Associations of personality and emotional intelligence with display rule perceptions and emotional labour

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Abstract

Emotional labour has been widely studied and is of considerable interest in relation to outcomes such as sense of accomplishment and burnout. There is a growing interest in individual differences in emotional labour and in organisational display rule perceptions. Personality and emotional intelligence (EI) are relevant to this, but their effects have been examined in a relatively small number of publications. The present study extends this literature by examining associations amongst personality, EI, display rule perceptions and emotional labour in a group of 247 undergraduate students. Surface acting (SA) was found to be positively correlated with Neuroticism and negatively correlated with Extraversion and Conscientiousness, whilst deep acting (DA) was positively correlated with Agreeableness and Extraversion. Positive display rule perceptions were correlated with Extraversion and negative display rule perceptions with Neuroticism. EI was unrelated to DA but negatively associated with SA and positively associated with positive display rule perceptions. Structural equation modelling showed that EI partially mediated the effect of personality on SA. The personality correlations were similar to previous results. For EI it appears that high-EI individuals are less likely to make use of the emotionally superficial SA strategy; this may be related to their superior emotion regulation capabilities.
1. Introduction

The term emotional labour describes the process in which employees display particular emotions (which may not correspond to the emotions they are actually experiencing) in response to job-related expectations of appropriate emotional behaviour (Hochschild, 1983). Hochschild’s study focussed on airline cabin crew and debt collectors, but requirements for appropriate emotional displays have been identified across a wide range of occupations, for example healthcare professionals (Martínez-Iñigo, Totterdell, Alcover, & Holman, 2007; Montgomery, Panagopolou, & Benos, 2005), teachers (Näring, Briët, & Brouwers, 2006) and university lecturers (Ogbonna & Harris, 2004). It is known that the requirements for emotional display (emotional display rules) vary between occupations and organisations and that individuals also differ in their perceptions of what these display rules are.

There are different ways in which individuals can produce the emotional impression required in their particular working environment. Much of the discussion of these differences has been framed in terms of the strategies of surface acting (SA) and deep acting (DA). SA involves simulating the required emotion without actually feeling it, whilst possibly also suppressing real and less appropriate feelings. DA involves the individual modifying and managing their emotions in order to produce the required ones. Because DA involves an attempt to actively
manage actual emotions whereas SA involves the manipulation of appearances only, these two approaches have been contrasted as "faking in good faith" vs. "faking in bad faith" (Rafaeli & Sutton, 1987). Both SA and DA involve conscious and effortful processes but it has been argued that the genuine nature of the attempt to feel the appropriate emotion that underlies DA also allows positive outcomes such as feelings of accomplishment and enhanced identification with the work role (Brotheridge & Grandey, 2002; Brotheridge & Lee, 2002; Rafaeli & Sutton, 1987).

The emotional effort associated with SA means that it would be expected to be consistently associated with occupational stress, emotional exhaustion and burnout, whereas the balance of costs and benefits associated with DA suggests that such associations would be liable to be weaker and context-dependent. Studies of the associations of SA and DA have been consistent with this view, with SA being found to be positively associated with emotional exhaustion and negatively with sense of accomplishment, whilst DA has been found to be positively associated with sense of accomplishment and either unrelated to emotional exhaustion (Brotheridge & Lee, 2002, 2003; Brotheridge & Grandey, 2002; Martínez-Iñigo et al., 2007), or with an association which becomes nonsignificant when the effects of surface acting are taken into account (Grandey, 2003). Another possible emotional labour strategy is the expression of naturally-felt emotion, where the employee is able to naturally feel the required emotions (Ashforth & Humphrey, 1993; Diefendorff, Croyle & Gosserand, 2005). This mechanism overlaps with and seems to be hard to distinguish from that of unconscious emotion regulation (Gosserand & Diefendorff, 2005), since the outcome of unconscious regulation should be the experience of the required emotion as natural. In this case the benefits of emotional labour are obtained without any cost in conscious effort so that, as found by Martínez-Iñigo et al., (2007), automatic emotion regulation is expected to be negatively related to emotional exhaustion.
The type of emotion that employees are expected to show in the workplace is determined by the emotional display rules of the organisation. In the most common type of workplace situation (one where positive emotional interactions with customers are expected) positive display rules cover expectations to show positive emotions, whilst negative display rules cover expectations to conceal negative emotions. Whilst such display rules generally have an objective existence, they can also to some extent be implicit, so that individual differences in the perception of these rules can be relevant to the selection of an emotional labour strategy.

Both emotional labour and display rule perceptions would be expected to be related to personality. A theoretical starting point for associations between personality and emotional labour (Diefendorff et al., 2005) is that emotional regulation capability is positively related to extraversion (E) and negatively related to neuroticism (N), so that E would be expected to be positively associated with expression of naturally felt emotions and negatively with surface acting, whilst N would be expected to show the reverse association pattern. Conscientiousness (C) is expected to link to good-faith rather than bad-faith acting and to attempting to be genuine in expressing emotions, and thus to be positively associated with DA and expression of naturally felt emotions and negatively with SA. Agreeableness (A) is expected to be associated with motivation to regulate emotions in order to have positive social interactions, and with sincerity in emotional displays, leading to the expectation of the same correlation pattern as for C. These associations were all present in the zero-order correlations reported by Diefendorff et al (2005), although in regression modelling N was found not to predict expression of naturally felt emotions and C not to predict deep acting and expression of naturally felt emotions. Use of the
SA strategy has also been found to correlate positively with self-monitoring (Brotheridge & Lee, 2003; Diefendorff et al., 2005). For the personality correlates of display rule perceptions, Diefendorff and Richard (2003) proposed a model in which associations with E and N are determined by consonance or dissonance with the ability to conform with the rules by regulating emotion, so that E (good emotion regulation capability) would be negatively correlated and N (poor emotion regulation capability) positively correlated with the perception of both positive and negative display rules. The actual findings of their study both for zero order correlations and from structural equation modelling however showed E positively correlated with positive display rule perception only and N positively correlated with negative display rule perceptions only, suggesting that the general salience of positive emotions for extraverts and of negative emotions for high-N individuals is actually more relevant. In the study by Diefendorff et al. (2005) a significant association between N and negative display rule perceptions but not between E and positive display rule perceptions was found.

Emotional intelligence (EI) and emotional labour have clear theoretical links. Among the emotional capabilities regarded as forming components of EI (e.g. Mayer, Salovey, & Caruso, 2002), the ability to regulate or manage emotions is particularly relevant. High-EI individuals should be able to make use of their superior ability to regulate their emotions in the workplace to produce and experience situationally-appropriate emotions. In addition, superior emotion perception and understanding abilities should aid in the determination of the type of emotional display that would be appropriate. In terms of emotional labour strategies, a negative association of EI with the emotionally superficial and inauthentic SA strategy would be expected. The
expression of naturally felt emotions can be regarded as corresponding to the utilisation of greater emotional awareness and capability, particularly if appropriate natural emotions are in fact the product of automatic and unconscious emotion regulation, meaning that a positive association with EI would be expected. For DA the sign of the expected correlation is less clear. If high-EI individuals have less need to perform any kind of emotional acting compared to low-EI individuals then a negative correlation for DA as well as for SA would be expected. However, taking account of the fact that DA allows a more authentic emotional response compared to SA, and that, as discussed above, DA can have positive intrapersonal and interpersonal emotional outcomes, a positive correlation could also be argued for. It is possible that, as with the associations between DA and burnout, associations between DA and EI could be moderated by situational factors.

Associations between EI and emotional labour have not been widely studied to date. In a study using a performance EI measure, the MSCEIT (Mayer et al., 2002), it was found that DA was positively associated with total EI score and with the Managing Emotions branch score, but modelling showed that EI did not predict additional variance in emotional labour above that predicted by situational factors (Brotheridge, 2006). In a study using a trait EI measure, the TEIQue-SF (Petrides & Furnham, 2006), EI was found to be negatively correlated with emotional effort (a composite of SA and DA) and burnout and positively correlated with positive emotional consonance, a measure of expression of naturally felt positive emotions. EI was also found to have incremental value over personality traits in predicting emotional labour and burnout (Mikolajczak et al., in press). A theoretical perspective on EI which is relevant in the context of emotional labour is the idea that EI can act as a positive coping mechanism, with
emotional regulation being the most relevant high-level capability, but with other EI components such as perception and understanding of emotion also being relevant (Salovey, Bedell, Detweiler, & Mayer, 1999) Two recent studies (Saklofske, Austin, Galloway, & Davidson, 2007; Saklofske, Austin, Rohr & Andrews, in press) have explored these ideas and have shown that EI overlaps with measures of coping and can mediate the associations between personality and health behaviours. These ideas can be extended to emotional labour by regarding the selection of emotional labour strategy as the outcome of an emotion-related appraisal and coping process.

The present study examined the associations amongst personality, self-report EI, display rule perceptions and emotional labour in a sample of undergraduate students who had experience of work involving interaction with customers, patients or students. From the above literature review it was hypothesised that the personality trait correlations of SA and DA would be as described above, and that N would correlate significantly with negative display rule perceptions and E with positive display rule perceptions. EI was expected to correlate negatively with SA and positively with the expression of naturally felt emotions. Since a clear theoretical prediction of the sign of any association between DA and EI could not be made, no specific hypothesis was made about this correlation. In addition to examining zero-order correlations, structural equation modelling was performed in order to investigate the role of EI as a possible mediator of the effects of personality on emotional labour.
2. Method

2.1 Participants

The participants were 247 Edinburgh, U. K. university students (50 male, 195 female, two genders not given) who reported experience of jobs involving working with people (14 additional participants who completed the survey but did not report such experience were excluded). Forty seven percent had job experience in customer service roles, 19% in social work or nursing, 25% in sales and 6% in teaching. The remainder reported a diverse mixture of other job types. The mean age of the group was 21.2 years, standard deviation 6.0 years.

2.2 Materials

2.2.1 Emotional labour. The 14-item scale described by Dieffendorff et al. (2005) was used. The scale items cover SA, DA, and expression of naturally felt emotions. Some rewordings were applied to take account of the different work environments of the current sample. In particular the word “customers” in the Dieffendorff et al. items was replaced by “others”. This section was headed “Managing Emotions at Work” and it was explained that “others” meant “people you interact with at work” such as patients, customers or students.

2.2.2 Emotional intelligence. The EI measure was the 30-item short form of the TEIQue (TEIQue-SF; Petrides & Furnham, 2006). This scale is designed primarily as a brief measure of
2.2.3 Personality. A 50-item scale targeting the Big-Five personality factors, the IPIP Big-Five factor markers, derived from the International Personality Item Pool (IPIP; Goldberg et al., 2006) was used. The scale has 10 items assessing each of the dimensions of Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Conscientiousness (C). The scale has been reported to have factorial and concurrent validity (Gow, Whiteman, Pattie, & Deary, 2005).

2.2.4 Perceived display rules and job demands. The display rule perception scale described by Dieffendorff et al. (2005) was used, again with some rewordings to reflect the different work environments of the student sample. The 14 items of this scale covered positive display rule perceptions, negative display rule perceptions, and frequency, duration and routineness of interactions.

2.3 Procedure

Potential participants were asked to complete the survey if they had a job involving interacting with adults either currently or within the last six months. Participants were contacted via brief presentations to lecture groups at which copies of the questionnaire were distributed. The questionnaire was described to participants as relating to emotions in the workplace and gave the following instructions on who was eligible for the survey:

Please only answer this survey if you currently have (or have recently had) a paid or
voluntary job that involves interacting with adults. Depending on the type of work, these people may be customers, patients or students. You should have several months of experience in this job, and must have worked within the past six months.

On the first page of the questionnaire participants were asked to state age, gender, full or part-time job, job title, whether currently employed and estimated total work experience.

3. Results

Descriptive statistics and scale internal reliabilities for the scales used in the study are shown in Table 1.

Table 1 near here

Initial examination of correlations amongst the scales showed that the correlation between surface acting and expression of naturally felt emotions (-.76) was similar in magnitude to the internal reliability of the expression of naturally felt emotions scale, calling into question the existence of SA and expression of naturally felt emotions as distinct subcomponents of the 14-item emotional labour scale. This issue was examined by performing a factor analysis on the surface acting and expression of naturally felt emotion items. The scree plot for the factor analysis suggested the extraction of one factor explaining 55% of the variance and parallel
analysis also indicated the extraction of one factor. The surface acting and expression of naturally felt emotion items were accordingly combined into a longer scale (internal reliability .91) which was used in all further analyses. The designation “surface acting” was retained for this scale, but it should be noted that the merged scale contrasts SA with expression of naturally felt emotion, so that high scorers are liable to use the SA strategy and low scorers to express naturally felt emotions.

Correlations amongst personality, EI, display rule perceptions and emotional labour (using the new surface acting scale and the original deep acting scale) are shown in Table 2. EI can be seen to be positively related to positive display rule perceptions and negatively related to surface acting. Surface acting shows positive associations with N and negative display rule perceptions and negative associations with E and C, whilst deep acting shows positive associations with E, A and both positive and negative display rule perceptions. Positive display rule perceptions are positively correlated with E and A, and negative display rule perceptions with N.

Table 2 near here

Examination of gender differences showed that there were no significant differences between males and females on surface acting, deep acting or either of the display rule perception scales. After correcting for multiple comparisons it was found that females scored significantly higher than males on N ($t(239) = 3.26, p = .001, d = .42$) and A ($t(239) = 4.26, p < .001, d = .55$).
The possibility of EI mediating the effect of personality on emotional labour was investigated using structural equation modelling. Since DA and EI were not significantly correlated, this could only be done for SA; here the correlation with EI was negative, indicating that high-EI was associated with low SA/high expression of naturally felt emotion. As negative display rule perception score was significantly correlated with SA, negative display rule perception score was also included in the model. Initial runs of the model indicated that (as is commonly found, and consistent with the trait intercorrelations in Table 2), correlations between some pairs of personality traits should be included; the final model included correlations between the pairs E/A, E/N, E/O and A/C. The model was originally run with no direct paths between personality traits and SA but the Lagrange multiplier test for adding paths indicated that a direct path should be added from C. The final model is shown in Figure 1. This model was reasonably well-fitting: normed fit index .91, non-normed fit index .91, comparative fit index .95, RMSEA = .074 (90% confidence interval .04, .11), $\chi^2 (15) = 34.25, p = .003$. All model paths were significant.

4. Discussion

This study examined the associations amongst personality, EI, display rule perceptions and emotional labour. Display rule perceptions and emotional labour were assessed using the scales devised by Dieffendorff et al. (2005) and some differences in psychometric properties compared to those reported previously were found. The internal reliabilities of positive and negative
display rule perception scales (.62, .67) were below ideal values and somewhat lower than those (.73, .75) reported by Diefendorff et al. (2005). More substantively, the factor structure of the emotional labour scale did not replicate in the present sample, with clear indications that the SA and expression of naturally felt emotions scale should be combined into a single scale. This suggests that the distinctness of these constructs requires further investigation; the finding here is that expressing naturally felt emotions is perceived by respondents in this study to be on a behavioural continuum with SA as the opposite pole, rather than SA and expressing naturally felt emotions being independently-available emotional labour strategies. The issue of whether SA and expression of naturally felt emotions are the opposite ends of a single emotional labour dimension or are distinct is clearly an important one which merits further study.

The personality correlations for SA were mostly as expected, with the personality profile of an individual being likely to make extensive use of this strategy combining high N with low E and C, although the expected negative association with A was not found. Examination of the relative sizes of the correlations showed the largest effect was for N with a medium-to-large \( r \) of .41. This dominant influence of N on SA suggests that the poor emotion regulation capability associated with high N could cause SA to be the most likely emotional labour strategy for high-N individuals because it allows the manipulation of appearances only rather than actual emotions. DA showed the expected positive association, which was of medium size, with A but not with C and also showed a small positive association with E. The expected associations of positive display rule perceptions with E and negative display rule perceptions with N were found. Although the effect sizes here were small, these associations were consistent with those found by Diefendorff and Richard (2003). A possible interpretation of this is by reference to findings that
extraversion is associated with a predisposition to notice positive aspects of events whilst neuroticism is associated with a predisposition to notice negative aspects (Uziel, 2006). In the context of display rules, the evaluatively positive rule of displaying positive emotions appears to be more salient to extraverts, whilst the evaluatively negative rule of suppressing negative emotions seems to be more salient to high-Ns. EI was also found to correlate with positive but not with negative display rule perceptions, suggesting high-EI shares a tendency with extraversion for focus on the positive. The consistency of the present and previous findings for the association of E and N with display rule perceptions suggests that the role of evaluation in the formation of display rule perceptions would provide an interesting topic for further study.

EI was found to be negatively associated with SA as expected, meaning that high-EI individuals tend not to make use of emotionally superficial surface acting strategies and do tend to express naturally felt emotions in the workplace. EI was found to be unrelated to DA. Structural equation modelling indicated that EI played a role in mediating the effects of personality on SA, although there was also a direct path from C to SA. These results give interesting preliminary information on the role of EI in the emotional labour process. In future work it would be of considerable interest to examine the distinct associations of theoretically salient EI sub-components such as emotion regulation, emotion perception and social competence with emotional labour.

The present study was limited by the use of a sample of students, whose work experiences would have been mostly in short-term and part-time work; the issue of generalisation of these
results to people in permanent employment would require examination. The cross-sectional nature of the study meant that phenomena such as changes in emotional labour style over time could not be examined. Examination of job-related stress and burnout would have been of interest, but would possibly pose validity problems, since it is unclear whether job stress would be as salient for this sample as for permanent employees (in that students have much greater scope for switching away from a job which is perceived as unduly stressful). In terms of the measures used in the questionnaire, the fusion of the SA and expression of naturally felt emotions dimensions found in this sample suggests that the use of a longer emotional labour scale with more items targeted at each of the key dimensions of emotional labour could be helpful in resolving the issue of how many distinct dimensions of emotional labour exist. The low internal reliabilities found for the display rule perception scales also suggest that the development of a longer scale to assess these could be useful.
References


Brotheridge, C. M. (2006). The role of emotional intelligence and other individual difference variables in predicting emotional labor relative to situational demands. *Psicothema, 18*, suppl., 139-144.


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### Table 1. Descriptive statistics and internal reliabilities for personality and EI scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Internal reliability</th>
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<tbody>
<tr>
<td>N</td>
<td>29.38</td>
<td>7.45</td>
<td>.87</td>
</tr>
<tr>
<td>E</td>
<td>33.95</td>
<td>7.40</td>
<td>.89</td>
</tr>
<tr>
<td>O</td>
<td>37.36</td>
<td>5.87</td>
<td>.81</td>
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<tr>
<td>A</td>
<td>40.51</td>
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<tr>
<td>C</td>
<td>34.04</td>
<td>6.41</td>
<td>.81</td>
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<tr>
<td>EI</td>
<td>150.51</td>
<td>19.33</td>
<td>.88</td>
</tr>
<tr>
<td>PDR</td>
<td>16.87</td>
<td>2.47</td>
<td>.62</td>
</tr>
<tr>
<td>NDR</td>
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<tr>
<td>SA</td>
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<td>DA</td>
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<tr>
<td>ENF</td>
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N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, PDR = positive display rule perceptions, NDR = negative display rule perceptions, SA = surface acting, DA = deep acting, ENF = expression of naturally felt emotions.
Table 2. Correlations amongst personality, EI and factor scores

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>N</th>
<th>E</th>
<th>O</th>
<th>A</th>
<th>C</th>
<th>PDR</th>
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<td>A</td>
<td>.34***</td>
<td>-.04</td>
<td>.28***</td>
<td>.10</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>C</td>
<td>.25***</td>
<td>-.04</td>
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<td>.11</td>
<td>.16*</td>
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<td>.24*</td>
<td>.15*</td>
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</table>

Calculated for participants with complete data for all scales, $N = 281$. N = Neuroticism, E = Extraversion, O = Openness, A = Agreeableness, C = Conscientiousness, PDR = Positive Display Rules, NDR = Negative Display Rules. * $p < .05$, ** $p < .01$, *** $p < .001$. 
Figure 1. SEM model for surface acting