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Empathic Embarrassment Responses While Viewing Romantic-Rejection and General Embarrassment Situations

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EMPATHIC EMBARRASSMENT RESPONSES WHILE VIEWING
ROMANTIC-REJECTION AND GENERAL EMBARRASSMENT SITUATIONS

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Giuliana L. Garbini

December 2011

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ABSTRACT

EMPATHIC EMBARRASSMENT RESPONSES WHILE VIEWING ROMANTIC-REJECTION AND GENERAL EMBARRASSMENT SITUATIONS

by Giuliana L. Garbini

Empathic embarrassment occurs when an observer experiences embarrassment while viewing another person in an embarrassing situation. It was hypothesized that the type of embarrassment situation, the prior information provided about an embarrassed protagonist, perceived similarity to an embarrassed protagonist, ability to relate to an embarrassed protagonist, and embarrassability would influence empathic embarrassment responses. Participants ($N = 208$) either read a vignette containing general or specific information about a female embarrassed protagonist or received no prior information about her. They watched an embarrassment situation (romantic-rejection or general) featuring this protagonist and reported their empathic embarrassment responses. They then rated how similar they felt to the protagonist and how able they were to relate to her. Their embarrassability was also assessed. It was found that the general embarrassment situation evoked stronger empathic embarrassment responses than the romantic-rejection embarrassment situation. Further, the amount of prior information did not influence empathic embarrassment responses overall. High perceived similarity, high ability to relate, and high embarrassability all led to stronger empathic embarrassment responses for the romantic-rejection embarrassment situation. For the general embarrassment situation, however, these variables did not influence empathic embarrassment responses. Moreover, when embarrassability was taken into account, the difference in the empathic embarrassment responses between the embarrassment situations disappeared.

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Introduction

Empathic embarrassment is the phenomenon of an observer sharing the uncomfortable feelings of embarrassment with an individual in an embarrassing situation even though the observer is neither directly experiencing nor threatened by the embarrassment situation (Miller, 1987). That is, by merely watching someone in an embarrassment situation, observers become embarrassed themselves. Further, observers may experience empathic embarrassment even when the person in the embarrassment situation is not overtly embarrassed. This may be the result of observers imagining themselves in the observed situation; thus, the resulting empathic embarrassment is the product of the embarrassment that they would feel if they themselves were in the situation. In this instance, it is the observed situation and not the observed person that leads to an embarrassment response. Therefore, empathic embarrassment may often be related more to the individual observing the situation than to the observed person's true level of embarrassment (Marcus & Miller, 1999).

Before continuing, a distinction between empathy and sympathy must be made. Sympathy is characterized by a feeling of compassion for a troubled individual; empathy, on the other hand, is characterized by the sharing of an emotional state with another person (Gruen & Mendelsohn, 1986). Therefore, in the case of empathic embarrassment, rather than feeling "sorry" for the embarrassed person, the observer actually experiences feelings of embarrassment. Although empathy and sympathy are distinct concepts, they are often seen together. However, although situations that produce empathic responses

often produce sympathetic responses as well, the opposite is not always true. That is, not all situations that produce sympathy also produce empathy. Therefore, although both sympathy and empathy appear to be idiosyncratic responses, empathic responses appear to be more variable among individuals. Researchers have shown that individuals differ in their empathic responses and that all individuals experience empathy to varying degrees (e.g., Davis, 1983). It appears that both personality factors (e.g., the observer's ability to take on other points of view) and situational factors (e.g., the observed individual's reactions during the embarrassment situation) affect empathic responses. Furthermore, observers are more likely to experience empathic responses, both negative and positive, when similar to the observed individual (Krebs, 1975). Perceived similarity may lead to observers identifying more with the observed individual and thus may facilitate observers' abilities to imagine themselves in the perceived situation.

Research focusing on empathic embarrassment has been limited. In fact, only three empirical studies could be found in the literature. In two of these studies, an observer's empathic embarrassment responses were assessed while viewing another individual perform either an embarrassing task (e.g., dancing to recorded pop music; Miller, 1987) or an innocuous task (e.g., counting the number of words sung during the same recorded music; Marcus, Wilson, & Miller, 1996). In a third study, the empathic embarrassment responses of college students were examined while viewing class presentations by their peers (Marcus & Miller, 1999). The underlying assumption behind these studies appeared to be that all highly embarrassing situations would produce the

same degree of empathic embarrassment in susceptible observers. However, as empathic embarrassment has been shown to be idiosyncratic, it is unlikely that all observers who are susceptible to empathic embarrassment would become personally embarrassed regardless of the type of embarrassment situation viewed. Further, the degree to which they experience empathic embarrassment may differ depending on the type of embarrassment situation.

In this study, it was proposed that empathic embarrassment responses would be stronger when viewing an embarrassment situation in which the embarrassment happens during a direct interaction with another person. For example, the strong interpersonal basis and possible prior familiarity of a romantic-rejection embarrassment situation could facilitate observers' identification with the observed individual and situation. This increased identification would in turn lead to a stronger empathic response. Therefore, it was hypothesized that the empathic embarrassment responses to a romantic-rejection embarrassment situation would be stronger than the empathic embarrassment responses to a general embarrassment situation (i.e., an embarrassment situation without direct interpersonal interaction).

It was further hypothesized that empathic embarrassment responses would be related to the information known about the embarrassed protagonist. When no prior information about the embarrassed protagonist was provided, the empathic embarrassment responses were expected to be limited for both the romantic-rejection embarrassment situation and the general embarrassment situation. Nevertheless, the

empathic embarrassment responses were predicted to remain stronger for the romantic-rejection embarrassment situation than for the general embarrassment situation. When provided with general prior information about the embarrassed protagonist (e.g., name, age), it was predicted that stronger empathic embarrassment responses would be experienced in regard to the romantic-rejection embarrassment situation than to the general embarrassment situation. It was expected that when provided with specific prior information about the embarrassed protagonist (e.g., personal history), stronger empathic embarrassment responses would be experienced for both the romantic-rejection embarrassment situation and the general embarrassment situation. Nonetheless, the empathic embarrassment responses would remain stronger for the romantic-rejection embarrassment situation than for the general embarrassment situation.

As previously stated, observers are more likely to experience empathic responses when similar to the observed individual (Krebs, 1975). Thus, it was predicted that perceptions of similarity and relatability toward the embarrassed protagonist would lead to observers experiencing stronger empathic embarrassment responses, as these perceptions may facilitate the ability to picture oneself in the embarrassment situation.

An observer's own embarrassability also influences his or her empathic response. Embarrassability is the extent to which an individual is prone to becoming embarrassed (Modigliani, 1968). Individuals differ widely in this trait. An individual displaying high embarrassability becomes embarrassed with minimal provocation and experiences embarrassment in situations that could objectively be considered as being mild.

Conversely, an individual displaying low embarrassability does not become embarrassed even in situations that could be perceived as being quite threatening to one's self-concept. Researchers have consistently shown that individuals who are easily embarrassed themselves are more likely to experience empathic embarrassment (e.g., Marcus & Miller, 1999; Marcus et al., 1996; Miller, 1987). In line with this prior research, it was hypothesized that those with high embarrassability would experience stronger empathic embarrassment responses than those with low embarrassability.

Method

Participants

The experiment had a sample size of 208 participants. As participants were recruited from the San Jose State University Psychology 1 class, the sample was a convenience sample. However, as the empathic embarrassment aspect of the study was not made explicit upon recruitment—participants were only told that their reactions to a video clip would be assessed—there was no reason to believe that those who chose to participate would be different from those who did not choose to participate in their empathic embarrassment responses. Demographic information (i.e., gender, sexual orientation, ethnicity, age) was collected. Of the sample, 136 were female and 72 were male. In addition, 93.3% of participants identified themselves as heterosexual, 5.3% as gay men or lesbians, and 1.4% as bisexual. With regard to ethnicity, 39.9% were Asian or Pacific Islander, 22.6% Caucasian, 18.3% Latino or Chicano, 6.7% African American, 8.2% multiracial, and 4.3% listed their ethnicity as Other. The majority of the sample was between the ages of 18 and 19 (73.6%); 17.8% were 20 or 21, 4.3% were 22 or 23, 1.9% were 24 or 25, and 2.4% were over the age of 25. Participants signed a form consenting to the study and were assured of anonymity.

Materials

Two video clips were chosen: one representing a romantic-rejection embarrassment situation and another representing a general embarrassment situation. The video clips were edited from prime-time television programs, and both featured a

female as the embarrassed protagonist. The romantic-rejection embarrassment situation featured a young woman asking the object of her romantic interests if he likes her; after a long, tense pause, he responded with a cold "no." The general embarrassment situation featured a young woman trying out for her high school's cheer squad; her inept performance was punctuated with a botched cartwheel. Both video clips were three minutes in length. Further, both embarrassment situations occurred in the presence of one or more individuals. The romantic-rejection embarrassment situation occurred in the presence of the male romantic interest. The general embarrassment situation occurred in the presence of a small group of female and male high school students.

Three versions of each video were made. The first contained a general prior information vignette about the embarrassed protagonist, the second contained a specific prior information vignette about the embarrassed protagonist, and the third did not contain any prior information vignette about the embarrassed protagonist. The general prior information vignette included the embarrassed protagonist's name, age, occupation, ethnicity, and physical characteristics. In addition to all of the information contained within the general prior information vignette, the specific prior information vignette included the embarrassed protagonist's personal history, desires, fears, insecurities, and strengths. The same information was presented for both embarrassed protagonists, with only a few character-appropriate details modified to fit each protagonist (e.g., name, age).

Measures

Empathic embarrassment responses. The extent to which participants

experienced empathic embarrassment was measured with a self-report of their reactions to the video using four, 8-point bipolar adjective scales (i.e., ease–self-conscious, calm–flustered, poised–awkward, unembarrassed–embarrassed). A mean score of these scales could range from 1 to 8, with a low mean score indicating low empathic embarrassment and a high mean score indicating high empathic embarrassment. These adjective scales have been used in previous studies that assessed empathic embarrassment responses (e.g., Apsler, 1975; Marcus et al., 1996; Miller, 1987), and the mean score on these scales has been comparable to scores on items that explicitly ask for observers to rate their empathic embarrassment (Miller, 1987). In this study, internal consistency for this scale was shown to be adequate for assessing the participants' empathic embarrassment responses for both the romantic-rejection embarrassment situation ($\alpha = .85$) and the general embarrassment situation ($\alpha = .91$).

Perceived similarity to the embarrassed protagonist. The extent to which participants perceived themselves to be similar to the embarrassed protagonist was measured using a single item ("How similar did you feel to the female character?") and a 5-point Likert-type scale. A rating on this scale could range from 1 to 5, with 1 = *not at all* and 5 = *very much*. A low rating on this scale indicated low perceived similarity to the embarrassed protagonist and a high rating indicated high perceived similarity to the embarrassed protagonist.

Ability to relate to the embarrassed protagonist. The extent to which participants were able to relate to the embarrassed protagonist was measured using a

single item ("How much could you relate to the female character?") and a 5-point Likert-type scale. A rating on this scale could range from 1 to 5, with 1 = *not at all* and 5 = *very much*. A low rating on this scale indicated low ability to relate to the embarrassed protagonist and a high rating indicated high ability to relate to the embarrassed protagonist.

Embarrassability. The extent to which participants are susceptible to embarrassment was assessed using Modigliani's (1968) 26-item Embarrassability Scale, which included a wide array of embarrassment situations. The items on this scale included embarrassment situation scenarios such as "Suppose you were muttering aloud to yourself in an apparently empty room and discovered someone else was present" and "Suppose your mother had come to visit you and was accompanying you to all your classes." Participants rated how embarrassed they would feel in each embarrassment situation on a 5-point Likert-type scale, with 1 = *I would not feel the least embarrassed; not awkward or uncomfortable at all* and 5 = *I would feel strongly embarrassed; extremely self-conscious, awkward, and uncomfortable*. A mean score on this scale could range from 1 to 5, with a low mean score indicating low embarrassability and a high mean score indicating high embarrassability. Internal consistency for this scale was shown to be adequate for both the romantic-rejection embarrassment situation ($\alpha = .90$) and the general embarrassment situation ($\alpha = .89$).

Procedure

Participants were randomly assigned to one of six conditions: romantic-rejection

embarrassment situation with general prior information; romantic-rejection
embarrassment situation with specific prior information; romantic-rejection
embarrassment situation with no prior information; general embarrassment situation with
general prior information; general embarrassment situation with specific prior
information; or general embarrassment situation with no prior information. Participants
watched their condition's respective video clip in groups of five to seven. Prior to
viewing the video, a questionnaire had been placed face down in front of participants.
Participants were instructed to turn over the questionnaire when prompted by the video
and to follow the printed directions. The directions asked participants to truthfully report
their current emotional state using the nine 8-point bipolar adjective scales assessing
empathic embarrassment responses. In addition, participants assessed how similar they
felt to the embarrassed protagonist and how much they could relate to her. Participants
then completed Modigliani's (1968) Embarrassability Scale. For the last portion of the
questionnaire, participants provided demographic information. Upon completion,
participants were debriefed and excused from the lab.

Results

Embarrassment Situation, Prior Information About the Embarrassed Protagonist, and Empathic Embarrassment Responses

To determine the roles that embarrassment situation and prior information about the embarrassed protagonist played in the expression of empathic embarrassment, participants who viewed either the romantic-rejection embarrassment situation or the general embarrassment situation and who were presented with general prior information, specific prior information, or no prior information about the embarrassed protagonist were compared. It was hypothesized that the romantic-rejection embarrassment situation would lead to stronger empathic embarrassment responses than the general embarrassment situation. It was further predicted that the more information provided about the embarrassed protagonist, the stronger the empathic embarrassment responses would be. To test these hypotheses, a two-factor between subjects analysis of variance (ANOVA) was conducted with embarrassment situation (romantic-rejection embarrassment situation, general embarrassment situation) and prior information about the embarrassed protagonist (general prior information, specific prior information, no prior information) as the independent variables and empathic embarrassment responses as the dependent variable (see Table 1).

Table 1

Embarrassment Situation x Prior Information About the Embarrassed Protagonist
Two-Factor Between Subjects ANOVA for Empathic Embarrassment Responses

Source	SS	df	MS	F	p
(A) Embarrassment situation	29.20	1	29.20	9.25	.003
(B) Prior information	10.00	2	5.00	1.58	.21
A x B (interaction)	0.62	2	0.31	0.10	.91
Error	637.83	202	3.16		
Total	676.19	207	3.27		

The overall main effect for embarrassment situation was significant ($p = .003$, $\eta_p^2 = .04$), but contrary to predictions, participants expressed stronger empathic embarrassment responses while viewing the general embarrassment situation ($M = 4.39$, $SD = 1.85$) than while viewing the romantic-rejection embarrassment situation ($M = 3.67$, $SD = 1.71$).

The main effect for prior information about the embarrassed protagonist, however, was not significant ($p = .21$, $\eta_p^2 = .02$). There were no significant overall differences among the empathic embarrassment responses for those presented with general prior information ($M = 3.73$, $SD = 1.86$), specific prior information ($M = 4.19$, $SD = 1.75$), and no prior information ($M = 4.10$, $SD = 1.79$). Further, the interaction between embarrassment situation and prior information about the embarrassed protagonist was not significant, $F < 1$, $\eta_p^2 = .0009$.

To see whether empathic embarrassment responses differed between the romantic-rejection embarrassment situation group and the general embarrassment situation group depending on the prior information provided about the embarrassed protagonist, main comparisons for embarrassment situation at each level of prior information about the embarrassed protagonist were performed (see Figure 1).

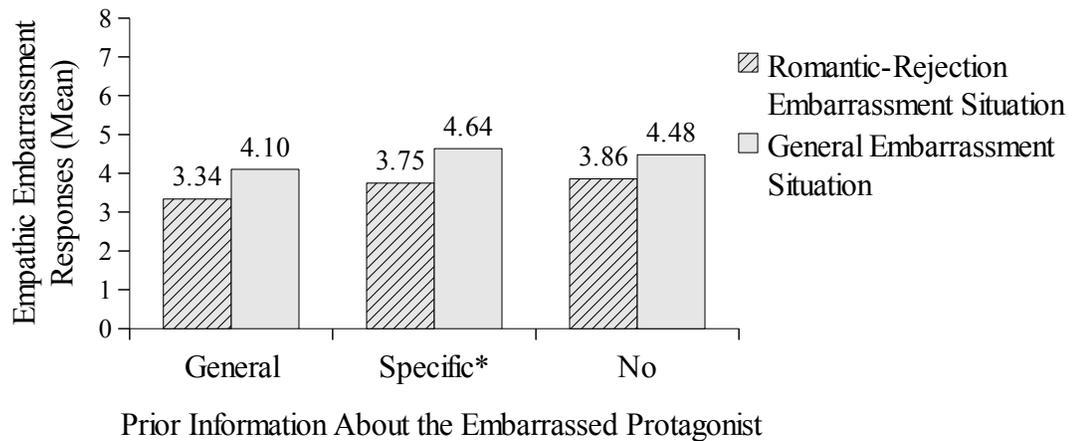


Figure 1. Main comparisons of embarrassment situation at prior information about the embarrassed protagonist for empathic embarrassment responses.

Note. *difference between means significant at $p = .042$

It was hypothesized that stronger empathic embarrassment responses would be experienced by those who viewed the romantic-rejection embarrassment situation than by those who viewed the general embarrassment situation, with the amount of prior information provided about the embarrassed protagonist increasing these empathic embarrassment responses. The main comparison for embarrassment situation at general prior information approached statistical significance, $F(1, 202) = 3.13, p = .079, \eta_p^2 = .01$, suggesting that the general prior information presented may have enhanced the empathic embarrassment responses to a greater extent for the general embarrassment situation ($M = 4.10, SD = 1.95$) than for the romantic-rejection embarrassment situation ($M = 3.34, SD = 1.71$). Further, it was found that participants who received specific prior information expressed stronger empathic embarrassment responses in the general

embarrassment situation ($M = 4.64$, $SD = 1.78$) than in the romantic-rejection embarrassment situation ($M = 3.75$, $SD = 1.63$), $F(1, 202) = 4.19$, $p = .042$, $\eta_p^2 = .02$. Participants who received no prior information did not differ significantly in their empathic embarrassment responses between the general embarrassment situation ($M = 4.48$, $SD = 1.81$) and the romantic-rejection embarrassment situation ($M = 3.86$, $SD = 1.76$), $F(1, 202) = 1.67$, $p = .20$, $\eta_p^2 = .007$. In sum, specific prior information—and to some extent, general prior information—enhanced the empathic embarrassment responses for those who viewed the general embarrassment situation in comparison to those who viewed the romantic-rejection embarrassment situation. However, when presented with no prior information, no significant differences between the embarrassment situations were found.

Perceived Similarity to the Embarrassed Protagonist, Embarrassment Situation, and Empathic Embarrassment Responses

To determine the role that perceived similarity played in the expression of empathic embarrassment, participants with low perceived similarity to the embarrassed protagonist and participants with high perceived similarity to the embarrassed protagonist were compared for the embarrassment situations. For these analyses, low perceived similarity was defined as a rating of 1 or 2 on the item assessing participants' perceived similarity to the embarrassed protagonist. Further, high perceived similarity was defined as a rating of 4 or 5 on this item. Because of these rating restrictions, the sample size for these analyses was reduced to $n = 146$. It was hypothesized that participants who

perceived themselves as being similar to the embarrassed protagonist would experience stronger empathic embarrassment responses. To test this hypothesis, a two-factor between subjects ANOVA was conducted with perceived similarity to the embarrassed protagonist (low perceived similarity, high perceived similarity) and embarrassment situation (romantic-rejection embarrassment situation, general embarrassment situation) as the independent variables and empathic embarrassment responses as the dependent variable (see Table 2).

Table 2
Perceived Similarity to the Embarrassed Protagonist x Embarrassment Situation
Two-Factor Between Subjects ANOVA for Empathic Embarrassment Responses

Source	SS	df	MS	F	p
(A) Perceived similarity	56.19	1	56.19	21.22	< .001
(B) Embarrassment situation	26.71	1	26.71	10.09	.002
A x B (interaction)	6.47	1	6.47	2.44	.12
Error	375.99	142	2.65		
Total	466.74	145	3.22		

As hypothesized, the overall main effect for perceived similarity to the embarrassed protagonist was significant ($p < .001$, $\eta_p^2 = .12$). Participants who had high perceived similarity experienced stronger empathic embarrassment responses ($M = 4.69$, $SD = 1.55$) than those who had low perceived similarity ($M = 3.52$, $SD = 1.80$). Taking perceived similarity to the embarrassed protagonist into account, the previously found overall main effect for embarrassment situation remained significant ($p = .002$, $\eta_p^2 = .06$), with the participants in the general embarrassment situation group overall experiencing stronger empathic embarrassment responses ($M = 4.39$, $SD = 1.85$) than the participants in the

romantic-rejection embarrassment situation group ($M = 3.67$, $SD = 1.71$). The interaction between perceived similarity to the embarrassed protagonist and embarrassment situation was not significant ($p = .12$, $\eta_p^2 = .01$).

To see whether perceived similarity to the embarrassed protagonist played a role in the empathic embarrassment responses between the romantic-rejection embarrassment situation and the general embarrassment situation groups, main comparisons for perceived similarity to the embarrassed protagonist at each embarrassment situation were performed (see Figure 2).



Figure 2. Main comparisons of perceived similarity to the embarrassed protagonist at embarrassment situation for empathic embarrassment responses.

Note. *difference between means significant at $p < .001$

It was hypothesized that for both embarrassment situations, those who perceived their embarrassed protagonist as being more similar to them would experience stronger empathic embarrassment responses. As hypothesized, those in the romantic-rejection

embarrassment situation who had high perceived similarity experienced stronger empathic embarrassment responses ($M = 4.53, SD = 1.35$) than those who had low perceived similarity ($M = 2.77, SD = 1.55$), $F(1, 142) = 23.21, p < .001, \eta_p^2 = .13$. On the other hand, for the general embarrassment situation, there were no significant differences in the empathic embarrassment responses for those with low perceived similarity ($M = 4.12, SD = 1.77$) and those with high perceived similarity ($M = 4.99, SD = 1.86$), $F(1, 142) = 1.09, p = .30, \eta_p^2 = .006$. In sum, perceived similarity to the embarrassed protagonist influenced the empathic embarrassment responses for the romantic-rejection embarrassment situation, but did not significantly affect the empathic embarrassment responses for the general embarrassment situation.

Ability to Relate to the Embarrassed Protagonist, Embarrassment Situation, and Empathic Embarrassment Responses

To determine the role that ability to relate to the embarrassed protagonist played in the expression of empathic embarrassment, participants with low ability to relate to the embarrassed protagonist and participants with high ability to relate to the embarrassed protagonist were compared for the embarrassment situations. For these analyses, low ability to relate was defined as a rating of 1 or 2 on the item assessing participants' ability to relate to the embarrassed protagonist. Further, high ability to relate was defined as a rating of 4 or 5 on this item. Because of these rating restrictions, the sample size for these analyses was reduced to $n = 147$. It was hypothesized that participants who were able to relate to the embarrassed protagonist would experience stronger empathic

embarrassment responses. To test this hypothesis, a two-factor between subjects ANOVA was conducted with ability to relate to the embarrassed protagonist (low ability to relate, high ability to relate) and embarrassment situation (romantic-rejection embarrassment situation, general embarrassment situation) as the independent variables and empathic embarrassment responses as the dependent variable (see Table 3).

Table 3
Ability to Relate to the Embarrassed Protagonist x Embarrassment Situation Two-Factor Between Subjects ANOVA for Empathic Embarrassment Responses

Source	SS	df	MS	F	p
(A) Ability to relate	41.27	1	41.27	14.45	< .001
(B) Embarrassment situation	17.82	1	17.82	6.24	.014
A x B (interaction)	2.44	1	2.44	0.85	.36
Error	408.53	143	2.86		
Total	458.73	146	3.14		

As hypothesized, the overall main effect for ability to relate to the embarrassed protagonist was significant ($p < .001$, $\eta_p^2 = .09$), with participants who had high ability to relate experiencing stronger empathic embarrassment responses ($M = 4.34$, $SD = 1.67$) than those who had low ability to relate ($M = 3.43$, $SD = 1.77$). When taking ability to relate to the embarrassed protagonist into account, the previously found overall main effect for embarrassment situation remained significant ($p = .014$, $\eta_p^2 = .04$), with the participants in the general embarrassment situation group overall experiencing stronger empathic embarrassment responses ($M = 4.39$, $SD = 1.85$) than the participants in the romantic-rejection embarrassment situation group ($M = 3.67$, $SD = 1.71$). Further, the interaction between ability to relate to the embarrassed protagonist and embarrassment

situation was not significant, $F < 1$, $\eta_p^2 = .005$.

To see whether the ability to relate to the embarrassed protagonist played a role in the empathic embarrassment responses between the romantic-rejection embarrassment situation and the general embarrassment situation groups, main comparisons for ability to relate to the embarrassed protagonist at each embarrassment situation were performed (see Figure 3).

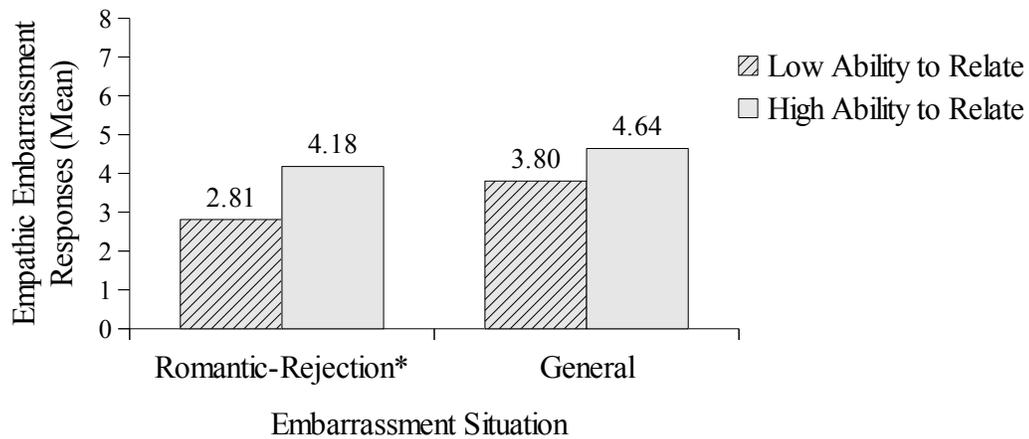


Figure 3. Main comparisons of ability to relate to the embarrassed protagonist at embarrassment situation for empathic embarrassment responses.

Note. *difference between means significant at $p = .005$

It was hypothesized that for both embarrassment situations, those who were able to relate to their embarrassed protagonist would experience stronger empathic embarrassment responses. As hypothesized, those in the romantic-rejection embarrassment situation who had high ability to relate experienced stronger empathic embarrassment responses ($M = 4.18$, $SD = 1.55$) than those who had low ability to relate ($M = 2.81$, $SD = 1.53$),

$F(1, 143) = 8.30, p = .005, \eta_p^2 = .05$. On the other hand, for the general embarrassment situation, there were no significant differences in the empathic embarrassment responses for those with low ability to relate ($M = 3.80, SD = 1.82$) and those with high ability to relate ($M = 4.64, SD = 1.86$), $F(1, 143) = 2.66, p = .11, \eta_p^2 = .02$. In sum, the ability to relate to the embarrassed protagonist influenced the empathic embarrassment responses for the romantic-rejection embarrassment situation, but did not significantly affect the empathic embarrassment responses for the general embarrassment situation.

Embarrassability, Embarrassment Situation, and Empathic Embarrassment Responses

To determine the role that embarrassability played in the expression of empathic embarrassment, participants with low embarrassability and participants with high embarrassability were compared for the embarrassment situations. For these analyses, low embarrassability was defined as a Modigliani's (1968) Embarrassability Scale mean score less than or equal to 2.50. Further, high embarrassability was defined as a mean score greater than or equal to 3.50. Because of these mean score restrictions, the sample size for these analyses was reduced to $n = 87$. It was hypothesized that regardless of whether they viewed the romantic-rejection embarrassment situation or the general embarrassment situation, those with high embarrassability would express stronger empathic embarrassment responses than those with low embarrassability. To test this hypothesis, a two-factor between subjects ANOVA was conducted with embarrassability (low embarrassability, high embarrassability) and embarrassment situation

(romantic-rejection embarrassment situation, general embarrassment situation) as the independent variables and empathic embarrassment responses as the dependent variable (see Table 4).

Table 4
Embarrassability x Embarrassment Situation Two-Factor Between Subjects ANOVA for Empathic Embarrassment Responses

Source	SS	df	MS	F	p
(A) Embarrassability	30.94	1	30.94	10.37	.002
(B) Embarrassment situation	7.52	1	7.52	2.52	.12
A x B (interaction)	3.86	1	3.86	1.29	.26
Error	247.54	83	2.98		
Total	301.96	86	3.51		

The overall main effect for embarrassability was significant ($p = .002$, $\eta_p^2 = .10$). As predicted, those with high embarrassability exhibited stronger empathic embarrassment responses ($M = 4.92$, $SD = 1.67$) than those with low embarrassability ($M = 3.52$, $SD = 1.81$). Moreover, when embarrassability was taken into account, the overall main effect for embarrassment situation was not significant ($p = .12$, $\eta_p^2 = .02$), with no significant differences in participants' empathic embarrassment responses between the romantic-rejection embarrassment situation group ($M = 3.47$, $SD = 1.67$) and the general embarrassment situation group ($M = 4.39$, $SD = 2.00$). Further, the interaction between embarrassability and embarrassment situation was not significant ($p = .26$, $\eta_p^2 = .01$).

To see whether embarrassability played a role in the empathic embarrassment responses between the romantic-rejection embarrassment situation and the general

embarrassment situation groups, main comparisons for embarrassability at each embarrassment situation were performed (see Figure 4).

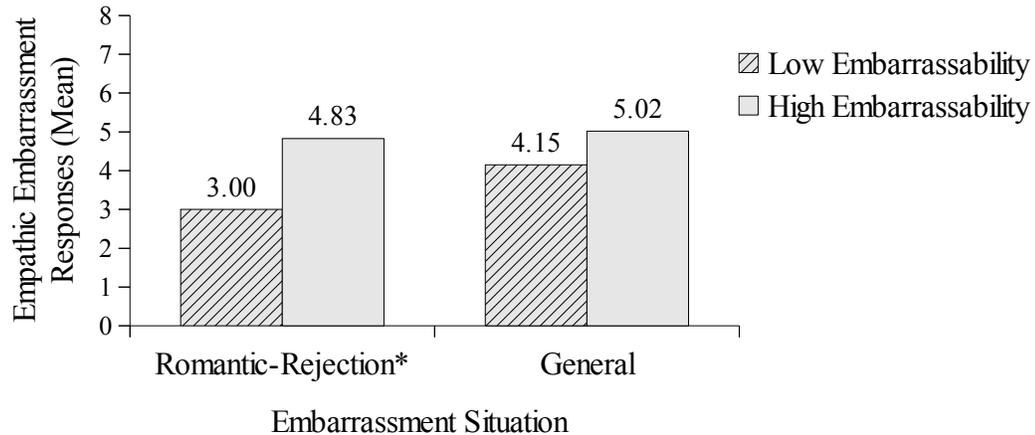


Figure 4. Main comparisons of embarrassability at embarrassment situation for empathic embarrassment responses.

Note. *difference between means significant at $p < .001$

In concordance with the prior research (e.g., Marcus & Miller, 1999; Marcus et al., 1996; Miller, 1987), it was predicted that high embarrassability would lead to stronger empathic embarrassment responses for both embarrassment situations. For the romantic-rejection embarrassment situation, those with high embarrassability expressed stronger empathic embarrassment responses ($M = 4.83$, $SD = 1.55$) than those with low embarrassability ($M = 3.00$, $SD = 1.45$), $F(1, 83) = 15.49$, $p < .001$, $\eta_p^2 = .15$. For the general embarrassment situation, however, the main comparison of embarrassability was not significant, $F < 1$, $\eta_p^2 = .009$, with empathic embarrassment responses not differing significantly between those with low embarrassability ($M = 4.15$, $SD = 2.02$) and those

with high embarrassability ($M = 5.02$, $SD = 1.88$). In sum, embarrassability influenced the empathic embarrassment responses for the romantic-rejection embarrassment situation, but embarrassability did not significantly affect the empathic embarrassment responses for the general embarrassment situation.

Discussion

Although not all hypotheses were supported by the results, what was found provides much food for thought. Contrary to predictions, the romantic-rejection embarrassment situation did not elicit stronger empathic embarrassment responses than the general embarrassment situation. There are several factors that may have led to this result. Because of the complex nature of interpersonal relationships more context may have been needed leading up to the romantic-rejection scene for it to evoke a stronger empathic embarrassment response. It may not be feasible to illustrate the complexity of interpersonal relationships in just three minutes. Moreover, the embarrassment situation in the general embarrassment situation gradually built up during the clip. Conversely, the embarrassment in the romantic-rejection embarrassment situation occurred only at the end. Empathic embarrassment may be more intense and more noticeable to an observer when it steadily grows rather than when it comes on suddenly. Further, the general embarrassment situation could have been interpreted as leading to rejection by one's peers and not merely as embarrassing oneself in front of them.

Although the amount of prior information about the embarrassed protagonist was not found to influence empathic embarrassment responses overall, there were some interesting tendencies found when looking at its influences between the embarrassment situations. Specific information led to a significant difference in empathic embarrassment responses between the embarrassment situations. Likewise, there was a nonsignificant tendency for general information to increase the differences between the

embarrassment situations. In both these instances, the empathic embarrassment responses were increased in intensity for the general embarrassment situation to a greater extent than for the romantic-rejection embarrassment situation. However, there were no differences between the embarrassment situations when there was no prior information provided about the embarrassed protagonist.

As predicted, high perceived similarity to the embarrassed protagonist, high ability to relate to the embarrassed protagonist, and high embarrassability were found to increase the intensity of empathic embarrassment responses. However, these increases of intensity were only statistically significant for the romantic-rejection embarrassment situation. For the general embarrassment situation, perceived similarity to the embarrassed protagonist, ability to relate to the embarrassed protagonist, and embarrassability did not significantly influence empathic embarrassment responses. When perceived similarity to the embarrassed protagonist and ability to relate to the embarrassed protagonist were taken into account, the differences between the overall empathic embarrassment responses for the romantic-rejection embarrassment situation and for the general embarrassment situation were significant, with the general embarrassment situation eliciting stronger empathic embarrassment responses than the romantic-rejection embarrassment situation. However, when embarrassability was taken in account, this overall difference in empathic embarrassment responses between embarrassment situations disappeared.

As the empathic embarrassment literature is limited, the possibilities for future

research directions are vast. In regard to the study presented here, the first course of action could be to revise the embarrassment situations. Although the general embarrassment situation evoked empathic embarrassment responses, it is possible that it was not truly a "general" embarrassment situation, as it could have been seen as containing an implicit rejection element on an interpersonal level. Therefore, an unambiguous general embarrassment situation would need to be developed. Further, the romantic-rejection embarrassment situation would need to be lengthened and edited in such a way to create tension and build context prior to the romantic-rejection moment. As mentioned, the romantic-rejection embarrassment situation may have evoked more intense empathic embarrassment responses with a steady build in embarrassment like the general embarrassment situation. In addition, a longer and differently edited romantic-rejection embarrassment situation could provide more context to the interpersonal relationship between the embarrassed protagonist and the romantic interest.

Gender effects, regarding both the embarrassed protagonist and the observer, are another direction for future study. Similar embarrassment situations featuring both male embarrassed protagonists and female embarrassed protagonists could be developed and compared. For example, participants could be presented with scripted scenes containing gender-neutral names in which male and female actors switch roles for each condition. Further, the empathic embarrassment responses of male and female observers could be compared in general and in regard to whether the embarrassed protagonist is of the same or of the opposite gender. In addition, a romantic-rejection embarrassment situation in

which the embarrassed protagonist and the romantic interest are of the same sex could be developed.

Studies that use the same embarrassed protagonist in different types of embarrassment situations could be developed. Through this, factors relating to participants' perceptions of the embarrassed protagonist could be controlled across conditions. Further, the role that personal experience plays with the type of embarrassment situation could be studied, in that personal experience may lead to stronger feelings of empathy toward the embarrassed protagonist.

More in-depth measures of empathic embarrassment could be implemented. For example, physiological responses such as heart-rate and electrodermal activity (i.e., galvanic skin response) could be measured during the embarrassment situation. These responses could be compared to the self-reported measures of empathic embarrassment. In addition, free response data could be obtained from observers in which they describe what they were experiencing while watching the embarrassment situation. These data could be coded and analyzed for empathic embarrassment tendencies.

The implications of this study show that even when viewing a short embarrassment situation within a laboratory setting, feelings of empathic embarrassment can be experienced. It is not outside the realm of possibility that these feelings would be amplified in a real world setting. Further empathic embarrassment research is needed as there is much left to learn about this intriguing empathic response and its role in the human experience.

References

- Apsler, R. (1975). Effects of embarrassment on behavior toward others. *Journal of Personality and Social Psychology*, 32, 145-153.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 752-766.
- Gruen, R. J., & Mendelsohn, G. (1986). Emotional responses to affective displays of others: The distinction between empathy and sympathy. *Journal of Personality and Social Psychology*, 51, 609-614.
- Krebs, D. (1975). Empathy and altruism. *Journal of Personality and Social Psychology*, 85, 845-857.
- Marcus, D. K., & Miller, R. S. (1999). The perception of "live" embarrassment: A social relations analysis of class presentations. *Cognition and Emotion*, 13(1), 105-117.
- Marcus, D. K., Wilson, J. R., & Miller, R. S. (1996). Are perceptions of emotion in the eye of the beholder? A social relations analysis of judgments of embarrassment. *Personality and Social Psychology Bulletin*, 22(12), 1220-1228.
- Miller, R. S. (1987). Empathic embarrassment: Situational and personal determinants of reaction to the embarrassment of another. *Journal of Personality and Social Psychology*, 53(6), 1061-1069.
- Miller, R. S. (1992). The nature and severity of self-reported embarrassing circumstances. *Personality and Social Psychology Bulletin*, 18(2), 190-198.
- Miller, R. S. (1995). On nature of embarrassability: Shyness, social evaluation, and social skill. *Journal of Personality*, 63(2), 315-339.
- Modigliani, A. (1968). Embarrassment and embarrassability. *Sociometry*, 31, 313-326.