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Do blushing phobics overestimate the undesirable communicative effects of their blushing?

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Abstract

Previous research indicated that blushing has socially threatening revealing effects in ambiguous situations. To explain blushing phobics' fearful preoccupation with blushing, we tested the hypothesis that blushing fearful individuals overestimate its revealing effects. High ($n = 20$) and low ($n = 20$) blushing fearful individuals read vignettes describing prototypical mishaps and ambiguous social events. Participants were prompted in the perspective of the actor, and were asked to indicate their expectations of the observers' judgments (meta-perceptions). Blushing fearful individuals overestimated the probability and the costs of undesirable outcomes. However, this judgmental bias was not inflated by displaying a blush. Thus, the results provide no evidence to support the idea that fear of blushing is fuelled by a biased conception of its communicative effects.

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Keywords: Blushing; Social phobia; Judgmental bias; Meta-perception

1. Introduction

Blushing is a common emotional response and virtually all people blush at least occasionally (Edelmann, 1990). It predominantly occurs in face-to-face contacts involving shame or

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embarrassment and is usually confined to the facial region (Shields, Mallory, & Simon, 1990). Despite its common nature, most people consider blushing as an undesirable response, which they often try to stop or to conceal. Some individuals experience even so much distress because of their blushing that they develop a blushing phobia and apply for treatment (e.g., Scholing & Emmelkamp, 1993). The major aim of the present study is to explain blushing phobics' fearful preoccupation with their blushing.

Previous research has already shown that blushing phobic individuals are not characterized by a relatively low threshold for blushing, or a relatively intense coloration in response to a certain social stressor (Gerlach, Wilhelm, Gruber, & Roth, 2001; Mulkens, De Jong, Dobbelaar, & Bögels, 1999; Drummond, 1997). Thus, fear of blushing cannot be simply attributed to a biological predisposition to blush relatively fast or relatively intense. Rather it appears to be fuelled by mechanisms that are irrespective of facial coloration per se. One of the mechanisms that might be involved is a biased interpretation of the communicative value of a blush. Therefore, we took the alleged communicative properties of social blushing (e.g., Leary, Britt, Cutlip II, & Templeton, 1992; de Jong, 1999) as the starting point to further explore why some people are characterized by a fearful preoccupation of blushing.

Several authors have argued that displaying shame and embarrassment has instrumental value (e.g., Goffman, 1967; Keltner, Young, & Buswell, 1997). Showing embarrassment or shame would signify the individual's recognition that she/he has committed a social infraction and sincerely regrets it. In its turn this behavior may attenuate the offender's negative social impression and diffuse interpersonal threats (de Waal, 1995). Because of its saliency (qua color and localization) blushing is an obvious candidate of being one of the components of shame and embarrassment that de facto appease the observers (cf. Keltner, 1995; Castelfranchi & Poggi, 1990).

Indeed, there is evidence that blushing serves a remedial function. In a series of studies (de Jong, 1999; exp.1 & 2; de Jong, Peters, & De Cremer, 2003) we found that blushing after a seemingly involuntary mishap (e.g., spilling wine on the observer's clothings) or a voluntary transgression (e.g., damaging someone else's bicycle) attenuated the negative impression of the actor and favorably influenced the attributed seriousness of the incident. In further support of its implied instrumental value, it has been shown that individuals who believed that the researcher did not perceive their blushes in the context of a self-presentational predicament, subsequently engaged in alternative remedial behaviors, whereas participants who thought their blushes were noticed by the experimenter, did not (Leary, Landel, & Patton, 1996; experiment 2). That is, these individuals acted in a way as if they realized that their blushing served as a remedial gesture.

The remedial effect of blushing seems to reflect a robust phenomenon. However, recent research showed that the favorable effects of the blush on the observers' judgments are restricted to contexts in which actors display clear-cut deviant behavior(s). In more ambiguous social situations, or in situations that are ambiguous with respect to the actors' intentionality, the blush was found to have *adverse* effects (e.g., de Jong et al., 2003). More specifically, we found that in the absence of a clear-cut predicament, observers interpreted blushing as signaling that the (ambiguous) situation should be considered as an intentional violation of a social standard rather than an innocent, incidental coincidence (de Jong, Peters, De Cremer, & Vranken, 2002; de Jong et al., 2003). In other words, in the context of behaviors that can be possibly interpreted as a transgression of some kind, displaying a blush may substantiate observers' suspicion that the blusher indeed behaved in a socially inappropriate manner (cf. Leary et al., 1996) ("true innocence

does not need a blush”). Since most situations involve some ambiguity with respect to the elicitors of a blush, its revealing effects may well prevail its appeasing effects in real life.

This characteristic of the blush may help to explain why people generally consider blushing as an undesirable response which they often try to stop or to conceal (Shields, Mallory, & Simon, 1990), and why a subgroup of social phobics report (fear of) blushing as being their predominant complaint (e.g., Scholing & Emmelkamp, 1993; Mulkens et al., 2001). That is, the apparent context-dependent functional properties of the blush may not only influence the actual judgments of the *observers* (e.g. de Jong et al., 2002), but may also affect the *actors’ beliefs* about the observers’ judgments (i.e., the blusher’s meta-perception). There is considerable evidence that social phobic individuals are characterized by selective processing of threat-relevant information (Heinrichs & Hofmann, 2001). Most important for the present context, several studies showed that social phobic individuals overestimate the probability and/or the costs of social events that are generally considered to be socially threatening (e.g., Foa, Franklin, Perry, & Herbert, 1996). Following this, it could be hypothesized that blushing phobics’ fearful preoccupation with blushing is (at least partly) due to a bias to overestimate the undesirable revealing properties of their blushing. More specifically, one would expect phobic individuals overestimating the possibility that others would think that they have done or thought something undesirable (when displaying a blush in an ambiguous situation). Second, such a bias would result in an overestimation of the negative influence of blushing on others’ judgment of the actor’s dispositional characteristics (cf. de Jong et al., 2002).

The present study was designed to investigate whether, indeed, blushing fearful individuals overestimate the undesirable communicative effects of their blushing. Therefore, we presented blushing fearful and explicitly nonfearful participants with a series of vignettes some of which referred to apparently involuntary mishaps, and some to ambiguous situations that could be interpreted as a transgression, but not necessarily so (cf. de Jong et al., 2003). However, in contrast to previous research prompting participants in the observers’ perspective, the present study prompted participants in the perspective of the (blushing) actor. Accordingly, rather than judging others, they judged others’ views of themselves. That is, participants were asked to take an outside perspective on one’s own behavior and to indicate their beliefs about the impressions they conveyed (by their behavior) to hypothetical others. The prediction most pertinent to our research question is that typically in the context of ambiguous social situations high fearful individuals expect others to attribute more intentionality and more negative traits to blushing actors (i.e., themselves) than low fear individuals.

2. Method

2.1. Participants

Participants were 40 female undergraduates from Maastricht University. Mean age was 19.6 years (range 18–7 years). They were selected from a larger sample ($N = 273$) on the basis of their scores on the fear of blushing subscale of the Blushing, Trembling, and Sweating Questionnaire (BTS-Q; Bögels & Reith, 1999). We selected a low fear group ($n = 20$; $M = 9.2$; $SD = 4.2$) and a high fear group ($n = 20$; $M = 59.4$; $SD = 14.5$). Mean BTS-Q scores of the high fearful group

Table 1
Description of the sample

	High fear ($n = 20$)	Low fear ($n = 20$)	t	p
BTS-Q (0–100)	59.4 (14.5)	9.2 (4.2)	15.2	<.01
BPS (0–76)	46.1 (12.8)	23.1 (9.1)	6.6	<.01
Brief FNE (0–48)	28.8 (10.1)	14.9 (5.8)	5.4	<.01
FQavoidance (0–40)	18.9 (8.5)	7.5 (3.7)	5.5	<.01

Note: BTS-Q = Blushing, Trembling, and Sweating Questionnaire (Blushing subscale); BPS = Blushing Propensity Scale; FNE = fear of negative evaluation; FQ = Fear Questionnaire (Social Phobia subscale).

were comparable to the mean scores that Mulkens et al. (2001) reported for their treatment seeking groups (i.e., 62.3). Participants received a small remuneration in return for their participation (e.g., a chocolate bar).

2.2. Assessment

For a more comprehensive description of the sample, participants completed (in addition to the BTS-Q) the extended version of the Blushing Propensity Scale (BPS; Bögels, Alberts, & de Jong, 1996) that was originally designed by Leary and Meadows (1991), the 12-item version of the Fear of Negative Evaluation Scale (Leary, 1983), and the social phobia subscale of the Fear Questionnaire (FQ; Marks and Mathews, 1979) (see Table 1).

2.3. Materials and measures

We used a paper and pencil task, which consisted of a series of vignettes. The social events that were described in the present vignettes, were the same as were successfully employed in previous work (de Jong et al., 2003). Yet, whereas participants in previous experiments had to evaluate the situation being prompted in the perspective of the observer (e.g., “To what extent *do you think* that the present situation reflects an intentional transgression”), for the present purposes participants were now prompted in the perspective of the actor and were asked to indicate how they would think the observing other would evaluate the situation (e.g., “To what extent *do you think that the observer* will interpret the present situation as an intentional transgression”).

There were two categories of vignettes.¹ One category consisted of vignettes describing a typical mishap (e.g., spilling coffee on someone’s trousers while pouring out coffee from a thermos jug in a crowded train), and one consisted of vignettes describing an actor who behaves in good faith within the context of an ambiguous situation that could be erroneously interpreted by others as a (intentional) transgression (e.g., the actor posits his/her bag near the dozens of other bags that were already left by some other students; when leaving the library, the actor accidentally takes someone else’s bag and is then accosted by the actual owner of the bag). In half of the vignettes, the actors displayed a blush response following the incident. Thus there were 2 Category (mishap vs. ambiguous situation) \times 2 actor’s response (blush vs. no blush) is 4 different types of vignettes.

¹The exact text of all vignettes that were used in the present study can be obtained from the first author.

To cancel out the influence of particular contexts, we used 4 different (but similar) incidents for each of the two distinct categories of vignettes. These different incidents were systematically varied across the different types of vignettes within each category. Participants were presented with a series of 4 vignettes (one of each type); for each series a particular context appeared only once. To minimize the influence of carry-over effects, the order of vignettes was randomized for each participant. The vignettes were printed on separate sheets. On the cover page participants were instructed that this experiment concerned an investigation into the appraisal of events and they were asked to identify themselves with the description as much as possible.

Each vignette was followed by 5 VASs. To index the revealing properties that participants (implicitly) attribute to their blushing, VAS 1 asked participants to indicate the probability that (hypothetical) others would think that the mishap was the result of an intentional act [mishaps] (0% = 0, 100% = 100), or the probability that the others would think that the situation should be interpreted as an intentional transgression (rather than a coincidence) [ambiguous situation]. Note that the subjective costs of being revealed as a “transgressor” may vary independently from the anticipated revealing or remedial effects of displaying a blush. Hence, even in the absence of any difference between high and low fear individuals with respect to the anticipated revealing effects of their blushing, high fearful may report inflated levels of subjective costs when being revealed as a “transgressor” (which in turn may give rise to a relatively negative appreciation of the -potentially revealing—blush). Therefore, VAS 2 asked to indicate how distressing it would be for them when others, indeed, would think that the mishap/transgression reflected an intentional act (i.e., subjective costs of being revealed as a “transgressor”) (not distressing at all = 0, very distressing = 100). The remaining three VASs were included to test whether typically in ambiguous situations high fearful overestimate the negative consequences of their blushing on others’ judgments (cf. de Jong et al., 2003). More specifically, participants were asked to indicate their expectancies with respect to others’ evaluation of the situation (VAS 3; not serious at all = 0, very serious = 100), as well as their expectancies with respect to others’ evaluation of both their reliability (VAS 4; not at all reliable = 0, very reliable = 100), and their likeability (VAS 5; very unlikeable = 0, very likeable = 100). It was stressed that there were no right or wrong answers and that only their personal judgment counts. Participants were tested individually.

3. Results

3.1. *Attributed intentionality*

To test whether especially the high fear group would anticipate that others would interpret their blushing in an ambiguous situation as signaling that this situation should be considered as an intentional transgression rather than an innocent coincidence, the ‘probability of intentionality’ ratings were subjected to a 2 Category (mishap vs. Ambiguous) \times 2 Actor’s Response (blush vs. no blush) \times 2 group (high vs. low fear of blushing) analysis of variance (ANOVA), with the last factor being a between subjects factor. The ANOVA revealed a main effect of Category [$F(1, 38) = 163.9, p < .0001$], indicating that in line with the (intended) experimental manipulation, participants’ ratings were lowest with respect to the vignettes describing mishaps ($M = 18.5, SD = 18.2$) and highest for the vignettes describing ambiguous situations that could be interpreted

Table 2

Actor's appreciation of the subjective costs and actor's judgments of *others'* view with respect to attributed intentionality and seriousness of the incident and their dispositions in the context of mishaps and ambiguous events as a function of fear level (high vs. low) and displayed response (blush vs. no blush)

	High fear		Low fear	
	Blush	No blush	Blush	No blush
<i>Mishap</i>				
Costs	83 (16)	77 (20)	77 (13)	76 (21)
Intentionality	25 (22)	21 (15)	15 (15)	13 (16)
Seriousness	53 (16)	57 (21)	48 (21)	57 (17)
<i>Dispositions</i>				
Reliability	49 (24)	49 (25)	44 (21)	49 (23)
Likeability	32 (15)	30 (18)	31 (19)	32 (18)
<i>Ambiguous</i>				
Costs	90 (10)	81 (16)	67 (28)	79 (20)
Intentionality	60 (30)	59 (35)	41 (33)	45 (28)
Seriousness	57 (29)	52 (28)	40 (20)	42 (27)
<i>Dispositions</i>				
Reliability	37 (33)	38 (26)	46 (28)	44 (26)
Likeability	34 (27)	39 (25)	46 (29)	46 (23)

as an intentional transgression but not necessarily so ($M = 51.9$, $SD = 30.0$). This effect was independent of the Actor's Response (blush vs. no blush) [$F(1, 38) < 1$], and Group (high fear vs. low fear) [$F(1, 38) < 1$]. Yet, there was a main effect of Group [$F(1, 38) = 12.5$, $p < .001$], indicating that high fear individuals generally reported higher ratings than low fear individuals with respect to the possibility that others would think that the incidents reflect intentional acts (see Table 2). None of the other effects approached significance.

3.2. Subjective costs when being judged as a "transgressor"

To test whether blushing fearful participants report inflated levels of distress (i.e., subjective costs) when others would think that the mishap/transgression reflected an intentional act, the distress ratings were subjected to a 2 Category (mishap vs. ambiguous situation) \times 2 Actor's Response (blush vs. no blush) \times 2 Group (high vs. low fear) ANOVA. The analysis revealed a main effect of Group [$F(1, 38) = 5.2$, $p < .05$]. This main effect was qualified by a significant Group by Category interaction [$F(1, 38) = 4.1$, $p < .05$]. Subsequent analyses indicated that there was a significant main effect of Group with respect to the ambiguous situations [$F(1, 38) = 9.2$, $p < .01$], but not with respect to the mishaps [$F(1, 38) < 1$] (see Fig. 1). This effect reflects the finding that typically in ambiguous contexts high fear individuals consider it more distressing than low fear individuals when others would think that the transgression reflects an intentional act (i.e., higher subjective costs of being revealed as a transgressor). In addition, subsequent analyses indicated that for the high fear group the costs tended to be higher in the ambiguous context than in the mishap context [$F(1, 19) = 3.6$, $p = .07$], whereas such a difference was absent in the low

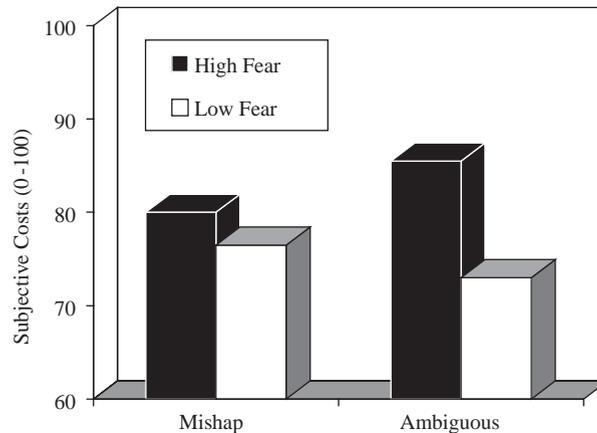


Fig. 1. Subjective costs when being revealed as a “transgressor” as a function of fear (Low vs. high) for both types of incidents (mishap, ambiguous).

fearful group [$F(1, 19) < 1$]. Thus, it appears that the Group by Context interaction is mainly carried by the relatively high subjective costs that are reported in the ambiguous context by the high fear group (see also Fig. 1).

3.3. Seriousness of incident

To test whether the high fear group expected a relatively negative appreciation of the incident by others when displaying a blush in an ambiguous situation, the seriousness ratings were subjected to a 2 Category (mishap vs. ambiguous situation) \times 2 Actor’s Response (blush vs. no blush) \times 2 Group (high vs. low anxious) ANOVA. The analysis revealed a main effect of Group [$F(1, 38) = 6.3, p < .05$]. This main effect was qualified by a Group \times Category interaction [$F(1, 38) = 7.0, p < .01$]. Subsequent analyses indicated that the seriousness ratings of both groups differed in the context of the ambiguous situation [$F(1, 38) = 14.7, p < .001$] but not with respect to the mishaps [$F(1, 38) < 1$]. Thus, typically in the ambiguous situation high fear individuals expected others to evaluate the situation as being more serious than the low fear individuals (see Fig. 2). In addition, subsequent analyses revealed that in the low fear group seriousness ratings were significantly lower for the ambiguous context than for the mishap condition [$F(1, 19) = 4.5, p < .05$], whereas for the high fear group ratings for both contexts were similarly high [$F(1, 19) = 2.6, p > .1$]. Together these findings indicate that the Group by Context interaction is mainly carried by the relatively high ratings in the high fear group with respect to the ambiguous context (see also Fig. 2). None of the other effects reached the conventional level of significance.

3.4. Dispositional characteristics

Reliability: To test whether high fearful individuals anticipated a relatively harsh evaluation by others when displaying a blush in an ambiguous situation, the reliability ratings were subjected to a 2 Category (mishap vs. ambiguous situation) \times 2 Actor’s Response (blush vs. no blush) \times 2 Group (high vs. low fear) ANOVA. The analysis revealed a main effect of category [$F(1, 38) = 9.5$

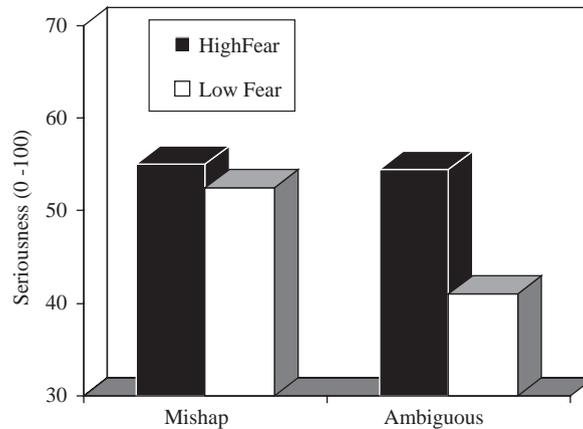


Fig. 2. Anticipated judgment of other people with respect to the seriousness of the incident as a function of the actor's fear level (Low vs. high) and type of incident (Mishap vs. ambiguous).

$p < .001$], indicating that participants generally expected others to consider the actor (i.e., participants) as less reliable in the context of the ambiguous situation than after a mishap. This effect appeared independent of the actor's response [$F(1, 38) < 1$]. There was no main effect of Group [$F(1, 38) < 1$]. Yet, there was a significant Group by Category interaction [$F(1, 38) = 5.3$, $p < .05$]. Subsequent analyses indicated that there was no main effect of Group in the context of the mishaps. However, in the context of the ambiguous situations there was a tendency to indicate that high fear individuals expected others to judge the actor (i.e., participants) as less reliable than the low fear individuals [$F(1, 39) = 3.0$, $p = .08$]. In addition, subsequent analyses indicated that for the high fear group the reliability ratings were significantly lower in the ambiguous context than in the mishap context [$F(1, 19) = 20.6$, $p < .01$], whereas no such difference was evident for the low fear group [$F(1, 19) < 1$] (see Fig. 3).

Likeability: To further test whether the high fear group anticipated a relatively negative influence of displaying a blush in ambiguous situations, the likeability ratings were subjected to a 2 Category (mishap vs. ambiguous situation) \times 2 Actor's Response (blush vs. no blush) \times 2 Group (high vs. low fear) ANOVA. The analysis revealed a main effect of Category [$F(1, 38) = 8.9$, $p < .01$], indicating that participants generally expected others to evaluate the actor (i.e., participant) in the context of the ambiguous situation as less likeable than after a mishap. Although the pattern was very similar to those of the reliability ratings, the Group by Category interaction did not reach significance [$F(1, 38) = 1.8$]. None of the other effects approached significance.

4. Discussion

The major results can be summarized as follows: (i) blushing fearful individuals overestimated the likelihood that others would interpret the mishaps/ambiguous events as reflecting intentional acts; (ii) high fear individuals considered it as particularly distressing when others would (erroneously) interpret their behavior in ambiguous situations as reflecting an intentional

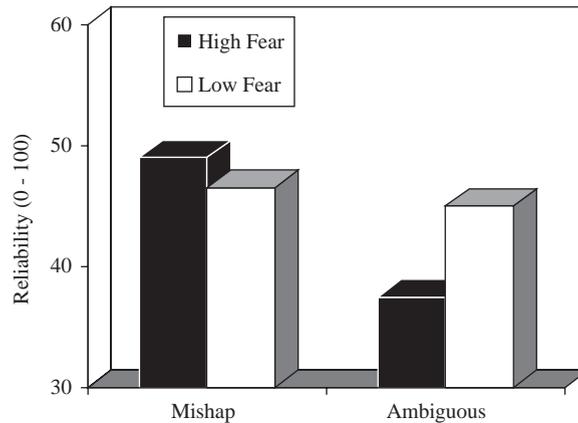


Fig. 3. Anticipated judgment of other people with respect to the actor's (i.e., participant's) reliability as a function of the actor's fear level (Low vs. high) and type of incident (Mishap vs. ambiguous).

transgression; (iii) specifically with respect to the ambiguous situations, high fear individuals expected others to evaluate the situation as being more serious, and the actors as being less reliable than low fear individuals, (iv) neither high nor low fearful individuals anticipated that blushing might positively affect others' judgment in the context of a mishap, nor adversely influence others' judgment in the context of ambiguous social situations.

The present results clearly showed that blushing fearful individuals are characterized by a judgmental bias: High fearful individuals reported relatively high expectancy ratings with respect to the possibility that individuals would interpret their behavior in a socially undesirable way (e.g., as a serious, intentional transgression/mishap rather than as a coincidence), anticipated relatively high levels of subjective costs (i.e., distress) when indeed others would interpret their behavior as a social transgression, and anticipated a relatively harsh evaluation of their dispositional characteristics (i.e., reliability). These findings replicate and extend previous results indicating that individuals suffering from generalized social phobia overestimate the probability and/or the subjective costs of socially threatening events (e.g., making a fool of oneself) (Stopa & Clark, 2000). In addition, the present finding that this judgmental bias in blushing fearful individuals was especially pronounced in the context of ambiguous situations, is in line with previous work indicating that social phobic individuals tend to choose a negative rather than a positive or neutral interpretation for ambiguous social scenarios (Amir, Foa, & Coles, 1998), and also implicitly selectively associate ambiguous social events with negative rather than with positive outcomes (e.g., de Jong, Pasman, Kindt, & van den Hout, 2001).

The presence of such a general bias to anticipate negative other's judgments of the self may logically act in a way to maintain or even enhance blushing phobics' social concerns. Meanwhile, it leaves unexplained why blushing phobic individuals report blushing as being their predominant complaint. To explain this fearful preoccupation with blushing, the present experiment was designed to test the hypothesis that blushing fearful individuals overestimate the negative consequences of displaying a blush in ambiguous social situations (i.e., in the absence of a straightforward elicitor of the blush). However, although blushing fearful individuals generally overestimated the probability of undesirable social outcomes, no evidence emerged to suggest that

this bias was further intensified by displaying a blush. In fact, contrasting with previous findings indicating that others' judgments of the actor are strongly influenced by the absence/presence of a blush (e.g., de Jong, 1999), neither high nor low fearful individuals expected that their blushing (in ambiguous social situations) would (adversely) influence others' judgment of their behavior or their dispositional characteristics.

One explanation for the apparent absence of an effect of the actor's blush on the anticipated judgment of the observer in the present study might be that the current manipulation was too weak. However, this possibility is not very convincing since exactly the same "blush" manipulation did systematically affect participants' judgments in previous experiments (de Jong, 1999; exp1 & exp 2; de Jong et al., 2003 exp 1 & exp 2). Another explanation could be that the high fear individuals might have expected/implied to blush in all of the situations described in the vignettes, irrespective of whether this was made explicit or not. Yet, although it is conceivable that such expectancies might have played a role in the high fear group, it is difficult to see why also no-fear individuals (who not typically think to blush easily, as is also evidenced by their low BPS scores) would have implied to blush even when this was not made explicit in the scenario. Hence, this would not be a particularly parsimonious explanation for the present pattern of findings that neither the high nor the low fear group anticipated any effect of their blushing on the observer's judgments with respect to their intentions and dispositions. Finally, it should be acknowledged that there was no manipulation check on the identification by the participants with the various situations that were described in the vignettes. Therefore, it cannot be ruled out that various degrees of identification with the situations may have affected the results. Meanwhile, it seems not very likely that a lack of sufficient identification played a major role in the present pattern of findings, since a very similar experimental approach in our previous work did reveal differential results as a function of the actor's response (i.e., absence/ presence of a blush; de Jong et al., 2003).

At this stage, it is important to note that the present study differed in one important respect from previous studies showing remedial and/or revealing effects of blushing (and other displays of embarrassment or shame) (e.g., de Jong et al., 2003; Keltner et al., 1997, Semin & Manstead, 1982). That is, in all of these earlier studies, the participants themselves had to evaluate the actors, whereas in the present study, participants had to predict how they themselves would be evaluated by others. Germane to this, recent research points to important discrepancies between the processes involved in judging others and in judging others' views of the self (e.g., Vorauer, 2001). When judging others, people tend to readily infer that current behavior reflects the true person/goal/intention (e.g., "correspondence bias"; Jones & Davis, 1965); hence, the impression people convey on observers strongly depends on their current behaviors (e.g., their blushing). Yet, when considering the judgments that others form of themselves (i.e., meta-perceptions) people typically underestimate the impact of their current behaviors and exaggerate the extent to which their true self will be evident for the observer ("transparency overestimation"). Accordingly, people's meta-perceptions tend to be most strongly connected to their beliefs about themselves rather than to their current behavior (e.g., Vorauer & Miller, 1997; exp. 2). Perhaps, then, the most parsimonious explanation for the present absence of an effect of blushing on the anticipated judgments might be that similar processes (e.g., transparency bias) led the present participants to ignore their blushing when considering the judgment that others would form of them. If so, this would obviously cast serious doubts on the idea that individuals' anticipated revealing effects of the blush might play an important role in blushing phobia.

To conclude, the present results provide no support for the idea that blushing phobic individuals' fear of blushing is fuelled by a biased conception of the communicative effects of blushing. Perhaps, then, blushing phobic individuals' consider blushing per se as a highly distressing response. This might follow from their coping assumption that one should not convey any sign of uncertainty to others (Mulkens et al., 2001). Therefore, they are likely to consider blushing per se as a self-presentational predicament (Mulkens et al., 1999). Unfortunately, feeling embarrassed because of displaying a blush may well have the ironic effect of further intensifying the blush (de Jong, 1998), which, in turn, promotes the generation of the undesirable negative public image, etc. (Drummond et al., 2003). To explore the validity of these deductions, we currently test whether typically blushing phobic individuals respond with increasing facial blood flow when given false-positive feedback of blushing (cf. Drummond, 2001) in the context of ambiguous social events.

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