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Empathic Embarrassment: Situational and Personal Determinants of Reactions to the Embarrassment of Another

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Two experiments investigated the reactions of observers to actors' embarrassments. The first study manipulated the nature of the prior interaction between actor and observer (cooperative, competitive, or independent) and the observational set of the observer (empathic or nonempathic). The observers' self-reports and measures of their skin potentials indicated that an empathic set and any prior interaction generally increased their responsiveness to the actors' plight. Moreover, independent, empathic observers reported reactions that appear to be *empathic embarrassment*, embarrassment felt with another even though one's own social identity is not threatened. The second study showed that empathic embarrassment is strongest in subjects of high embarrassability who are chronically susceptible to embarrassment. The results portray social embarrassment as a robust, pervasive phenomenon that nevertheless affects some people more than others. The possible origins of empathic embarrassment and the joint influences of perception, interaction, and personality on the experience of empathic embarrassment are discussed.

Embarrassment is that uncomfortable state of mortification, awkwardness, and chagrin that can result whenever undesired events publicly threaten one's social identity (Goffman, 1956). It is an aversive state of psychological and physiological arousal (Buck, Parke, & Buck, 1970) that engenders a sense of both exposure and abashment (Edelmann, 1985; Miller, 1986). As a result, people avoid embarrassment whenever possible (even at cost to themselves; e.g., Brown, 1970) and quickly try to repair its damage whenever it does occur (Apsler, 1975; Modigliani, 1971).

Thus embarrassment can have substantial influence on social interaction. Nevertheless, the phenomenon has received relatively little experimental attention. Moreover, several intriguing determinants of embarrassment have largely been ignored by prior studies. How do the observers who witness others' embarrassments respond? Are there meaningful individual differences in susceptibility to embarrassment? This article reports two studies that address these questions and demonstrate the existence of an *empathic embarrassment* that depends heavily on both interactive and personality influences.

Embarrassing Circumstances

Scientific study of embarrassment began with Goffman's (1956) seminal suggestion that embarrassment results from disrupted interaction in which a person fails to maintain a consistent, desirable, and appropriate social identity. Goffman believed the primary cause of embarrassment was a person's concern for the impression he or she was projecting to the audience present at the time. Following in Goffman's footsteps, early studies of embarrassment attempted to catalog the various social predicaments through which impression management could fail. For instance, Gross and Stone (1964) suggested that disruption of any of three essential elements of interaction could cause embarrassment: First, people might misplay their or others' *identities*, leaving their wallets at home or misnaming another person; second, people might lose *poise*, the control of their selves or situations, by ripping their pants, invading another's bath, or being audibly flatulent; or third, people might lose *confidence* in their expectations for interaction, not knowing how to proceed.

In a more recent analysis, Arnold Buss (1980) agreed that public impropriety, incompetence, and breaches of privacy could be embarrassing. However, he also showed that mere *conspicuousness*, being singled out for attention by others, and *overpraise*, receiving more public acclaim than one deserves, are often embarrassing as well. Thus Buss differed from Goffman (1956) in arguing that embarrassment does not necessarily depend on fumbled interaction; it can occur even when no adverse information about a person is known to his or her audience. Instead, for Buss, embarrassment results from a socialization process that too often equates public scrutiny of one's behavior with social ridicule. People so thoroughly learn that their public shortcomings will be met with disdain that merely being conspicuous—even if one is behaving appropriately—can be aversive.

In any case, these analyses of embarrassment all assumed that its roots lay in a person's concern for his or her own social identity, and they encouraged studies that examined how people cope with their own embarrassing circumstances. For instance, Apsler (1975) embarrassed half of his subjects by having them

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sing the "Star Spangled Banner" and dance, by themselves, to recorded music in front of a peer observer/confederate. Other subjects performed unembarrassing tasks, such as merely listening to the music. Thereafter the observer or a second confederate who was supposedly unaware of the actor's performance asked for help with a class project. Embarrassed subjects were more compliant than their unembarrassed counterparts, and they were equally helpful whether or not the recipient knew of their embarrassment. Not only did embarrassment motivate people to seek social approval as a way of repairing their endangered public images (cf. Modigliani, 1971), it was apparently quite robust, pervasively influencing subsequent social behavior even toward those who knew nothing of one's past predicaments.

Thus embarrassment can transcend maladroit interaction, and it is clearly a more global phenomenon than Goffman (1956) believed. As Buss (1980) implied, we may know embarrassment so well and dread its abashment so much that simply knowing of embarrassing circumstances may cause us chagrin, even when our social identities are not threatened. It is possible that merely witnessing another person's social predicament can cause us embarrassment even though our images are in no way involved. In fact, even Goffman (1956) noted that when someone is in embarrassing circumstances, "others present will usually blush with and for him" (p. 266) even if the actor fails to blush on his or her own account.

Nevertheless, past studies of embarrassing circumstances have almost completely ignored the observers of others' embarrassments. What emotions do observers experience when they witness others' social miscues? Can one person's social predicament discombobulate mere bystanders? We are often affected by others' emotions, as studies of empathy demonstrate.

Empathic Responses

Gruen and Mendelsohn (1986) have recently distinguished between *empathy,* an emotional response in which an observer shares another person's affect, and *sympathy,* wherein an observer responds with compassion and concern for another's plight. The two are often correlated, and both are likely affected by situational and personality influences. For instance, a series of studies by Stotland (1969) has shown that observers are more affected by others' experiences, physiologically and subjectively, when they are asked to concentrate on the others' feelings than when they are simply asked to watch the others' behavior. Similarly, Krebs (1975) showed that observers were more influenced by an actor's pain or pleasure the more similar they were to the actor. Thus emotional responses to others' experiences are clearly affected by the observer's perspective toward, cognitive appraisal of, and identification with those others, and all of these are manipulable (e.g., Coke, Batson, & McDavis, 1978).

In addition, people seem to differ in their tendencies to empathize and sympathize with others. Davis (1983) suggested that dispositional abilities to understand others' points of view, imagine their feelings, and be concerned by their distress underlie empathic responses and cause sizable individual differences in empathy. Indeed, Archer, Diaz-Loving, Gollwitzer, Davis, and Foushee (1981) found that subjects high in dispositional empathy responded more favorably to a fellow student's plea for help than did subjects who were less characteristically empathic.

In any case, whatever the source of a particular empathic response, these studies show that it is possible for observers to be emotionally affected by exposure to the emotions of others. And Gruen and Mendelsohn's (1986) distinction between sympathy and empathy suggests that those who witness another's embarrassment may not only feel sorry for the abashed other person but may be embarrassed by the other's predicament as well.

Empathic Embarrassment: A Conceptualization

Embarrassment is readily recognizable, being signaled by specific nonverbal displays of decreased eye contact and increased smiling, postural shifting, and speech disturbances (Edelmann & Hampson, 1981). Thus whenever a person suffers the flustered discomfort of embarrassment, observers may recognize and empathically share that embarrassment even though the person's actions do not reflect on the observer and the observer's social identity is not threatened. Moreover, observers may become empathically embarrassed if they are able to imagine themselves in another person's social predicament whether or not the person displays obvious embarrassment. It is proposed that empathic embarrassment is commonly the result of a generalization of the classically conditioned emotional responses that typically follow people's own embarrassing experiences. Personal embarrassments are punishing episodes that create negative emotional states. Once a person learns normative rules of social conduct, violation of those rules can cause empathic embarrassment even if the person is not personally involved. Parents are likely to be embarrassed by the improprieties of their daughter, in part because her actions reflect on them; by contrast, truly empathic embarrassment would be epitomized by observers sharing the embarrassment of total strangers they view from afar.

The extent of an observer's empathic embarrassment should be influenced by a variety of situational and personal factors. A history of interaction with, or other familiarity of, an embarrassed actor should make the actor's predicament more salient. The extent of the actor's distress and the observer's attentiveness to the actor's emotional displays should make the actor's chagrin more influential. In short, any variable that makes an actor's embarrassment (or embarrassing circumstances) more conspicuous should increase empathic embarrassment.

To examine these issues, the present study assessed the reactions of observers to an actor's embarrassment, manipulating the perceived link between actor and observer and the perceptual set of the observer. Pairs of subjects were induced to cooperate, compete, or maintain their independence on a short task. The observer then watched the actor perform a number of embarrassing tasks under one of two perceptual sets. Observers were instructed either to concentrate on the actor's feelings or to watch his or her movements carefully. It was expected that observers who had cooperated or competed with the actors would be most responsive to the actors' plight, whereas observers who had maintained their independence would be less responsive. Empathic embarrassment would be best illustrated, it was believed, if the observers shared the actors' embarrass-

ment in the cell of the design in which independent actors and observers had neither cooperated nor competed—minimizing the link between them—and in which observers were asked to concentrate on the actors' feelings.

Experiment 1

Method

Subjects

Eighty-four male and 84 female introductory psychology college students participated in partial fulfillment of a course requirement. Three additional subjects refused to perform the embarrassing tasks, and they and their observers were dismissed without penalty.

Procedure

Subjects reported to the laboratory in same-sex pairs and were told that the study was investigating physiological changes during impression formation. They were informed that after a short task one of them would watch the other perform a variety of tasks while the observer's physiological reactions were recorded.

After agreeing to this procedure, the subjects were randomly assigned to one of three interaction conditions. All subjects engaged in a task modeled after that of Wolosin, Sherman, and Till (1973), but the task instructions were varied to induce a particular interactional set. The subjects were presented with 12 pairs of "sociable activities" arranged in a forced-choice format. For example, one item read, "If you were dating someone for the first time, you'd probably go to: (a) a movie, (b) a party." Subjects in the *cooperation condition* were told to try to anticipate and match their "partner's" choices and that the more often their answers agreed, the higher their single, joint score would be.

In contrast, subjects in the *competition condition* were told to anticipate and avoid their "opponent's" choices. In this condition, each subject played the role of "pursuer" for half the items, and the role of "hider" for the other half. Hiders tried to answer the questions as they believed their opponent would not; pursuers tried to "find" the hiders, selecting the same option they had chosen. These subjects were told that on each trial only one of them would receive any points and that because this was a competitive task, only one of them would win.

Finally, subjects in the *independence condition* were instructed to answer each item as they believed "most other students" would. They were asked not to let the "other person" influence them and were informed they would each receive their own individual score. In all three interaction conditions the actual contact between the subjects was the same; each subject answered the questions individually at his or her own pace and was led to believe that the answers would be examined later to determine the task outcome. In no case was feedback concerning task performance actually delivered.

After the subjects completed the task, a coin flip decided which of them was to be the *actor* and which the *observer.* The observer was then taken to an adjoining room where he or she could view the actor through a one-way mirror and hear the actor over headphones. Beckman Ag/AgCl electrodes capable of measuring skin potential were attached to the hypothenar eminence of the subject's right palm and to the medial aspect of the volar surface of the right forearm.

The observer was then asked to read one of two sets of instructions adapted from Gould and Sigall (1977). Observers in the *empathy condition* were told to picture how the actor feels, visualizing "how it feels to him [or her] to be performing the tasks." In contrast, observers in the *objective observation condition* were told to watch the actor's behavior closely, noting gestures and postures and generally observing "her [or his] behavior as carefully as you can."

The actor then drew a list of tasks from an envelope and, in the experimental conditions, was instructed to perform four tasks shown by Apsler (1975) to be embarrassing. The actor was asked to (a) turn on a tape recorder and dance to recorded rock music, which lasted for 60 s; (b) laugh for 30 s as if he or she had just heard a joke (a clock was provided); (c) sing the "Star Spangled Banner" (the words and music were printed on the back of the instruction sheet); and (d) imitate for 30 s a 5-year-old throwing a temper tantrum to avoid going to bed. An offset control group was also included in the design of the experiment; the 14 male and female actors in this group performed Aspler's four nonembarrassing tasks (e.g., listening to the music and copying the words of the "Star Spangled Banner"). The 14 observers in the control group interacted with the actors under independence conditions and were given empathy instructions.

The observer's skin potential was recorded on a Narco-Bio physiograph during the actor's performance. Afterward, both subjects were given questionnaires that asked them to rate their feelings on bipolar adjective scales used to assess embarrassment by Modigliani (1971). They also rated their embarrassment on a 19-point scale, and observers were asked to rate on similar scales the extent of the actor's embarrassment and his or her sympathy for the actor. The actor and observer were then rejoined and fully debriefed, and a lively discussion often ensued.

In sum, the design was a $3 \times 2 \times 2 \times 2$ factorial, varying prior interaction (cooperation, competition, or independence), actor/observer role, perceptual set, and subject sex with an offset control group.

Results

Actor's Responses

The actors reported their feelings both on the four 8-point bipolar adjective scales (i.e., at ease–self-conscious, poised–awkward, flustered–calm, and unembarrassed–embarrassed) and on the 19-point scale that asked, "How embarrassed were you while you were performing the tasks?" The responses of those actors who had performed the embarrassing tasks were compared with those of the control group actors using Dunnett's test, a multiple comparison statistic that controlled the experimentwise error rate. On both embarrassment measures, and in every cell of the design, embarrassed actors (grand mean on the Likert item = 11.5) reported more embarrassment than the control actors did (M = 4.9). The embarrassing tasks were indeed more embarrassing to the actors than were the innocuous control tasks.

Observer's Responses

Except where noted, observers' responses were analyzed using a three-way analysis of variance (ANOVA) including prior interaction, perceptual set, and subject sex as factors.

Perception of the actor's embarrassment. Dunnett's test showed that observers who watched actors perform the embarrassing tasks generally did judge them to be more embarrassed (grand M = 11.2) than did observers watching the control tasks (M = 6.4). As Table 1 shows, only in the independent/observation cell of the design, in which nonempathic observers watched actors with whom they had not interacted, did observers fail to perceive reliable differences between the emotions of embarrassed and unembarrassed actors. Thus whenever the observers had a cooperative or competitive link to the actors, or whenever they received empathy-arousing instructions, the observers accurately detected the actors' embarrassment. In addition, AN-

Table 1
Observers' Ratings of the Actors' Embarrassment

Perceptual set	Prior interaction		
	Cooperation	Independence	Competition
Empathy	11.7[a]	12.9[a]	12.3[a]
Observation	12.0[a]	8.1	10.1[a]

Note. Control $M = 6.4$.
[a] Mean differs from the control mean by Dunnett's test, $p < .05$.

OVAs revealed that observers given empathy instructions considered the actors to be more embarrassed ($M = 12.3$) than did the observers instructed to watch carefully ($M = 10.1$), $F(1, 58) = 5.47$, $p < .03$. The empathy condition was apparently effective in directing observers' attention to the actors' emotional experiences.

Self-ratings of embarrassment and sympathy. Observers rated their own embarrassment during the actors' performances on the same two (bipolar adjective and Likert) measures used by the actors. The patterns of responses on both measures were identical, so for convenience only the broader adjective measure will be described in detail. Examination of the actors' mean ratings on the four scales revealed a main effect of subject sex, $F(1, 58) = 6.19$, $p < .02$, and a triple interaction of prior interaction, perceptual set, and sex, $F(2, 58) = 5.11$, $p < .01$. Female subjects ($M = 4.4$) usually reported more personal embarrassment than did male subjects ($M = 3.5$), but as Table 2 illustrates, this pattern was reversed in the competition condition in which male and female subjects behaved very differently. For example, simple effects tests (and Duncan's multiple-range test) showed that after observation instructions, women reported less embarrassment in the competition condition than in the cooperation condition, $F(2, 58) = 3.17$, $p < .05$, but men tended to report more. Moreover, whereas women in the competition condition expressed less embarrassment in the objective observation set than in the empathy set, $F(1, 58) = 7.44$, $p < .01$, competition men expressed more, $F(1, 58) = 4.57$, $p < .04$.

Thus the results for the competition condition were more complex than expected. Nevertheless, a competitive link between actor and observer, though presumably negative, did not necessarily leave the observers unaffected by the actors' behavior. Depending on subject sex and perceptual set, past competition often increased observers' reactions to the actors' plights.

Importantly, comparisons with the control group indicated that a number of observers—most notably the independence/empathy men and all the empathic women—reported significantly more personal embarrassment than did control observers. Despite maintaining their independence from the actors throughout the experiment, both men and women in the independence/empathy condition reported noticeable embarrassment in response to the actors' predicaments.

However, similar three-way interactions of prior interaction, perceptual set, and subject sex were also obtained on Likert items that asked subjects to rate the extent to which they felt "sorry" for the actor, $F(2, 58) = 6.84$, $p < .01$, and the extent to which they were "sympathetic" toward him or her, $F(2, 58) = 4.48$, $p < .02$. The patterns of means on these items were very similar to those of the embarrassment measures, and from these self-report data it did not appear that any one of these emotional reactions was predominant. Instead, it seemed that the observers simultaneously entertained a number of related reactions, all of which could be reasonably expected to occur—feeling sorry for the actors, being sympathetic toward their plights, and being embarrassed by their predicaments.

Autonomic responses: Skin potential. A measure of the physiological reactivity of the observers was obtained by scoring the number of shifts in skin potential exceeding 4 mV/s and counting the number of such shifts occurring within successive 30-s time periods (cf. Buck et al., 1970). The observers' responses were recorded continuously during the actors' performances (a period lasting from 180 to 210 s), and breaking this period into 30-s segments enabled tests for trends in the data. It was expected that these reactivity sums would reflect a decreasing linear trend as the observers habituated to the actors' unusual behavior, but a significant quartic trend, $F(2, 58) = 8.21$, $p < .01$, indicated that the observers reacted strongly to each of the actors' four tasks, their skin potential jumping as each unlikely task began.

A mean reactivity score was obtained for each subject by averaging the number of shifts occurring within the seven 30-s periods, and analysis of this measure revealed a main effect of the interaction condition, $F(2, 58) = 3.52$, $p < .05$. Cooperative observers ($M = 5.2$) reacted more strongly to the actors' behavior than did independent ($M = 2.9$) or competitive ($M = 3.8$) observers, with the difference between the latter two groups just missing significance (by Duncan's test, $p < .05$). Like the self-ratings, these data suggest that even a competitive link between actor and observer still prompted observers to react somewhat more strongly to the actors than independent observers did.

Comparisons of the mean reactivity scores with those of the control group (Table 3) showed that only the observers in the independence/observation cell failed to react to the actors' embarrassment more than control observers did. This suggests that in the independence condition, unlike the cooperation and competition groups, there really was no perceived link between the

Table 2
Observers' Average Self-Ratings of Embarrassment on the Bipolar Adjective Scales

Perceptual set	Prior interaction		
	Cooperation	Independence	Competition
Male subjects			
Empathy	3.4	4.6[a]	2.4_{bc}
Observation	2.9_{a}	3.1	4.5^{a}_{cd}
Female subjects			
Empathy	5.2[a]	4.7[a]	5.1^{a}_{be}
Observation	4.8^{a}_{af}	4.1	2.5_{def}

Note. For male subjects, control $M = 3.4$; for female subjects, control $M = 3.7$. Means with the same single-letter subscript differ by at least $p < .05$.
[a] Mean differs from its respective control mean by Dunnett's test, $p < .05$.

Table 3
Mean Physiological Reactivity Scores: Control Group Comparisons

Perceptual set	Prior interaction		
	Cooperation	Independence	Competition
Empathy	5.4[a]	3.9[a]	4.3[a]
Observation	4.9[a]	2.0	3.4[a]

Note. Control $M = 1.2$.
[a] Mean differs from the control mean by Dunnett's test, $p < .05$.

subjects that made the observer reactive to the actor's plight and that the significant arousal of the independence/empathy observers was due primarily to their instructions to empathize.

Correlations. The interrelationships among these dependent measures were assessed by computing the within-cell correlations between them. As Table 4 indicates, the observers' perceptions of the actors' embarrassment were positively correlated with both their own embarrassment and their feelings of sorriness and sympathy for the actor. In addition, as suspected, embarrassment, sympathy, and sorriness were all highly intercorrelated. More important, however, the observers' self-ratings of embarrassment were significantly correlated with their physiological reactivity, whereas their self-ratings of sorriness and sympathy were not. Moreover, their reports of embarrassment were more highly correlated with their reactivity than their sorriness was, $t(60) = 2.29$, $p < .05$. Thus the emotional arousal that accompanied their observation of embarrassed others was more closely related to the state of awkward fluster they described as embarrassment than to the state they described as sorriness.

Actors and observers compared. A four-way analysis including actor/observer role showed that observers were generally less embarrassed ($M = 3.9$) than the actors ($M = 5.9$), $F(1, 127) = 57.07$, $p < .01$, and that as we have seen before, men were less embarrassed ($M = 4.5$) than were women ($M = 5.4$), $F(1, 127) = 14.14$, $p < .01$. Empathic embarrassment was thus a milder form of embarrassment than that suffered by the embarrassed actors themselves.

Discussion

Fundamentally, this study attempted to ascertain whether an actor's embarrassment could be empathically shared by observers of that embarrassment. The data seem to answer affirmatively. Independent, empathic observers watching an embarrassed actor reported significantly more personal embarrassment than did similar observers watching an unembarrassed actor. They also reported such reactions as sympathy and sorriness for the actor, but none of these reactions was as highly related to the physiological measures of their emotional arousal as were their self-ratings of embarrassment. Although the observers no doubt experienced an admixture of several emotions in this unusual situation, a major component of their responses appears to have been abashment and chagrin for and with the embarrassed actor. In short, their reported embarrassment appears to be empathic embarrassment.

It is unlikely that the independent/empathic observers felt that the others' embarrassing actions reflected on them. The independence condition seemed successful in maintaining the independence of the subjects; observers in this condition were the least physiologically reactive, and observers in the independence/observation cell were the only ones who failed to exhibit significant arousal in response to the actors' predicament. Thus the embarrassment of the independent/empathic observers was not likely caused by concern for their own social identities; they had managed their own identities successfully but were nevertheless discomfitted by another person's embarrassing circumstances. Of course, the independence subjects were not truly as independent as any two randomly chosen strangers. None of the subjects were friends of one another, but they were students at the same (large) university, studying the same academic subject. As a result, the subjects were all minimally similar to one another, and these data leave open the question of whether empathic embarrassment can be felt for those who are substantially dissimilar to ourselves.

The cognitive perspective of the observers, exemplified in their perceptual sets, and the past relations of the subjects, exemplified in their interaction conditions, both influenced empathic embarrassment. In general, whenever the actors' predicaments were especially salient, observers were most affected. Even notable social predicaments probably affect some observers more than others, however, and along with various situational factors, person variables should mediate empathic embarrassment. High dispositional empathy (Davis, 1983) and good nonverbal decoding skills (Hall, 1978), for instance, should make an actor's distress more affecting (if it occurs).

The label of *empathic embarrassment* implicitly suggests that the observers were responding to overt cues of embarrassment visible in the actors. Indeed, empathic embarrassment was positively correlated with the observers' judgments of how embarrassed the actors were, and whenever an actor's embarrassment is obvious, observers' empathic embarrassment should increase. However, instructions to empathize with the actors did influence the observers' perceptions of how embarrassed the actors seemed to be, so the nonverbal decoding of the observers depended in part on their perceptual set. More important, empathic embarrassment probably does not depend wholly on an actor's display of embarrassed behavior. Whenever an observer is familiar enough with the relevant norms of social conduct to judge that an actor is behaving inappropriately and in a fashion

Table 4
Pearson Product-Moment Within-Cell Correlations Among the Observers' Major Responses

Response	1	2	3	4	5
1. Perceptions of actor's embarrassment	—				
2. Self-reported embarrassment	.36[a]	—			
3. Sorriness	.34[a]	.54[a]	—		
4. Sympathy	.37[a]	.34[a]	.59[a]	—	
5. Skin potential reactivity	.23	.26[a]	.03	.05	—

Note. Coefficients with a subscript *a* differ significantly from zero by at least $p < .05$.

that would embarrass the observer, empathic embarrassment should be possible.

Therefore, whether or not an actor appears discombobulated, an observer's own susceptibility to embarrassment, or embarrassability, should affect how he or she responds to others' embarrassing circumstances. Modigliani (1968) has developed an Embarrassability Scale that comprises 26 items, each describing a potentially embarrassing situation; respondents are asked to rate how embarrassed they would be in each situation. Using Modigliani's scale, Miller (1987) found that embarrassability is highly correlated with public self-consciousness, shyness, and fear of negative evaluation and is negatively linked to self-esteem. Regression analyses indicated that fear of negative evaluation and low self-esteem best predict how embarrassable a person is. Thus those who chronically dread others' censure and who tend to doubt their own self-worth are particularly likely to react strongly to awkward social predicaments.

But do embarrassable people react more strongly to awkward situations in which they are not personally involved? Our conceptualization of empathic embarrassment predicts that they should; independent of their empathic abilities, susceptibility to personal embarrassment should also make people more responsive to the plights of others. An oversensitivity to social sanction should cause strong reactions to social improprieties that readily generalize beyond one's own behavior. As a result, highly embarrassable people should dread the awkwardness of embarrassment whenever and to whomever it occurs. Thus, a second study designed to demonstrate the role of embarrassability in empathic embarrassment seemed warranted.

A second study was also desirable in light of the equivocal effects of the competition condition. The embarrassment of a rival is an interesting case; it is a more salient, and thus more affecting, event than the embarrassment of a stranger, but one is less likely to be sympathetic toward an actor one dislikes. In this study, competitive subjects evidenced less physiological arousal than cooperative partners, but the sexes responded somewhat differently when faced with an opponent's predicament. This was a fairly mild manipulation, however, in which the subjects were merely informed they were rivals and no winner or loser was ever declared. As a result, the manipulation may not have created the negative affect that frequently accompanies real rivalries, and it seemed desirable to examine how a more potent manipulation of competition would affect empathic embarrassment.

Experiment 2

This investigation assessed the relative impact of past cooperation or competition on empathic embarrassment by engaging subjects in a prisoner's dilemma game in which they either cooperated to their mutual (and equal) benefit or competed to their mutual detriment. To the extent that empathic embarrassment is increased simply by a history of past interdependency, the reactions of observers to the embarrassment of cooperative or competitive actors should be similar. However, to the extent that empathic embarrassment is grounded in a fundamentally favorable disposition toward the other, prior competition may minimize it.

In addition, the embarrassability of the participants was assessed to determine how individual differences influence the embarrassment of the actors and the empathic embarrassment of their observers.

Method

Subjects

Seventy-six male and 76 female college students participated in the study in partial fulfillment of course requirements. Four additional subjects refused to perform the embarrassing tasks, and they and their observers were dismissed without penalty.

Procedure

Prior to participating in the study, subjects completed Modigliani's (1968) Embarrassability Scale in their classes, rating themselves on each item using a 0 to 4 range. The scale was acceptably reliable in this administration, demonstrating a Cronbach's alpha of .87 (M = 39.4, SD = 13.6). Subjects were assigned to groups of high or low embarrassability by a median split, with those scoring 40 or higher being considered more embarrassable.[1]

The expressed rationale of the study closely replicated Experiment 1. After providing their consent, same-sex pairs of subjects were randomly assigned to either a *cooperation* or *competition* condition. All subjects were presented with a prisoner's dilemma game labeled "Beat the Bank" that provided them 10 separate trials on which they could choose to cooperate or compete with each other. Their instructions thoroughly introduced them to the game, demonstrated the clear advantages (if they were to beat the bank) of mutual cooperation, and explicitly made cooperation the normative strategy. The subjects were then placed in separate rooms where they recorded their choices for each trial. On each occasion, the experimenter obtained a subject's cooperative or competitive choice, provided generally fictitious feedback about the other subject's choice for that trial, calculated a running total of scores for both subjects and the bank, and then obtained the subject's next choice. The subjects maintained personal score sheets listing their and the other subject's choices and the relevant scores. The other subject's ostensible choices that were reported by the experimenter manipulated the conditions of interaction between the subjects. In the cooperation condition, subjects were told that their counterparts made consistently cooperative choices; in all but one case, the subjects reciprocated with cooperative choices, providing the two players with equally high scores and cleaning out the bank. In contrast, subjects in the competition condition learned that their partners had made competitive choices on 7 of the 10 trials. In every case, this meant that the two players failed to "beat the bank" and (because the other subject had initiated the competition, exploiting them at least once) that the subjects had personally lost the game, receiving lower scores than their opponents. Thus unlike Experiment 1 in which mild competition was dictated by the experimenter, subjects were faced with a rival who boldly chose to exploit them, rather than cooperate as an equal.

Thereafter, the subjects were randomly assigned to either actor or observer roles. Observers again watched from an adjacent room as the actors performed Apsler's (1975) embarrassing tasks, all reading the

[1] Embarrassability was also treated as a continuous covariate in analyses of covariance (ANCOVAs) in this study. However, as the Results section will show, embarrassability interacted with the independent variables on some measures, violating the assumption of homogeneity of regression slopes and necessitating separate regression coefficients for each level of the independent variables. For ease of presentation, analyses based on a median split (which closely support the more precise ANCOVAs) will be described here.

Table 5
Actors' and Observers' Self-Reports of Embarrassment

Subject's role	Embarrassability	
	Low	High
Actor	5.5_{ab}	6.4_{ad}
Observer	3.3_{bc}	5.5_{cd}

Note. Means with the same single-letter subscript differ by at least $p < .05$.

empathy-inducing instructions that urged them to concentrate on the actors' feelings. The galvanic skin response of the observers was recorded on a Narco-Bio physiograph during the tasks. After the actors' performances, both actors and observers again rated their embarrassment, and in keeping with the study's cover story, observers provided detailed impressions of the actors by rating them on fifteen 9-point bipolar adjective scales. The subjects were then thanked and fully debriefed.

The study was thus a 2 × 2 × 2 × 2 factorial design including embarrassability (high or low), prior interaction (cooperative or competitive), subject role (actor or observer), and subject sex. Because the greater potency of the embarrassing tasks was amply demonstrated by the first study, no unembarrassed control group was included in Experiment 2.

Results

Actors and Observers Compared

Both actors and observers reported the extent of their embarrassment during the tasks on Modigliani's (1971) four 8-point bipolar adjective scales. A four-way analysis of these responses revealed main effects of the subjects' roles, $F(1, 126) = 29.45$, $p < .001$, and embarrassability, $F(1, 126) = 32.04$, $p < .001$, and an interaction of embarrassability and role, $F(1, 126) = 5.46$, $p < .02$, shown in Table 5. In general, the embarrassment of the observers was less intense than that of the actors; once again, empathic embarrassment was a weaker form of abashment than that suffered by the embarrassed actors themselves. However, the subjects' susceptibility to embarrassment substantially influenced their experiences, whether they were performing the tasks, $F(1, 138) = 6.35$, $p < .02$, or merely watching them, $F(1, 138) = 42.12$, $p < .001$. Simple effects tests indicated that all the comparisons between means in Table 5 were significant, but embarrassability may have been particularly important in the observers, who reported much stronger reactions if they were highly embarrassable. Further analysis revealed that whereas the embarrassability of the actors was significantly correlated with the extent of their personal embarrassment ($r = .26$, $p < .05$), the embarrassability of the observers was more highly correlated ($r = .54$, $p < .01$) with their empathic embarrassment, $t(68) = 2.42$, $p < .01$. As a mild form of embarrassment that does not threaten our own social identities, empathic embarrassment may be especially determined by our chronic susceptibilities to embarrassment. Indeed, all of us probably know the chagrin of personal embarrassment, but some minimum level of embarrassability may be needed for us to experience the lesser distress of empathic embarrassment.

Correlations

By finding that observers' empathic embarrassment was correlated with their perceptions of the extent of others' embarrassment, Experiment 1 raised the question of whether observers were empathically responding to real emotional displays by those others. Experiment 2 provided further data on this point. The link between the observers' perceptions and their emotional reactions was replicated; the more embarrassed the observers believed the actors to be, the more empathic embarrassment they experienced ($r = .56$, $p < .001$). However, further analyses revealed that the observers' judgments of the actors' feelings were only moderately correlated ($r = .23$, $p < .02$) with the actors' own ratings of their embarrassment, and the observers' empathic embarrassment was not at all correlated with the actors' self-reported embarrassment ($r = .05$)! The observers were clearly reacting more to their judgments of the actors' experiences than to the actors' own perceptions of what they were feeling, suggesting that empathic embarrassment may well occur even when actors are not objectively embarrassed.

Observers' Responses

Three-way analyses (excluding subject role) were conducted on the dependent variables that were unique to the observers. Despite the more involved manipulation, prior cooperation or competition between the actors and observers did not differentially affect self-reported empathic embarrassment.

Ratings of the actor. Observers reported their impressions of the actors on fifteen 9-point bipolar adjective scales (e.g., warm–cold, immature–mature, intelligent–unintelligent). Although it did not influence empathic embarrassment, the prior interaction between actor and observer did influence the observers' impressions, $F(1, 68) = 9.14$, $p < .01$. Cooperative actors were judged more favorably ($M = 7.3$) than those who had seemed competitive ($M = 6.3$).

Autonomic responses: Galvanic skin response. A measure of the observers' physiological reactivity was again obtained by computing the mean number of significant shifts (greater than 10 mV/s) in galvanic skin response occurring within 30-s intervals during the actors' tasks. Analysis of this measure demonstrated a main effect of embarrassability, $F(1, 68) = 8.70$, $p < .01$. Highly embarrassable observers exhibited greater autonomic arousal ($M = 7.2$) than did their less embarrassable counterparts ($M = 5.0$). Observers who had cooperated with the actors exhibited slightly greater reactivity ($M = 6.5$) to the actors' predicaments than did those who had competed with the actors ($M = 5.3$), but this effect was nonsignificant ($p < .08$). Thus the observers' emotional responses to the actors' embarrassments did not mirror their evaluations of the actors; competitive actors were evaluated less positively than cooperative actors, but there were no reliable effects of prior interaction on the observers' autonomic responses or their self-reported empathic embarrassment.

Discussion

The results clearly demonstrate the impact of embarrassability on empathic embarrassment. Highly embarrassable observ-

ers considered the actors to be more embarrassed, reported more empathic embarrassment, and exhibited greater physiological reactivity than did observers of lesser embarrassability. Moreover, embarrassability was more closely linked to the empathic embarrassment of the observers than it was to the personal embarrassment of the actors. Indeed, because empathic embarrassment seems to be a milder experience than the personal embarrassment that follows threats to one's own social identity, it may be more heavily influenced by individual differences. Some public pratfalls are probably so disastrous that they would embarrass anyone, whatever one's susceptibility to embarrassment. But someone else's embarrassment probably exerts less situational pressure, allowing subtle differences in experience, perception, and disposition to have more effect.

One experience that does influence empathic embarrassment is prior interaction between an observer and the embarrassed target. Experiment 2 evidently manipulated two different kinds of prior (cooperative or competitive) interaction with some success; the observers' evaluative judgments of the actors were influenced by the nature of interaction they had had, and they exhibited somewhat more physiological responsiveness to the embarrassment of cooperative partners than to competitive rivals. Empathic embarrassment was unaffected by the nature of the prior interaction, however. Past competition did not reduce empathic embarrassment, suggesting that within the situations examined in these studies, any history of interdependency between actor and observer, whether positive or negative, is likely to foster empathic embarrassment.

General Discussion

Both studies demonstrate the existence of empathic embarrassment, embarrassment felt with another even though the other's actions do not reflect upon oneself. The phenomenon has heretofore largely been overlooked in analyses of embarrassment, but it is especially noteworthy because it provides a focal point for the integration of personality and social psychology. Empathic embarrassment is influenced by the cognitive set of the observer; it is minimized by detached, dispassionate objectivity and enhanced by compassionate empathy. As a result, it exemplifies the difference between "hot" and "cool" social cognition. Moreover, empathic embarrassment depends heavily on observers' judgments of what they're seeing; indeed, it may depend more on observers' perceptions of their circumstances than on the factual reality the observers face, though this issue needs further study.

Empathic embarrassment is also influenced by the past relationship of an actor and observer. We are less affected by the embarrassment of relative strangers, whether because their feelings are less salient to us or because they create fewer problems for us to resolve. Whatever the case, past familiarity with other people, whether desirable or undesirable, may increase our reaction to their embarrassment.

Finally, empathic embarrassment chronically affects some people more than others. Dispositional embarrassability substantially determines how strong one's empathic embarrassment will be, and it may play an even stronger role in empathic embarrassment than in the embarrassment that follows one's own social miscues. Thus social cognition, interactional processes, and personality are all essential components in the experience of, and study of, empathic embarrassment.

Theoretically, the two studies demonstrate that embarrassing circumstances need not always involve direct threats to one's social identity, a point past studies have overlooked. For instance, in a persuasive comparison of different social anxieties, Schlenker and Leary (1982) suggested that embarrassment is an emotion that troubles us after we have met with failure in impression management (whereas shyness, for instance, refers to our fear that we soon will encounter trouble). However, the present results argue that Schlenker and Leary's and others' (e.g., Goffman, 1956; Edelmann, 1985) focus on an embarrassed actor's self-presentational dilemma is too narrow, obscuring some of the power of this social phenomenon. One person's embarrassment may affect all others present, not only by disrupting the predictable flow of interaction but also by embarrassing those others as well. The maintenance of proper conduct in social interaction seems to be such a central concern and such a precarious undertaking that envisioning ourselves in the place of embarrassed others—even if we are innocent bystanders—may cause us to suffer empathic embarrassment.

To understand fully this phenomenon, we may ultimately have to document the nature of our socialization, because, as Buss (1980) suggested, some cultures may make empathic embarrassment more likely than others. As a state based on knowledge of normative social conduct and experience with past social transgressions, empathic embarrassment is no doubt fundamentally influenced by a person's enculturation. This much is clear: Individual differences in embarrassability do affect a person's response to others' embarrassments, but such responses also depend on transient situational influences, such as the observer's perspective, and the existence of prior interaction between actor and observer. Personal and situational variables jointly determine empathic embarrassment, but the mere existence of the state testifies to the importance of the larger lesson of social psychology; we are very social animals, greatly affected by the behavior and feelings of our fellows.

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