may add to a fuller account for attachment-related processes.

Conclusion

While research has focused on describing how embarrassment and empathy predict social helping, we examined a bit more deeply how cognitive representations of the self and others guided emotions before coming to the aid of someone in need. The findings underscored the self-focused quality of embarrassment and the other-oriented nature of empathy, and how working models of the self and others carried relevance in distress disposition and perspective taking, which, in turn, predicted the two emotions. Complicated as it seemingly appears, the account here provides part of a fundamental ground upon which social helping can be predicted, and serves as a window into the complexity of human encounters.

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