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Personal and vicarious embarrassability: Common and unique personality correlates

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Abstract

Although distinct vicarious embarrassability (VE) and personal embarrassability (PE) dimensions have emerged in factor analytic research, few studies have compared theoretically relevant correlates to explore potential differences in underlying mechanisms. The current study sought to determine whether PE was best accounted for by a social evaluation model, and VE by emotional empathy. 453 undergraduates completed embarrassability, emotional empathy and social evaluation trait measures. Factor analysis with oblique rotation produced two correlated (r=.37) PE and VE factors. Multiple regression did not provide absolute support for two distinct underlying models, with fear of negative evaluation and emotional empathy significant predictors of both embarrassability factors. However, public self-consciousness and perceived social competence were predictive only of PE. These results suggest common mechanisms could underlie PE and VE, but that a negative perception and heightened awareness of one's social image could confer a unique vulnerability to PE.

1 Introduction

Susceptibility to embarrassment, or 'embarrassability', is a trait closely related to social anxiety (Miller, 2010) and has demonstrated associations with loneliness, anxiety and depression (Maltby & Day, 2000) and a number of maladaptive behaviours (Leary & Kowalski, 1995). Several theories of embarrassment have been proposed (see Keltner & Buswell, 1997), suggesting antecedents such as transgression of personal standards and uncertainty about how to proceed socially following an unexpected disruption. An additional theory that has received considerable attention, and the one focused on here, is social evaluation theory. This suggests that embarrassment directly results primarily from an acute concern over others' evaluations (Miller, 2010). The social evaluation model fundamentally proposes that two components are necessary to produce embarrassment: the *perception* of negative evaluation from others (e.g. following a self-presentational failure) and *fear* of such negative evaluation (see (Leary & Kowalski, 1995). Individual differences in fear of negative evaluation have been consistently associated with embarrassability (Miller, Leary, & Hoyle, 2009; Maltby & Day, 2000; Kelly & Jones, 1997). Research has also indicated that factors that cause one to both underestimate the standards of one's own behaviour and overestimate the standards expected by others, and thus increase the likelihood of perceiving negative judgements, are also linked to embarrassability. Specifically, low social self-esteem, a lack of confidence in one's ability to perform socially, and socially-prescribed perfectionism, a belief that others expect unrealistically high standards, have both shown positive correlations with measures of embarrassment (Miller, 1995; Stoeber & Yang, 2010). In addition, public self-consciousness, a heightened focus of attention to one's outwardly observable 'public' aspects, has also demonstrated significant correlations with self-reported embarrassability (Miller, 1995; Edelmann, 1985), possibly because these aspects represent potential sources of others' negative evaluation.

1.1 'Vicarious' embarrassability

Although a social evaluation model can account for 'personal' embarrassment, triggered by perceived negative evaluation of one's personal behaviour, such a model cannot easily explain why embarrassment can result from observation of *another's* behavioural failure. Vulnerability to this type of embarrassment has typically been

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labelled 'empathic' or 'vicarious' embarrassability. Recent research has drawn a further distinction between these two forms (Paulus, Muller-Pinzler, Westermann, & Krach, 2013), with empathic embarrassment conceptualised as referring exclusively to an affective experience that is shared by an observer and social target (e.g. watching a comedian flounder on stage), and vicarious embarrassment as a broader term including situations where embarrassment can be experienced by an observer even in its apparent absence in the observed (e.g. observing a teacher who has forgotten to do up his fly). One possible resolution to the failure of the social evaluation model to account for all instances of embarrassment is that, while personal embarrassability may be precipitated by socially evaluate concerns, vicarious/empathic embarrassment could be caused by the same type of empathic processes that generate joy, sadness or other emotions (see Paulus et al., 2013, for a description of neuronal and cogntive processes involved).

1.2 Evidence for embarrassability factors

Despite the conceptual differences in personal and vicarious types of embarrassability, there has been limited empirical success in establishing the two as distinct dimensions. Factor analysis of Modigliani's embarrassability scale (Modigliani, 1968), where respondents assign embarrassment ratings to various social situations, has produced inconclusive results. The number of factors identified has ranged from two (Singelis, Bond, Sharkey, & Lai, 1999), four (Edelmann, 1985; Edelmann & McCusker, 1986) and five (Modigliani, 1968), with factor content frequently varying substantially across studies. This general inconsistency has led to justifiably cautious claims that it may simply be safest to treat embarrassability as consisting of a single dimension (Edelmann, 1987).

However, the discrepancy in identified factors is likely be influenced by the factor retention method used. Studies identifying four or more factors used the Kaiser eigenvalue method with moderate sample sizes (N =103-183), conditions under which the number of genuine latent factors is likely to be overestimated (Zwick & Velicer, 1986). Despite this factorial inconsistency, factors equating to vicarious and personal embarrassability did seem to emerge in a number of these studies. This suggests that these factors could represent genuine independent dimensions of embarrassability,

although this has yet to be verified with a large sample employing an optimal factor extraction technique.

1.3 Embarrassability correlates

Unfortunately, research comparing theoretically derived correlates of vicarious embarrassability with other embarrassability factors is also sparse. Edelmann and McCusker (1986) compared the correlations of empathy with four embarrassability factors but found no significant correlation with vicarious embarrassability and minimal variation across correlation coefficients. Notably, the study examined 'cognitive' empathy, an ability to accurately infer the feelings of others (Flavell et al., 1968). Given that vicarious embarrassment can involve a genuine affective response that transcends a simple cognitive appreciation of an embarrassing situation, an instrument that taps 'emotional' empathy (Fesbach, 1978) would also seem to be worthy of investigation. While Kelly and Jones (1997) identified a significant correlation between an emotional empathy measure and overall embarrassability, correlations with distinct embarrassability factors were not examined. As such, few conclusions can currently be drawn on whether personal and vicarious/empathic embarrassability can be distinguished on the basis of variables such as emotional empathy.

1.4 Current Study

Despite the apparent conceptual distinctiveness of empathic and personal embarrassability dimensions, previous variation in factor structure and a paucity of research comparing theoretically relevant correlates, means there is currently an inadequate basis for confidently delineating these dimensions as distinct types. The aims of the current study were therefore:

(1) To examine the dimensionality of embarrassability by factor analysis of Modigliani's embarrassability scale. Parallel analysis of a large participant sample will be employed to determine the number of factors to retain and thus provide a more reliable assessment of dimensionality

(2) To explore the underlying nature of embarrassability by a comparison of the personality correlates of each factor based on social evaluation variables and a measure of emotional empathy

2 Method

2.1 Participants

Four hundred and fifty-three individuals (123 males and 330 females) with a mean age of 29.1 years (*SD* = 12.7) were recruited from two London Universities. Participants were primarily undergraduates participating in exchange for course credits, with the remainder (approximately 20%) volunteers recruited from around the University campuses.

2.2 Procedure

Participants were not requested to provide any information that could uniquely identify them and were assured that their responses would be treated with complete confidentiality. After providing a signed declaration of informed consent, participants were given a battery of questionnaires, which took approximately 20 minutes to complete.

2.3 Questionnaires

2.3.1   *Embarrassability Scale (ES)*

 A 22-item self-report scale designed to assess susceptibility to embarrassment. Respondents rate the degree of embarrassment that a number of potentially embarrassing situations would cause them to feel on a 5-point scale. The present study uses Edelmann's (1987) revision of Modigliani's (1966) original scale. The ES has demonstrated good internal consistency, reliability and criterion validity, correlating with embarrassment ratings following an experimental manipulation of embarrassment (Modigliani, 1968).

2.3.2   *Brief Fear of Negative Evaluation Scale (FNE)*

The brief FNE (Leary, 1983) is a 12-item scale assessing concern over others' negative evaluations. The scale has shown good internal consistency, test-retest reliability and criterion validity (e.g. Collins, Westra, Dozois, & Stewart, 2005).

2.3.3   Public Self-consciousness Scale (PuSc)

This 7-item subscale of the wider Self-consciousness Scale (Fenigstein, Scheier, & Buss, 1975) taps an awareness and concern over publicly observable aspects of the self (e.g. physical appearance) and has shown good reliability and validity (Fenigstein, et al., 1975).

2.3.4   Texas Social Behavior Inventory (TSBI)

The TSBI (Helmreich & Stapp, 1974) is a 16-item measure of an individual's self-esteem in social situations, with higher scores indicating greater self-esteem. The current study employs the TSBI-B, one of two alternative versions of the scale and shown good reliability and convergent validity (Miller, 1995).

2.3.5   Socially Prescribed Perfectionism Scale (SPP)

This is a 15-item subscale from Hewitt and Flett's (1991) Multidimensional Perfectionism Scale and measures an individual's perception of the perfectionist demands of others. The scale has shown good internal consistency and validity (Hewitt & Flett, 1991)

2.3.6   Parental Expectations (PExp)

This 5-item scale from the Frost Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990), assesses perfectionist standards the respondent feels is demanded by his or her parents. The scale has demonstrated good psychometric properties (Frost, et al., 1990).

2.3.7   Empathy Scale (EMP)

The empathy subscale from Eysenck and Eysenck's (1991) IVE measures emotional empathy. The original dichotomous scoring system is adapted to a 5-point agree/disagree rating scale here to maximize discriminative sensitivity. Analysis of the current study data suggests this adaptation did not compromise internal consistency, with Cronbach's α=.78, comparable with the original (Eysenck & Eysenck, 1991).

2.4 Analytical Method

Exploratory factor analysis using principal components extraction was used to examine the dimensionality of the ES. Although conceptually distinct components were anticipated, an oblique rotation method (promax) was selected, as a degree of association between dimensions is likely. Although a theoretical basis existed for delineation of two factors, exploratory rather than confirmatory factor analysis was chosen given the considerable variation in factors across previous studies.

Standard multiple regression on factor scores of each emergent component was then performed, with individual difference variables entered as predictors. Standard regression was employed in preference to hierarchical regression/SEM as there is insufficient previous research to justifiably specify a structured model with directional relationships.

3 Results

3.1 Data screening

Initial data screening indicated no univariate outliers, non-linear relationships or normality violations with multicollinearity and homoscedasticity regression assumptions also met.

3.2 Embarrassability scale: factor analysis

Inter-item correlations for the embarrassability scale ranged from r = .06 to .60 with a mean of .24. Item communalities indicated a low communality of .16 for one item, which was therefore excluded. To determine the number of components to retain, Horn's parallel analysis with principal components extraction was conducted (see Figure 1). Using the 99th percentile of eigenvalue sets generated from 1000 simulated datasets as the retention threshold (Glorfeld, 1995), parallel analysis suggested two components be retained. [Interestingly, the traditional Kaiser unadjusted eigenvalue>1 method yielded five factors, comparable with previous research, with these factors mostly uninterpretable.]
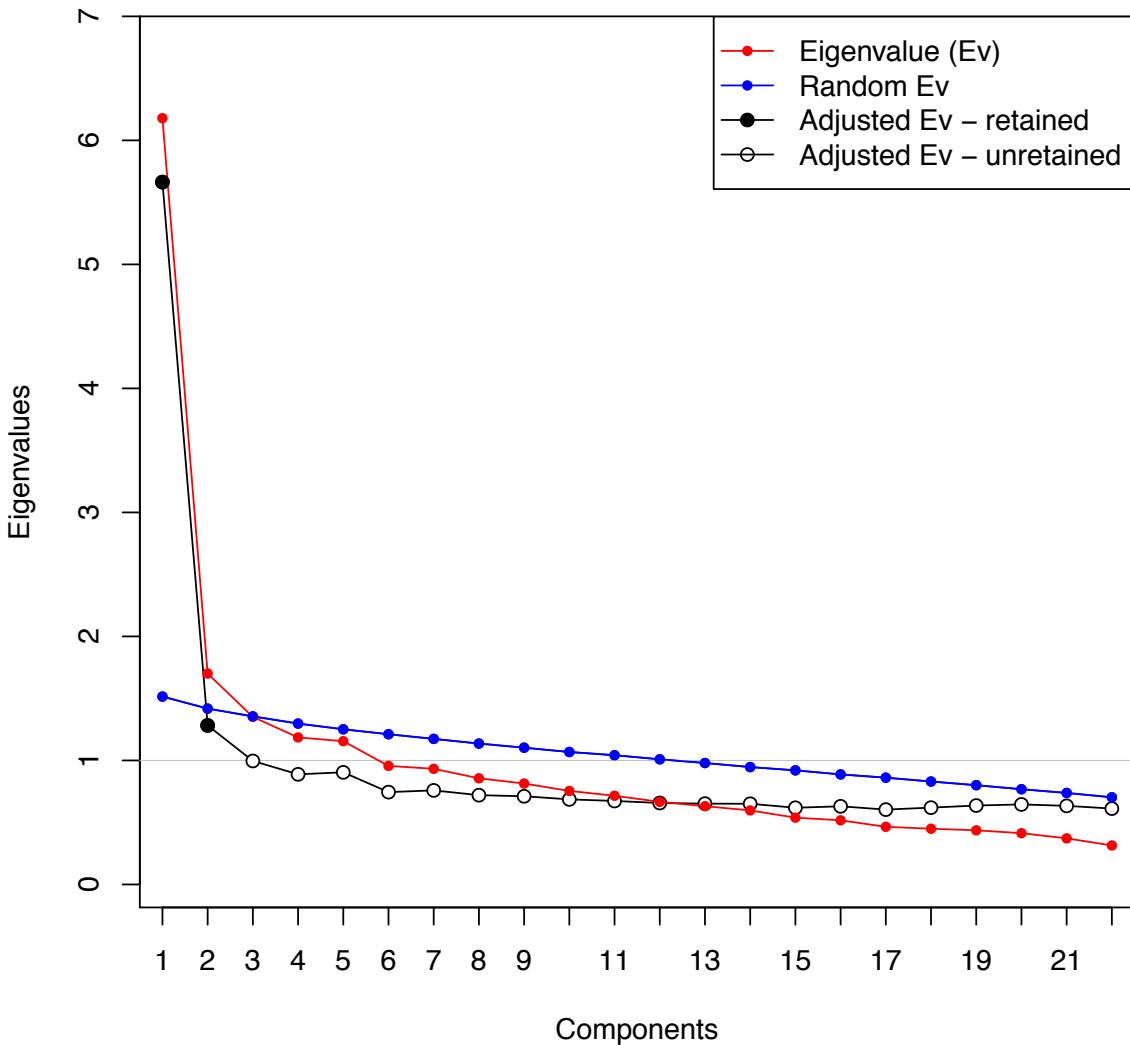
Figure 1. Parallel analysis showing 2 component eigenvalues (Ev) exceed random Ev from simulated data (adjusted Ev = Ev - random Ev +1)

Principal component analysis with two-component extraction was therefore conducted, with an oblique promax rotation (*kappa* = 3) specified. Results indicated a correlation of *r* = .37 between the two components. Eigenvalues for factor 1 and factor 2 were 6.06 (28.9% variance) and 1.70 (8.1%) respectively, with both factors together accounting for 37% of the total ES variance. Rotated loadings from the pattern matrix are shown in Table 1 (with loadings > .40 highlighted in bold) and suggest two distinct and coherent factors. The first factor was labelled 'Personal Embarrassability' (PE), as items appear to largely reflect instances where oneself is the central character in the

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embarrassing situation; either through explicit self-presentational failure or social conspicuousness. The second factor, labelled 'Vicarious Embarrassability' (VE), contains items referring to embarrassment seemingly resulting from observation of another's presentational failure. PE and VE component scores were calculated using the regression method for use as dependent variables in subsequent analysis.

[TABLE 1 ABOUT HERE]

3.3 Multiple regression of PE and VE factors

Correlates of embarrassability factors were initially examined with Pearson's zero-order correlations (Table 2), which suggest that the majority of variables are significantly associated with both types of embarrassability to varying degrees.

[TABLE 2 ABOUT HERE]

To assess the independent contributions of individual difference variables, standard multiple regression analyses were performed on each embarrassability factor. Regression on PE indicated a significant overall model, $F(6, 446) = 28.30$, $p<.001$, with 28% of sample variance ($R^2 = .28$) accounted for by the model predictors, with an adjusted $R^2 = .27$. The table of coefficients (Table 3) indicates that four variables emerged as significant independent predictors of PE: FNE, TSBI, PuSc and EMP. As parental expectations (PExp) and socially-prescribed perfectionism (SPP) were strongly associated both conceptually and statistically (Table 2), it is conceivable that the failure of either to achieve significance could be attributable to their strong common association. However, removing each variable from the regression analysis did not result in the other achieving significance.

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[TABLE 3 ABOUT HERE]

Regression on VE also yielded a significant overall model effect, $F(6, 446) = 9.91$, $p<.001$, although a lower overall sample variance of 12% ($R^2 = .12$) was accounted for (adjusted $R^2 = .11$). Examination of regression coefficients (Table 4) revealed that only FNE and EMP were significant independent predictors of VE.

[TABLE 4 ABOUT HERE]

While FNE, EMP, PuSc and TSBI were significant predictors of at least one embarrassability factor, an examination of the beta weights in tables 3 & 4 indicates that the predictive strength of each variable might vary across the two factors. A test for comparing equivalency of beta weights across two correlated dependent variables (Cohen, Cohen, West, and Aiken (2003, p. 642) indicated significant differences across PE and VE factors in the beta weights of TSBI, $t(445) = 2.15$, $p =.032$, and PuSc, $t(445)= -3.96$, $p <.001$. No significant differences in beta weights were observed for EMP or FNE ($p =.84$ and .70).

3.4 Cross-validation of regression analysis

To estimate the degree of overfitting of estimated regression models, cross validation was performed after randomly splitting the data into equally-sized testing and validation samples. Regression of PE and VE factors was performed on the testing sample and R^2 computed. Resultant model parameters were applied to validation data to estimate predicted scores, with validation R^2 estimated from the squared correlation between actual and predicted scores. This procedure was repeated swapping validation

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and testing sets (double cross-validation). Consistent with adjusted R^2 from the main analysis, shrinkage was minimal, reducing from mean $R^2 = .28$ (screening) to .27 (validation) for PE and .12 to .11 for VE. Model parameters derived from the previous analysis of the entire data were therefore retained as these should represent the most stable parameter estimates (Pedhazur, 1982).

4 Discussion

The primary aims of the study were to assess the dimensionality of the embarrassability scale and to establish whether emergent dimensions could be distinguished by their personality correlates. Factor analysis of the embarrassability scale produced two distinct factors. The 'personal embarrassability' factor (PE) was characterized by situations where one's self was the central character in the embarrassing scenario, either through explicit self-presentational failure (e.g. 'you trip and fall'), or from being the focus of attention (e.g. 'you are opening presents while others are watching'). The 'vicarious embarrassability' factor (VE), in contrast, appeared to reflect embarrassment resulting from observation of *another's* actions independent of one's own behaviour. While the number of embarrassability factors has varied across previous studies, the emergence of a separate vicarious embarrassability factor distinct from other embarrassability dimensions is consistent with previous findings (Edelmann & McCusker, 1986; Modigliani, 1968; Singelis, et al., 1999).

4.1 Personal embarrassability (PE)

Although PE items reflect the respondent being of central prominence in the social encounter (in contrast to vicarious embarrassment), some heterogeneity is apparent. While some items refer to overt presentational failure, others allude to social conspicuousness (with no implication of presentational failure). At least two theoretical perspectives may resolve this apparent heterogeneity. The dramaturgic account (e.g. Sabini, Siepmann, Stein, & Meyerowitz, 2000; Silver, Sabini, & Parrot, 1987) would suggest that self-presentational failure and unexpected social conspicuousness both promote an awkward uncertainty for proceeding with the social encounter in the

absence of any obvious script. Alternatively, the social evaluation model (Miller, et al., 2009) suggests that self-presentational failure and being the centre of attention with little confidence about how to act appropriately, commonly lead to a belief that others will evaluate one negatively and result in embarrassment (Leary & Kowalski, 1995).

The quasi-experimental nature of the research precludes identification of the precise causal mechanisms underlying 'personal' embarrassability. However, it is interesting to note that fear of negative evaluation was a significant predictor of PE, consistent with the social evaluation model (Kelly & Jones, 1997; Miller, 1995). Of the substantive proportion of overall PE variance (R^2 = 28%), low social self-esteem and high public self-consciousness were also significant predictors, in line with previous research (Edelmann, 1985). This suggests that individual differences related to a negative self-perception of one's own social image might also be important. All of these predictors were also significant when entered together in regression analysis suggesting all may independently contribute to vulnerability to personal embarrassment. Neither socially-prescribed perfectionism nor parental expectations were significant independent predictors of PE, suggesting that perceiving others to hold perfectionist standards of behaviour may have little direct influence on embarrassability.

Interestingly, emotional empathy was also revealed as a significant independent predictor of PE. Recent studies examining vicarious/empathic embarrassability have found associations of trait empathy with increased empathic embarrassment reactions as measured by self-report ratings and neural activity (Krach et al., 2011; Stocks, Lishner, Waits, & Downum, 2011). Few studies, however, have specifically examined the association of emotional empathy with personal embarrassability, and the association found here is perhaps surprising given the absence of any obvious theoretical connection. Why would an increased tendency to experience others' emotions vicariously be related to increased personal embarrassment? One possibility is that highly empathic people may simply exhibit greater emotional reactivity in general (Lawrence et al., 2004), and thus may also be more predisposed to experiencing more intense embarrassment in otherwise mildly embarrassing situations. Alternatively, highly empathic people are by definition more conscious of others' thoughts and feelings and this may increase their awareness of others' evaluations.

4.2 Vicarious Embarrassability (VE)

Although personal and vicarious embarrassability emerged as distinct factors, a moderate association (r=.37) was nevertheless observed, suggesting a degree of common vulnerability to both types of embarrassing situations possibly indicative of common underlying mechanisms. This finding is consistent with research identifying a positive association between self-reported propensity to blush in personally-awkward social situations and embarrassment ratings ascribed to pictorial representations of vicarious embarrassment situations (Müller-Pinzler, Paulus, Stemmler, & Krach, 2012).

As with PE, regression analysis revealed emotional empathy and fear of negative evaluation to be significant predictors of VE. Given the obvious dissimilarity in the situational determinants of VE and PE, it is unclear precisely *why* vulnerability to each is associated with these common traits. While emotional empathy would be expected to play an obvious role in vicarious embarrassability, the role of fear of negative evaluation is less obvious. One possible explanation is that any type of empathic response depends partly on the inferences made by the observer on the emotional state of those they are observing (Waytz & Mitchell, 2011). Such inferences are likely to be influenced by the observer's thoughts on how they would feel in the same position (Stocks, et al., 2011), and accordingly their recollection of their own experiences in similar situations, their interpretation of contextual information and their personality characteristics. Given that those high in fear of negative evaluation are more likely to have experienced acute discomfort during their own self-presentational failures they would seem to be more likely to project this state onto others, increasing the likelihood of an empathic response.

While empathy and fear of negative evaluation were common predictors of both embarrassability factors, social-self esteem and public self-consciousness were predictive only of PE and not of VE. Overall, these results suggest that while empathy and a fear of negative evaluation are related to vulnerability to both types of embarrassment, a tendency to focus on and negatively evaluate aspects of one's own social behaviour may uniquely characterize personal embarrassability.

4.3 Limitations & Implications

Limitations of the current research should be noted. First, conclusions regarding personality influences on embarrassability are naturally restricted to variables included

in the study. Given the relatively low predictable variance of vicarious embarrassability in particular (adjusted $R^2=11\%$), other unidentified mechanisms are likely, and may include characteristics of the 'target' such as their likeability (Stocks, et al., 2011) as well traits of the observer. Second, the quasi-experimental nature of the study and the use of self-report measures mean that inferences regarding possible causal personality influences are necessarily speculative. Furthermore, embarrassability was indexed by ratings of how embarrassed participants *thought* they would be in various imagined situations rather than their actual response. Although Modigliani's embarrassability scale has shown significant correlations with embarrassment in real life situations (Modigliani, 1968), the current findings should be considered preliminary until experimental work can corroborate that the pattern of associations identified here are replicated using behavioural indicators and/or third party assessments. This notwithstanding, the theoretically-based personality variables identified in the current study do seem to represent plausible mechanisms that might operate to increase susceptibility to embarrassment and provide a basic framework for a more detailed exploration in future work.

Despite these limitations, the current study contributes to embarrassability research in at least two ways. First, the use of a more reliable factor extraction technique than employed in previous studies provides a more reliable basis for the delineation of two distinct, but related dimensions, of embarrassability. Second, results show that personal and vicarious embarrassability dimensions could share several influences common to both empathic and social evaluation perspectives and this could partially explain their association. Despite these common personality correlates, the current study shows that personal embarrassability may be differentiated from vicarious embarrassability by the unique contribution of a heightened awareness and negative perception of one's social presentation. If the personality variables identified in this study are causally linked to embarrassability this has obvious implications for management, and a maximally effective intervention may be one that addresses multiple influences. Remedial strategies that manage anxiety over others' evaluations may help to regulate excessive embarrassment. Cognitive techniques that address low social self-esteem and an excessive focus of attention on one's social appearance may also be particularly beneficial to those susceptible to the type of personal embarrassment situations so pervasive in daily life.

4.4 Conclusions

Two distinct but correlated embarrassability factors were identified in the current study: personal and vicarious embarrassability. While both embarrassability dimensions may be commonly associated with emotional empathy and fear of negative evaluation, a negative perception and heightened awareness of one's social image may uniquely confer a vulnerability to personal embarrassment. Given the negative consequences of excessive embarrassability, further research in this area is warranted to improve our understanding of the role of personality and to facilitate strategies for management.

5   Acknowledgements

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Table 1. Pattern matrix factor loadings for Embarrassability Scale (loadings>.40 in bold)

Factor and items	Loadings	
	Factor 1	Factor 2
You slip and fall on a patch of ice in a public place, dropping a package of groceries	**.68**	-.20
You discover you are the only person at a social occasion without formal dress	**.60**	.08
You are calling someone you have just met for the first time in order to arrange a date	**.49**	.16
You are muttering aloud to yourself in an apparently empty room when you discover someone else is there	**.53**	.16
You walk into a bathroom at someone else's house to discover that it is occupied by a member of the opposite sex	**.54**	.13
You enter an apparently empty classroom, turn on the lights, and surprise a couple necking	**.43**	.38
You are a dinner guest and cannot eat the main course because you are allergic to it	**.41**	.30
You walk into a room full of people you do not know, and are introduced to the whole group	**.65**	.04
You trip and fall while entering a bus full of people	**.79**	-.23
You are opening some presents while the people who have given them to you are watching	**.43**	.25
You ask someone on crutches if they have had a skiing accident and they reply that they were crippled by polio as a child	**.49**	.12
You are a dinner guest, and the guest seated next to you spills his plate in his lap whilst trying to cut some meat	.10	**.45**
You are watching an amateur show and one of the performers is trying to do a comedy act but is unable to make anybody laugh	-.22	**.75**
You are watching a play when it suddenly becomes clear that one of the actors has forgotten his lines, causing the play to come to a halt	-.17	**.82**
You notice that your teacher has forgotten to do up his fly	.10	**.59**
You are talking to a stranger who stutters badly due to a speech impediment	.16	**.48**
You are talking in a small group which includes a blind person, when someone makes a remark about everyone being "blind as a bat"	.37	**.42**
A group of friends is singing happy birthday to you	.38	.10
You are being lavishly complimented by your companion on your first date	.21	.38
You are alone in a lift with your professor/boss who has just given you a bad grade/reference	.32	.39
You have forgotten an appointment with your boss and run into them the next day	.36	.33

Table 2. Correlation matrix of PE and VE Factors with predictors

	FNE	PuSc	TSBI	PExp	SPP	EMP	PE	VE
FNE		.69**	-.39**	.10**	.27**	.41**	.46**	.28**
PuSc			-.06	.23**	.31**	.27**	.38**	.14**
TSBI				.13**	-.10*	-.23**	-.30**	-.19**
PExp					.57**	.01	.12**	.08
SPP						.11*	.19**	.16**
EMP							.34**	.25**
PE								.36**

* p<.05; ** p<.01;

FNE=Fear of Negative Evaluation; PuSc=Public Self-Consciousness; TSBI=Texas Social Behaviour Inventory; PExp=Parental Expectations; SPP=Socially Prescribed Perfectionism; EMP=Empathy; PE=Personal Embarrassability; VE=Vicarious Embarrassability

Table 3. Regression results for Personal Embarrassability

Variable	ß	t	unique[a]	p
FNE	.19	2.95	.014	.003
SPP	-.01	-0.18	.001	.855
PExp	.09	1.83	.005	.067
TSBI	-.18	-3.88	.025	.001
PuSc	.17	2.86	.013	.004
EMP	.17	3.91	.025	.001

Total unique variance=8.3%

[a]semi-partial correlation squared

Table 4. Regression results for Vicarious Embarrassability

Variable	ß	t	unique[a]	p
FNE	.23	3.13	.024	.019
SPP	.09	1.54	.005	.123
PExp	.04	0.68	.001	.496
TSBI	-.07	-1.41	.003	.160
PuSc	-.10	-1.47	.004	.142
EMP	.15	3.10	.021	.002

Total unique variance=5.8%

[a]semi-partial correlation squared