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To err is human: Embarrassment, attachment, and communication apprehension [☆]

Lesley A. Withers ^{a,*}, Laura L. Vernon ^b

^a *Central Michigan University, Speech Communication and Dramatic Arts, 350 Moore Hall,
Mount Pleasant, MI 48859, United States*

^b *Department of Psychology, Auburn University, 226 Thach Hall, Auburn, AL 36849-5214, USA*

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Abstract

This study examines the types of situations, or triggers, which cause embarrassment and their relationship with attachment and communication apprehension. Two embarrassment measures were compared: Modigliani's (1968) embarrassability scale and Sabini, Siepmann, Stein, and Meyerowitz (2000) embarrassment questionnaire. Participants ($N = 350$) completed embarrassment and personality measures. Correlational and regression analyses were conducted. All embarrassment measures were related to communication apprehension and the anxious attachment dimension, but not the avoidant attachment dimension. Not surprisingly, all embarrassment measures were significantly positively correlated with one another. The Center of Attention embarrassment trigger significantly predicted communication apprehension above and beyond the other embarrassment measures in the regression model. In contrast, *Faux Pas* and Sticky Situations embarrassment triggers were independently associated with anxious attachment. The implications for the conceptualization and measurement of embarrassment are discussed.

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Keywords: Embarrassment; Attachment; Communication apprehension; Measurement

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* Corresponding author.

E-mail addresses: withe1la@cmich.edu, lesley.withers@cmich.edu (L.A. Withers).

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1. Introduction

This study examines the types of situations, or triggers, which cause embarrassment and their relationship with attachment and communication apprehension, two personality variables in the interpersonal domain. Embarrassment is a social, moral, and self-conscious emotion (e.g., Buck, 2004; Tangney & Fischer, 1995) and has been characterized as a complex interaction between the eliciting situation, one's personality, and the real or imagined presence of another (e.g., Keltner & Buswell, 1997; Miller, 1996; Withers & Sherblom, 1999, submitted). Modigliani's (1968) traditional embarrassability measure aims to tap trait embarrassment by examining responses to embarrassing situations. We seek to compare Sabini et al.'s (2000) new measure of situational triggers of embarrassment to Modigliani's embarrassability measure and examine their interpersonal personality correlates.

Most modern theoretical perspectives of embarrassment can be traced to Erving Goffman, the "progenitor of modern embarrassment research" (Miller, 1996, p. 112). Goffman's (1956, 1959, 1967) dramaturgic perspective likens social interaction to a theatrical performance. According to Goffman, embarrassment occurs when "the expressive facts at hand threaten or discredit the assumptions a participant finds he [sic] has projected about his identity" (1959, p. 269).

Although as many as five theories of embarrassment have been described (see Keltner & Buswell, 1997 for a review), Miller (1996) argues that there are two primary and competing theoretical causes of embarrassment: the dramaturgic (or awkward interaction) and the social evaluation models. The dramaturgic model of embarrassment holds that "embarrassment results from the flustered uncertainty that follows the loss of a coherent script in interaction" (Miller, 1992, p. 204). According to this model, one experiences embarrassment due to an inability to perform one's expected social role (e.g., Goffman, 1956, 1967; Parrott & Smith, 1991; Silver, Sabini, & Parrott, 1987). In comparison, the primary concern of embarrassment in the social evaluation model is what others think of us. Failures in impression management are threatening because audiences may form an undesired or unfavorable impression (e.g., Edelman, 1987; Manstead & Semin, 1981; Miller, 1996; Miller & Leary, 1992). The social evaluation model predicts embarrassment in any situation endangering one's desired image. For years, the social evaluation and dramaturgic models have competed to explain the nature of embarrassment; there is disagreement about which provides the clearest explanation for why and how embarrassment occurs (see Miller, 1996, for an overview). This study seeks to examine whether the models explain different aspects of embarrassment.

According to Fenigstein (1979), the self-consciousness involved in embarrassment has both situational and dispositional sources. Aspects of the situation play an important role in models of embarrassment and many researchers have attempted to categorize embarrassing situations (e.g., Cupach & Metts, 1990, 1992; Edelman & McCusker, 1986; Metts & Cupach, 1989; Miller, 1996; Modigliani, 1968, 1971; Sabini et al., 2000; Sattler, 1965; Sharkey & Stafford, 1990; Withers & Sherblom, 1999, submitted). Sabini et al. have suggested that Miller's (1996) typology can be modified to include three kinds of embarrassment triggers: *Faux Pas*, Sticky Situations, and being the Center of Attention. *Faux Pas* triggers, based upon the social evaluation model, are described as situations in which a person "acts out a social failing" (Sabini et al., p. 216). Sticky Situations, on the other hand, are based upon dramaturgic theory, and include situations that challenge participants' roles (e.g., asking someone to repay an overdue loan). As Sabini et al.'s *Faux Pas* and

Sticky Situations triggers are explicitly aligned with the social evaluation and dramaturgic theories, respectively, the present investigation can compare these theories using these two trigger subscales.

The third situational trigger subscale, Center of Attention, measures embarrassing situations that cannot be easily explained by social evaluation or dramaturgic theory. In situations in which one is the center of attention, no social failure or role threat need be involved. Embarrassment may occur simply as a result of being a focus of public attention. A common theme in the embarrassment research is the social nature of embarrassment. Buck (2004) conceptualizes moral emotions such as embarrassment in terms of concern about social rules, and Goffman (1959) and Miller (1995, 1996) link embarrassment to situations involving social scripts and fear of negative social evaluation. Thus it seems likely that concern about social interactions, or communication apprehension, may be closely related to embarrassment. Schlenker and Leary's (1982) self-presentational theory posits concern about others' perceptions and evaluations of oneself as the cause of social anxiety. Although Sabini et al. (2000) refer to the Center of Attention embarrassment trigger as "an anomaly" (p. 215) in terms of the major theoretical accounts of embarrassment, we suggest that Center of Attention may be explained by a form of social anxiety, communication apprehension. Communication apprehension has been considered similar in many ways to shyness (McCroskey, 1982), which has been linked to embarrassment (Tangney, Miller, Flicker, & Barlow, 1996). Sabini et al. recently found that the Center of Attention trigger was associated with a stage fright measure, termed Audience Anxiousness. Given these findings, we examined the nature of the relationship between public speaking communication apprehension and embarrassment.

In addition to situational theories of embarrassment, there are also theorists who focus on the role of personality in embarrassment (e.g., Buck, 2004; Kelly & Jones, 1997). Buck's (1985, 1988, 1999, 2000, 2004) developmental-interactionist theory posits that embarrassment is a social/moral emotion that involves, and in fact requires, a combination of biologically-based attachment mechanisms and awareness of social rules (Buck, 2004). Although Buck's substantial theoretical work suggests links between embarrassment and attachment, this link has not been empirically tested. This study attempts to find empirical support for developmental-interactionist theory by exploring associations among attachment dimensions and embarrassment.

Sabini et al.'s (2000) recent embarrassment triggers measure offers researchers an exciting opportunity to directly compare two competing theoretical models (dramaturgic and social evaluation) of embarrassment. However, the possible contributions of Sabini et al.'s measure need to be evaluated relative to Modigliani's well-established embarrassability measure. The embarrassment trigger and Modigliani embarrassability measures have not been compared, as Sabini et al. discussed in a footnote. The present investigation will address that gap in the literature. Knowing not only the relationship between the two embarrassment measures, but also whether they have differential interpersonal personality correlates, will provide information about whether the Sabini et al. measure is redundant with Modigliani's measure or can provide additional information about the nature of embarrassment. Gender difference findings provide some indirect evidence that may indicate the divergent validity of the Sabini et al. measure.

Gender differences in the experience and expression of emotion have been reported for an array of emotions, including embarrassment as measured by the Modigliani measure (e.g., Miller, 1987a, 1992, 1995, 1996). Sabini et al., on the other hand, found a gender difference on the *Faux Pas* subscale only, and did not find such a difference on the other two subscales. This finding may

suggest that the Sticky Situations and Center of Attention trigger subscales tap facets of embarrassment that are distinct from those measured by the Modigliani scale. The present study will attempt to replicate this finding, examining gender differences in embarrassment.

The present study aims to examine Sabini et al.'s (2000) embarrassment trigger type questionnaire, compare it with Modigliani's (1968) embarrassability scale, and examine their relations with interpersonal variables. First, we examined associations among the Modigliani and Sabini embarrassment measures. Second, we examined gender differences in embarrassment. Finally, we examined the relationships between embarrassment triggers and interpersonal variables, testing the following four predictions: (1) embarrassment will be associated with communication apprehension, anxious attachment, and avoidant attachment, as related findings of associations among embarrassment triggers, stage fright, rejection sensitivity, and conflict avoidance would suggest (Sabini et al., 2000); (2) the embarrassment Center of Attention trigger will be independently associated with communication apprehension, similar to the findings of an association between Center of Attention embarrassment and audience anxiousness (Sabini et al., 2000); (3) the embarrassment *Faux Pas* trigger will be independently associated with anxious attachment, since anxious attachment involves concern about abandonment likely to be related to social evaluation concerns; and (4) the Sticky Situations embarrassment trigger will be independently associated with avoidant attachment, because the negative model of others characteristic of avoidant attachment is predicted to be related to dramaturgic concerns.

2. Method

2.1. Participants

Participants ($N = 350$) were from undergraduate communication courses at four universities and colleges of different sizes in three U.S. states. Ages ranged from 18 to 54 ($M = 22$) and 55% were female.

2.2. Instruments

2.2.1. Embarrassment trigger type questionnaire (Sabini et al., 2000)

Participants completed Sabini et al.'s questionnaire of 30 potentially embarrassing scenarios representing three trigger factors: Center of Attention, *Faux Pas*, and Sticky Situations. For each scenario, participants indicated degree of embarrassment on a 7-point scale (1 = not at all; 4 = moderately; 7 = extremely).

2.2.2. Revised embarrassability scale (ES; Miller, 1987b; Modigliani, 1968)

Participants completed the ES, as revised by Miller (1987b) to include Likert-scale ratings and be appropriate for both men and women. The revised ES has been used consistently in embarrassment research (Leary, 1990; Miller, 1987b, 1996). It consists of 26 items describing uncomfortable social situations rated on a 5-point scale (1 = not the least embarrassed; 5 = strongly embarrassed). It has demonstrated strong reliability and validity (Leary, 1990; Miller, 1987b).

2.2.3. *Experiences in close relationships scale (ECR; Brennan, Clark, & Shaver, 1998)*

The ECR focuses upon attachment experiences in romantic relationships (e.g., “I worry about being abandoned”). Participants rated each of 36 items on a 7-point scale (1 = disagree strongly; 7 = agree strongly). Items measure two independent attachment dimensions, avoidance and anxiety, with 18 items in each dimension subscale. Dimension labels, anxiety (about abandonment) and avoidance (discomfort with closeness and dependency), correspond to the attachment dimensions found by Simpson, Rholes, and Nelligan (1992). The ECR is based upon Bartholomew’s (1990) two-dimensional, four category conceptualization of attachment. In line with the assertions of several attachment researchers (e.g., Brennan et al., 1998; Simpson & Rholes, 1998), the present study elected to use the measure’s dimensions rather than the categories, as dimensional analyses provide increased precision and power. The ECR demonstrates strong reliability, with high internal consistency scores (anxiety, $\alpha = .91$; avoidance, $\alpha = .94$), and its patterns of associations with other measures suggest strong convergent and divergent validity (Brennan et al.). The present study found strong internal consistency (anxiety, $\alpha = .90$; avoidance, $\alpha = .92$).

2.2.4. *Public speaking communication apprehension (PRCA-24; McCroskey, 1982)*

To assess communication apprehension while giving a speech, six items from the PRCA-24 were included (e.g., “I feel relaxed while giving a speech”), current study’s $\alpha = .84$. McCroskey supports using the subscales separately; other subscales were excluded because they were not of hypothesized theoretical importance for Center of Attention embarrassment (e.g., group discussion, interpersonal conversation). Participants rated items on a 7-point scale (1 = strongly agree; 7 = strongly disagree).

3. Results

3.1. *Embarrassment measures*

Means and standard deviations are presented by gender for all measures in Table 1. The descriptive statistics for the present sample are similar to those reported by Sabini et al. (2000) for the embarrassment trigger subscales and to those reported by Miller (1992, 1995) on the ES. On average, participants reported at least moderate embarrassment on all measures. Participants reported more embarrassment to *Faux Pas* than Sticky Situation triggers, $t(321) = 30.46$, $p < .001$, and Center of Attention triggers, $t(325) = 28.18$, $p < .001$. In turn, Sticky Situations were reportedly more embarrassing than Center of Attention triggers, $t(321) = 4.05$, $p < .001$.

To examine associations among Sabini et al.’s (2000) total scale, trigger subscales, and the ES, Pearson correlations were conducted (shown in Table 2). Not surprisingly, the embarrassment trigger total scale, subscales, and the ES were strongly positively associated with one another, suggesting their convergent validity. Despite their relatively high associations, the reliability of each measure was higher than the correlations with the other measures, suggesting some degree of discriminant validity. The intercorrelations among the trigger subscales (i.e., .49, .49, .63) are sufficiently high to suggest that they measure the same construct of embarrassment, as intended, but are sufficiently low to suggest a degree of divergent validity.

Table 1
Means and standard deviations for embarrassment and interpersonal measures

	Range	Males (<i>N</i> = 146)		Females (<i>N</i> = 177)	
		<i>M</i>	(SD)	<i>M</i>	(SD)
Modigliani measure	26–130	67.89	(14.09)	71.99	(13.30)
Sabini measure total	30–210	104.94	(26.65)	116.74	(26.83)
Centre of Attention	10–70	28.08	(10.94)	31.34	(11.34)
<i>Faux Pas</i>	10–70	44.45	(11.45)	53.09	(9.87)
Sticky Situation	10–70	31.75	(10.02)	32.39	(10.89)
Communication apprehension	6–42	16.87	(5.21)	18.53	(5.29)
Attachment: avoidance dimension	18–126	3.03	(1.03)	2.97	(1.12)
Attachment: anxiety dimension	18–126	3.47	(1.06)	3.54	(1.06)

Table 2
Intercorrelations among embarrassment measures and scales (Cronbach's alpha on main diagonal)

	Sabini measure	Sabini et al. subscales			Modigliani measure
		Centre of Attention	<i>Faux Pas</i>	Sticky Situation	
Sabini measure	.94	–	–	–	.76***
Centre of Attention		.87	.49***	.63***	.62***
<i>Faux Pas</i>			.89	.49***	.61***
Sticky Situation				.84	.67***
Modigliani measure					.88

Note: Cronbach's alpha along the main diagonal.

*** $p < .001$.

3.2. Gender differences in embarrassment

To examine gender differences, we conducted a 2 (gender) \times 4 (embarrassment measure) MANOVA, with the trigger subscales and the ES as dependent variables and gender as a between-subjects factor. We found a significant main effect for gender, $F(4, 299) = 14.38, p < .001$. Follow-up *t*-tests showed that females reported significantly higher levels of embarrassment on the *Faux Pas* subscale, $t(320) = 7.27, p < .001$, the Center of Attention subscale, $t(320) = 2.61, p < .01$, and the ES, $t(311) = .64, p < .01$. There was no gender difference for Sticky Situations, $t(316) = .54, ns$.

Analyses with the trigger subscales yielded similar results whether conducted for the total sample or separately by gender. The only exception was that Sticky Situations were not significantly more embarrassing than Center of Attention triggers for females.

3.3. Relationships among embarrassment and personality variables

Further examination of distinctions between the triggers was accomplished via bivariate correlation and multiple regression analyses with the personality measures. The anxiety attachment dimension was significantly positively associated with all embarrassment measures: the ES,

Table 3

Simultaneous multivariate regression analyses predicting communication apprehension and the anxiety dimension of attachment

Dependent variable	Predictor	<i>B</i>	β	<i>t</i>	
Communication apprehension	Modigliani	.05	.13	1.52	
	Centre of Attention	.18	.39	5.23***	
	<i>Faux Pas</i>	−.04	−.08	−1.13	$R^2 = .14$
	Sticky Situation	−.05	−.10	−1.35	$F(4, 299) = 12.37^{***}$
Attachment: anxiety dimension	Modigliani	.001	.02	0.22	
	Centre of Attention	.006	.07	0.94	
	<i>Faux Pas</i>	.02	.18	2.64**	$R^2 = .15$
	Sticky Situation	.02	.20	2.59*	$F(4, 300) = 13.11^{***}$

* $p < .05$.

** $p < .01$.

*** $p < .001$.

$r = .28, p < .001$, and Center of Attention, *Faux Pas*, and Sticky Situations, $r_s = .28, .29$, and $.32$, respectively, all $p < .001$. The avoidance attachment dimension, on the other hand, was not significantly associated with any embarrassment measure. Further, all embarrassment measures were significantly positively associated with communication apprehension: Sticky Situations, $r = .19, p < .01$; *Faux Pas*, $r = .15, p < .01$; Center of Attention, $r = .35, p < .001$; and ES $r = .25, p < .001$.

The relationships among the interpersonal variables were also examined via bivariate correlations. Communication apprehension was significantly correlated with the anxiety dimension of attachment, $r = .14, p < .05$, but not with the avoidance dimension.

Next, we examined whether the embarrassment measures were independently associated with communication apprehension and anxious attachment by conducting two multiple regression analyses (shown in Table 3). In the first analysis, communication apprehension was the dependent variable, and the trigger subscales and the ES were predictor variables. Only the Center of Attention subscale significantly predicted communication apprehension above and beyond other embarrassment measures. Next, the anxiety dimension was the dependent variable and the embarrassment measures were predictor variables. Sticky Situations and *Faux Pas* triggers significantly predicted the anxiety attachment dimension independent of the other embarrassment measures.

4. Discussion

4.1. Examining embarrassment measures

This study is the first to compare the Sabini et al. (2000) embarrassment trigger scale with Modigliani's (1968) ES, a common self-report embarrassment measure. We found that the trigger subscales and the ES were strongly positively associated with one another. As these measures are thought to assess aspects of the same construct, these findings are not surprising, although they further demonstrate the convergent validity of the Sabini et al. measure.

Although participants reported, on average, approximately moderate levels of embarrassment in response to the different situational triggers, we found differences among the levels of

embarrassment reported for each trigger subscale. Similar to the results reported by Sabini et al. (2000), our participants reported the most embarrassment to *Faux Pas* triggers, less embarrassment to Sticky Situations, and the least embarrassment to Center of Attention triggers. It is not clear whether these findings represent true differences in the degree of embarrassment elicited by each type of situation or whether they are artifacts. For example, it may be the case that being the Center of Attention is less embarrassing than committing a *Faux Pas*, or that the Center of Attention subscale scenarios were not of the same intensity as those in the *Faux Pas* subscale.

In addition to finding differences in the degree of embarrassment reported in response to the trigger types, we also found gender differences in line with previous research (e.g., Miller, 1987a, 1992, 1995, 1996; Sabini et al., 2000). Females in our sample reported more embarrassment than males on the *Faux Pas* subscale, the Center of Attention subscale, and the ES. There was no gender difference for Sticky Situations. Interestingly, Sabini et al. (2000) found a gender difference only on the *Faux Pas* subscale. Perhaps our study detected a gender difference on Center of Attention due to our larger sample size ($N = 350$) relative to those of Sabini et al. ($N = 78$ and 84). It is notable that no gender differences were found in the present sample or in the Sabini et al. samples for Sticky Situations. It appears that although women are more embarrassed by situations in which negative social evaluations are likely (*Faux Pas* triggers) or in which they are the Center of Attention, dramaturgic failings are equally embarrassing to the sexes. This finding suggests the differentiation of the dramaturgic and social evaluation models of embarrassment, but additional research is warranted.

What we think is especially important are our findings concerning the independent differential associations of the Sabini et al. (2000) trigger subscales. We found that, as predicted, the Center of Attention trigger subscale was independently associated with public speaking communication apprehension, similar to Sabini et al.'s finding of the subscale's association with stage fright. In contrast, the Sticky Situations and *Faux Pas* trigger subscales independently predicted the anxiety attachment dimension in our study. This finding is particularly helpful in further establishing the distinction between the Sticky Situations and Center of Attention subscales. Sabini et al.'s correlational analyses suggested different patterns of associations, but did not test the independence of such associations. First, the present findings are impressive in that the trigger subscales predicted communication apprehension and anxious attachment above and beyond the well-established Modigliani (1968) embarrassment measure, and over and above the contributions of other trigger subscales.

Second, the findings of the independent differential predictive power of the trigger subscales provide additional evidence for the multidimensionality of embarrassment. If embarrassment were a unidimensional construct, we would expect the trigger subscales to be redundant, revealing the same or similar patterns of associations. However, the present study found that the different embarrassment triggers were differentially associated with the personality variables, suggesting the multidimensionality of embarrassment. For example, triggers representative of both the dramaturgic and social evaluation models of embarrassment were associated with anxious attachment independent of one another, suggesting that both contribute to our understanding of embarrassment. Many researchers have found evidence to support the social evaluation model (Edelmann, 1987; Miller, 1987a, 1992, 1995, 1996) and the dramaturgic model (Edelmann, 1987; Edelmann & McCusker, 1986; Parrott, Sabini, & Silver, 1988; Parrott & Smith, 1991). The present study

supports previous assertions that each model captures a distinct dimension of embarrassment (e.g., Sabini et al., 2000; Withers & Sherblom, 1999, submitted).

Third, our findings suggest that, as Sabini et al. (2000) claimed, the Center of Attention trigger is distinct from *Faux Pas* and Sticky Situations triggers. The trigger subscales were moderately correlated, suggesting the expected convergent validity of subscales measuring facets of the same construct. However, the subscale intercorrelations were sufficiently low as to suggest some degree of divergent validity. The differential correlates of the subscales further support their divergent validity. This interpretation is also supported by confirmatory factor analysis findings reported elsewhere suggesting a three-factor structure for the Sabini et al. measure (Vernon & Withers, submitted).

4.2. Embarrassment and personality

We discovered that, as hypothesized, embarrassment is related to two personality variables associated with anxiety regarding different aspects of social interaction: communication apprehension and anxious attachment. This study is the first to report an association between embarrassment and communication apprehension. Given the theorized social nature of embarrassment, it seems natural that embarrassment would be associated with one's apprehension about a specific social performance situation, public speaking. Thus, it is not surprising that Sabini et al. (2000) found an association between stage fright and Center of Attention embarrassment and that we found that Center of Attention embarrassment was associated with communication apprehension above and beyond other aspects of embarrassment. Perhaps communication apprehension represents the anxious anticipation of experiencing embarrassment. Our finding also appears consistent with Modigliani's (1971) finding of greater embarrassment when a failure was public versus private and Tangney et al.'s (1996) finding that embarrassment was more likely in the presence of a larger audience relative to the other self-conscious emotions of guilt and shame.

We found that not only was embarrassment related to apprehension about a public social situation, but that it was also related to anxiety regarding intimate interpersonal situations, those important for the construct of attachment. We found that the Sticky Situations and *Faux Pas* trigger subscales were independently associated with the anxiety attachment dimension. Characteristically, people high on the anxiety dimension of attachment are thought to hold negative models of the self. They may be prone to embarrassment because they would likely focus on information consistent with their negative self image, such as their social failings and gaffes.

Interestingly, although the anxiety dimension of attachment was related to embarrassment as predicted, the avoidance dimension was not. Avoidant attachment is associated with a negative model of others. The fact that we did not find an association between embarrassment and the avoidant attachment dimension suggests that models of others may not be important for understanding embarrassment. Although embarrassment typically occurs in real or imagined interpersonal contexts, it may be a largely self-focused emotion. Even in situations in which others embarrass us, our embarrassment may be more related to our interpretation of the situation (through our model of self) than related to others' contribution to the situation (our model of other).

Our findings concerning embarrassment and attachment paralleled our findings concerning communication apprehension and attachment. Public speaking communication apprehension

was associated with anxious attachment, but not with avoidant attachment. It may be the case that anxiety in intimate relationships, represented by the anxious attachment dimension, was similar to public performance anxiety reported in the form of communication apprehension. Those who reported negative expectations of themselves in intimate situations were also more likely to report negative expectations for themselves in a public setting. Interestingly, in contrast, the avoidance dimension was not associated with apprehension about speaking in front of others. This finding suggests that whether the audience is expected to be cruel or kind, one's own social performance is of foremost concern for the apprehensive person.

4.3. *Limitations and future directions*

The present study was limited by the self-report nature of the data and the fairly homogeneous sample. Confidence in the present findings would be strengthened by the use of a more diverse sample, as well as additional measurement methods beyond self-report. For example, future research might employ behavioral or facial expression measures of embarrassment. Embarrassing stimuli might be expanded from the written scenarios in the Sabini et al. (2000) and Modigliani (1968) measures to include video portrayals of embarrassing situations, or imaginal or in vivo experiences. Further, the scope of emotions examined could also be broadened to include a measure of shame and guilt in order to assess relationships among attachment, communication apprehension, embarrassment, and the other self-conscious emotions.

The present findings provide preliminary evidence that the Sabini et al. (2000) measure might be better suited than the Modigliani (1968) embarrassment measure for research examining both public and private social situations. The Sabini et al. (2000) embarrassment trigger measure might also be useful in examination of other related personality and interpersonal variables, such as fear of negative evaluation, self-consciousness, neuroticism, and introversion. Future research should assess the replicability of our findings of the redundancy of the Modigliani measure, as well as comparing the Modigliani and Sabini scales to the Kelly and Jones (1997) embarrassability scale, which measures dispositional rather than situational aspects of embarrassment.

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