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The effects of different types of social desirability on the identification of repressors

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Abstract

This study investigated whether different types of social desirability have an impact on the identification of repressors. In addition, it explored the relationship between the repressive coping style and various affect-related measures. Participants completed the Marlowe–Crowne Social Desirability Scale [Crowne, D.P. & Marlowe, D.A. (1964). *The approval motive: Studies in evaluative dependence*. New York: Wiley] and the Balanced Inventory of Desirable Responding [Paulhus, D. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598–609], which differentiates between *self-deceptive positivity* (the tendency to give self-reports that are honest, but positively biased) and *impression management* (deliberately positive self-presentation). These, in conjunction with scores on the Taylor Manifest Anxiety Scale [Taylor, J.A. (1953). A personality scale of manifest anxiety. *Journal of Abnormal and Social Psychology*, 48, 285–290], allowed the generation of three 2×2 categorisations. Participants also completed measures of trait emotional intelligence (trait EI), rumination, self-esteem, life satisfaction, and coping. A series of ANOVAs showed that the repressor group scored significantly higher on trait EI, self-esteem, life satisfaction, and “healthy” coping styles, but lower on rumination and “unhealthy” coping styles. In almost every analysis, repressors were significantly different from the non-defensive/high anxious group. There was, however, little evidence to support the notion that different social desirability measures have differential impact on the identification of repressors. © 2002 Elsevier Science Ltd. All rights reserved.

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Interest in repression as a coping mechanism dates back to Freud (Freud, 1915/1966), but the area continues to draw a lot of attention (Baumeister, Dale, & Sommer, 1998; Bell & Cook, 1998; Brosschot, de Ruiter, & Kindt, 1999; Burns, 2000; Burns, Evon, & Strain-Saloum, 1999; Cramer, 1998; Lehrer, 1998; Myers, 2000; Myers & Derakshan, 2000; Myers & Reynolds, 2000; Nassau,

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Fritz, & McQuaid, 2000; Newman & Hedberg, 1999; Sparks, Pellechia, & Irvine, 1999). During the 1960s and 1970s there were several psychometric investigations into repression primarily involving Byrne's (1961) repression-sensitisation scale. Although this scale was employed in a series of studies on repression (e.g. Altrocchi, 1961; Charbot, 1973), it was soon established that it was confounded with anxiety and was actually measuring little else (Furnham & Osborne, 1986; Tudor & Holmes, 1973).

Research in repression surged anew in the 1980s, this time with the initiative of Weinberger, Schwartz, and Davidson (1979), who used well-established tests of anxiety (Taylor Manifest Anxiety Scale; TMAS; Taylor, 1953) and social desirability (Marlowe-Crowne Social Desirability Scale; MCSD; Crowne & Marlowe, 1964) in an attempt to define the genuine repressor. Thus, Weinberger et al. (1979) proposed a fourfold categorization based on classifying people as high or low on the two said measures:

1. Defensive/high anxious: High on defensiveness and high on anxiety.
2. Non-defensive/low anxious: Low on defensiveness and anxiety.
3. Non-defensive/high anxious: Low on defensiveness and high on anxiety.
4. Repressors: High on defensiveness and low on anxiety.

Weinberger (1990) suggested that "repressors are people who fail to recognise their own affective responses. . . repressors as a group seem actively engaged in keeping themselves, rather than just other people, convinced that they are not prone to negative affect" (p. 338). Repressors downplay their state of anxiety so that they may appear more socially desirable. Originally, Weinberger et al.'s (1979) classificatory system was designed to examine responses to acute anxiety in laboratory settings and focused on individuals who did not report experiencing anxiety. However, this scheme quickly stimulated a great deal of research ranging from studies on personality and self-estimates (e.g. Furnham, Petrides, Sistrone, & Baluch, 2001) to studies examining physical health (Jensen, 1987).

Furnham et al. (2001) reviewed about 60 studies on the repressive coping style, which they grouped under three headings. First, they reported on cognitive studies (involving Stroop tests, recall tasks, etc.), which generally showed that repressors were highly sensitive to affect-laden stimuli such as emotional words and affective memories (e.g. Baumeister & Cairns, 1992; Bonanno, Davis, Singer, & Schwartz, 1991; Cutler, Larsen, & Bunce, 1996; Davis, 1987; Derakshan & Eysenck, 1997; Fox, 1993; Holtgraves & Hall, 1995; Mendolia, Moore, & Tesser, 1996; Myers & Brewin, 1994; Schimmack & Hartmann, 1997). Second, they reported on various individual differences studies relying mostly on self-report and demonstrating that repressors score high on adaptability, health, and successful coping and low on fear, anxiety, sadness, and hostility (e.g. Egloff & Hock, 1997; Egloff & Krohne, 1996; Kreidler & Kreidler, 1991; Myers & Brewin, 1996; Myers & Vetere, 1997). In short, repressors consistently emerged in self-report measures as the most healthy, happy, and adapted group. Third, they reviewed a series of studies investigating repression in relation to various behavioural and physiological measures such as electrodermal responses, heart-rate changes, and basal salivary cortisol levels (e.g. Altemus, Wexler, & Boulis, 1989; Asendorpf & Scherer, 1983; Brown, Tomarken, Orth, Loosen, Kalin, & Davidson, 1996; Fox, O'Boyle, Barry, & McCreary, 1989; Gudjonsson, 1981; Jamner & Schwartz, 1986; Jensen, 1987; King, Taylor, Albright, & Haskall, 1990; Kneier & Temoshok, 1984; Newton & Contrada, 1992; Shaw, Cohen, Doyle, & Palesky, 1985; Weinberger et al., 1979). The results from these studies

tended to reveal disparities between the physiological data, which indicated that repressors were most reactive and anxious, and the self-report data, which gave an entirely contradictory impression. The overall picture that emerges from the studies in this field is fairly coherent; although repressors are cognitively hypersensitive to positive and especially negative cues, to which they react physically with manifold signs of stress, in virtually every self-report study they appear to be most adapted, relaxed, and happy.

The present study is an extension of previous individual differences investigations on the repressive coping style (Furnham & Traynar, 1999; Furnham et al., 2001) and looks into the relationship between repression, trait emotional intelligence (trait EI), rumination, self-esteem, and coping. More importantly, it investigates the effects of different social desirability measures on the identification of repressors. Despite the popularity of the TMAS and MCSD scales in studies of the repressive coping style, some researchers (e.g. Gudjonsson, 1981) have shown that other related measures work equally well. Furnham and Traynar (1999) compared two different sets of measures to categorise individuals into the 2×2 scheme and found that only 58% of them were classified into the same categories. Nevertheless, this discrepancy did not seem to affect the results, which remained similar irrespective of the inventories used to assess anxiety and social desirability.

Paulhus (1991) noted that in factor analyses the different measures of social desirability tend to load on two separate factors, namely, 'self-deceptive positivity' and 'impression management'. The former refers to an honest, but overly positive presentation and the latter to a self-presentation tailored to a particular audience. While self-deceptive positivity seems to be linked to adjustment, self-esteem, and mental health, impression management is simply a form of lying. The MCDS appears to confound the two by comprising items that measure both. This scale was originally conceived of as an operationalisation of the approval-dependent personality although it has been suggested that it primarily measures the desire to avoid disapproval rather than the desire to seek approval (Paulhus, 1991).

The present study set out to compare results derived from the standard way of classifying repressors (TMAS×MCSD) with those obtained through a different measure of social desirability, i.e. the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984, 1991), which distinguishes between self-deceptive positivity and impression management. The major difference in Paulhus' (1984) conception of desirable responding is that it is conceived of in ego enhancement terms rather than as a tendency to deny psychologically threatening thoughts or feelings (ego defence). The central question of this study is whether repressors will show a different pattern of results across a range of dependent variables, depending on the social desirability scale used to identify them. The use of Paulhus' BIDR scales enables a classification of two rather different types of repressors: the genuine self-deceiver and the impression managing, other-deceiver. Derakshan and Eysenck (1999) argued that there should be noticeable differences between the two types with 'self-deceiving repressors' more clearly differentiated from the other three groups than 'impression managing repressors'.

The second aim of this paper is to investigate the repressive coping style in relation to a set of theoretically relevant dependent variables. Self-report studies have variously examined coping (Furnham & Traynar, 1999; Myers & Brewin, 1996), personality (Furnham & Traynar, 1999; Kreitler & Kreitler, 1991), and affective states (Derakshan & Eysenck, 1997) in relation to the concept of repression. The present study examines a series of distinct affect-related measures. It

was expected that dependent variables associated with affect, rather than cognition, would reveal more pronounced differences between repressors and the other groups, as the former seem hypersensitive to issues concerning their emotional well-being.

Furnham et al. (2001) found that repressors tend to score higher on trait EI than the other three groups in Weinberger et al.'s (1979) typology. The present study attempts to replicate this finding with a different measure of trait EI (Bar-On, 1997). Thus, the first hypothesis is that the repressor group will score higher on trait EI than the other three groups. The second variable considered is rumination, which was assessed with the 'rehearsal' scale of the Emotional Control Questionnaire (Roger, de la Banda, Lee, & Olason, 2001; Roger & Najarian, 1989). Rumination is defined as "passively and repetitively focusing on one's symptoms of distress and the circumstances surrounding these symptoms" (Nolen-Hoeksema, McBride, & Larson, 1997, p. 855). It was hypothesized that repressors would report less rumination than the other three groups. The third dependent variable is one of the most robust and well-studied in psychology, i.e. self-esteem. Self-esteem is closely related to happiness (Furnham & Cheng, 2000) as well as to a wide range of psychological problems (Brockner, 1988). The third hypothesis was that repressors would give higher self-esteem scores than the other three groups. The fourth dependent measure is satisfaction with life, a quintessential self-report variable that concerns an individual's subjective judgments that cannot be a priori related to objective criteria such as wealth or status. In line with Weinberger's (1990) definition of repression, we hypothesised that repressors would score higher on life satisfaction than the other three groups. Finally, various studies have looked at the relationship between repression and coping styles (e.g. Furnham & Traynar, 1999). This research is extended in the present study, where four distinct coping styles, i.e. rational, detached, emotional, and avoidance, were assessed with Roger, Jarvis, and Najarian's (1993) coping strategies scale. Since the rational and detached styles are considered adaptive and the emotional and avoidance styles maladaptive, it was predicted that repressors would report more frequent use of the former and less frequent use of the latter.

1. Method

1.1. Participants

In total there were 112 participants, of whom 75 were females and 35 males (two unreported). Ages ranged from 18 to 30 years (mean = 20.36, S.D. = 2.20). All participants were university students, with the majority being undergraduates.

1.2. Measures

1.2.1. Repressive coping style

Repression was assessed in three different ways. The first set of measures used to identify repressors comprised the TMAS (Taylor, 1953) and the MCSD (Crowne & Marlowe, 1964), which have been employed in many previous studies of repression (Myers & Brewin, 1994, 1996; Weinberger et al., 1979). Based on the mean TMAS and MCSD scores, participants were divided into the four groups of Weinberger et al.'s (1979) typology: defensive/high anxious ($n = 20$),

non-defensive/low anxious ($n = 29$), non-defensive/high anxious ($n = 24$), repressors ($n = 39$). On this sample, the internal consistencies for the MCDS and the TMAS were 0.71 and 0.84, respectively.¹

Subsequently, repression was measured using the TMAS and the BIDR (Paulhus, 1984, 1991). The BIDR measures two distinct aspects of social desirability, i.e. self-deceptive positivity (SDP) and impression management (IM). Respondents rated on a 7-point scale their degree of agreement with each of a total of 40 statements. It is possible to code such that only those participants who give exaggeratedly desirable responses attain high scores. In this case, this led to low reliabilities and therefore the raw scores were retained. The internal consistencies for the SDP and the IM scales on this sample were 0.60 and 0.73, respectively.² The classification based on the SDP and the TMAS scales produced the following group sizes: defensive/high anxious ($n = 11$), non-defensive/low anxious ($n = 23$), non-defensive/high anxious ($n = 32$), repressors ($n = 44$). Finally, the third set of repression measures comprised the TMAS and the IM scales and produced the following group sizes: defensive/high anxious ($n = 21$), non-defensive/low anxious ($n = 31$), non-defensive/high anxious ($n = 22$), repressors ($n = 36$).

1.2.2. *Trait EI*

Trait EI is a constellation of dispositions and self-perceived abilities encompassing many distinct emotion-related facets (Petrides & Furnham, 2000a, b, 2002). In this case, the construct was measured with the Bar-On Emotional Quotient Inventory (EQ-i; Bar-On, 1997), which assesses “an array of non-cognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (Bar-On, 1997, p.14). Participants responded on a 5-point Likert scale ranging from ‘not true of me’ to ‘true of me’.

1.2.3. *Rumination*

Rumination was measured using the rehearsal scale from the Emotion Control Inventory (Roger & Najarian, 1989). This scale comprises 14 items to which participants responded on a 6-point scale ranging from ‘agree’ to ‘disagree’. Data were scored in the socially desirable direction such that high scores indicate *less* rumination.

1.2.4. *Self-esteem*

Self-esteem was assessed with Rosenberg’s Self-Esteem Scale (Rosenberg, 1965). This scale consists of 10 items to which participants responded on a 7-point scale ranging from ‘agree’ to ‘disagree’.

1.2.5. *Satisfaction with life*

Satisfaction with life was measured using Diener, Emmons, Larsen, and Griffin’s (1985) 5-item scale. Participants responded on a 7-point scale ranging from ‘agree’ to ‘disagree’.

1.2.6. *Coping styles*

Roger et al.’s (1993) 60-item inventory was used to measure four distinct coping styles, i.e. rational, detached, emotional, and avoidance coping. As noted, the former two are considered

¹ Two items were dropped from the MCDS due to negative item-total correlations.

² Three items were dropped from the SDP scale due to negative item-total correlations.

adaptive and the latter two maladaptive. Participants responded on a 4-point scale ranging from ‘always’ to ‘never’. In the present data set, high scores indicate *infrequent* use of a particular style.

1.3. Procedure

Participants were asked to complete a battery of questionnaires taking approximately 1 h. Some participants were tested in class whereas others were given the questionnaires to complete in their own time. The response rate was about 90% and most participants received feedback on their results.

2. Results

The internal consistencies for the dependent variables are shown in Table 1. As can be seen, all dependent variables had high alphas, with only one below 0.80 (avoidance coping). The MCSD correlated $r=0.40$ with the SDP scale and $r=0.54$ with the IM scale. Paulhus’ two scales correlated $r=0.30$. Of those participants who were classified as repressors by the TMAS×MCSD classification, about 82% and 71% were classified in the same category by the TMAS×SDP and TMAS×IM classifications, respectively.

2.1. One-way ANOVAs

Three one-way ANOVAs, one per classification (TMAS×MCSD, TMAS×SDP, TMAS×IM), were carried out on each dependent variable. The ANOVAs were followed by post hoc tests (Dunnett’s *t*-tests). The means and standard deviations for the three sets of four groups along with the results of the ANOVAs and the post-hoc tests are summarised in Table 1.

2.1.1. Trait EI

The results were clear and supported the first hypothesis. As predicted, repressors had the highest score irrespective of the manner in which the four groups were identified. Indeed, in two of the three analyses their scores were significantly higher than those of all other groups.

2.1.2. Rumination

The results partially supported the hypothesis. Thus, the repressor group had the highest score (indicating less rumination) in all but one case. Dunnett’s *t*-tests showed that the repressor group’s scores were significantly higher than those of the non-defensive/high anxious group across all three classifications. However, their scores did not differ significantly from those of the defensive/high anxious and the non-defensive/low anxious groups.

2.1.3. Self-esteem

As hypothesised, repressors consistently had the highest self-esteem scores. Their scores were significantly different from those of the non-defensive/high anxious group across all three classifications. In addition, they were significantly different from the scores of the defensive/high anxious group in the TMAS×MCSD and the TMAS×IM classifications.

Table 1

Means, S.D.s, and results from the one-way ANOVAs and post-hoc tests across the three categorisation schemes^a

	Defensive high anxious (a)	Non-defensive low anxious (b)	Non-defensive high anxious (c)	Repressors (d)	<i>F</i>	Dunnett's <i>t</i> -test
<i>Emotional intelligence (alpha=0.88)</i>						
MCSD	3.57 (0.41)	3.75 (0.28)	3.40 (0.33)	3.94 (0.29)	15.69 ^h	d > a, b, c
BIDR (SDP)	3.68 (0.25)	3.73 (0.26)	3.39 (0.37)	3.92 (0.30)	18.19 ^h	d > c
BIDR (IM)	3.59 (0.40)	3.75 (0.30)	3.34 (0.28)	3.95 (0.28)	18.58 ^h	d > a, b, c
<i>Rumination (alpha=0.85)^b</i>						
MCSD	55.23 (8.15)	51.45 (9.75)	44.24 (12.49)	56.05 (6.79)	8.85 ^h	d > c
BIDR (SDP)	55.41 (9.48)	53.22 (10.04)	46.80 (12.13)	54.28 (7.53)	4.35 ^h	d > c
BIDR (IM)	55.60 (10.84)	50.90 (8.80)	45.57 (12.32)	56.42 (7.32)	6.00 ^h	d > c
<i>Self-esteem (alpha=0.89)</i>						
MCSD	51.65 (10.41)	56.13 (7.41)	45.14 (9.85)	57.46 (7.49)	11.58 ^h	d > a, c
BIDR (SDP)	55.91 (8.96)	55.52 (8.44)	45.38 (9.91)	57.45 (6.86)	14.02 ^h	d > c
BIDR (IM)	51.24 (11.08)	56.32 (7.09)	45.06 (9.48)	57.19 (7.79)	10.68 ^h	d > a, c
<i>Satisfaction with life (alpha=0.86)</i>						
MCSD	23.04 (5.32)	24.96 (4.84)	19.52 (5.01)	27.03 (4.96)	11.73 ^h	d > a, c
BIDR (SDP)	22.64 (5.32)	24.48 (4.98)	20.73 (5.45)	26.95 (4.85)	9.57 ^h	d > a, c
BIDR (IM)	23.09 (5.41)	25.16 (4.98)	19.43 (4.90)	26.91 (4.94)	10.78 ^h	d > a, c
<i>Rational coping (alpha=0.86)^c</i>						
MCSD	38.79 (6.94)	38.38 (3.89)	39.50 (7.95)	34.00 (7.69)	4.40 ^h	d < a, b, c
BIDR (SDP)	36.20 (6.05)	38.96 (4.05)	40.56 (7.28)	34.18 (7.27)	6.41 ^h	d < b, c
BIDR (IM)	39.55 (6.86)	37.00 (5.51)	39.50 (7.63)	34.81 (7.53)	3.03 ^g	d < a, c
<i>Detached coping (alpha=0.83)^d</i>						
MCSD	41.47 (5.46)	41.24 (4.92)	45.82 (5.63)	38.19 (6.83)	8.33 ^h	d < c
BIDR (SDP)	40.80 (7.84)	40.87 (6.14)	44.99 (4.96)	38.71 (6.28)	6.70 ^h	d < c
BIDR (IM)	44.53 (5.99)	40.36 (5.42)	43.50 (6.01)	38.67 (6.90)	5.18 ^h	d < a, c
<i>Emotional coping (alpha=0.84)^e</i>						
MCSD	45.16 (7.08)	50.66 (4.31)	42.04 (5.68)	49.93 (4.92)	15.46 ^h	d > a, c
BIDR (SDP)	47.20 (3.12)	48.61 (4.13)	42.13 (6.84)	51.03 (4.77)	18.17 ^h	d > c
BIDR (IM)	44.85 (5.42)	49.85 (4.13)	41.96 (7.20)	50.50 (5.14)	14.90 ^h	d > a, c
<i>Avoidance coping (alpha=0.73)^f</i>						
MCSD	35.26 (5.44)	38.49 (3.96)	35.71 (6.34)	38.00 (5.09)	2.45	—
BIDR (SDP)	38.10 (5.45)	37.30 (4.80)	34.59 (5.92)	38.55 (4.48)	3.91 ^g	d > c
BIDR (IM)	35.90 (4.47)	37.52 (4.38)	35.00 (7.10)	36.84 (4.77)	2.70 ^g	d > c

^a MCSD, Marlowe–Crowe Social Desirability Scale; BIDR, Balanced Inventory of Desirable Responding; SDP, self-deceptive positivity; IM, impression management.

^b Higher scores indicate less rumination.

^c Higher scores indicate less frequent use of the rational coping strategy.

^d Higher scores indicate less frequent use of the detached coping style.

^e Higher scores indicate less frequent use of the emotional coping style.

^f Higher scores indicate less frequent use of the avoidance coping style.

^g $P < 0.05$.

^h $P < 0.01$.

2.1.4. *Satisfaction with life*

Again repressors scored higher than the other three groups across all three categorisations. The differences were statistically significant in the comparisons against the two high anxious groups across all three classifications.

2.1.5. *Coping styles*

The results from the analyses of the four coping styles largely supported the hypotheses. The repressor group reported more frequent use of adaptive coping styles (rational and detached) than the other three groups. In all but two cases these differences were statistically significant. Furthermore, repressors generally reported less frequent use of the two maladaptive coping styles (emotional and avoidance) than the other three groups. Thus, for emotional coping, repressors differed significantly from the non-defensive/high anxious group across all three classifications and from the defensive/high-anxious group in the TMAS×MCSD and the TMAS×IM classifications. Finally, the repressor group reported significantly less frequent use of the avoidance coping style than the non-defensive/high anxious group in the TMAS×SDP and the TMAS×IM classifications.

2.2. *Two-way ANOVAs*

Various authors (Furnham & Traynar, 1999; Furnham et al., 2001; Schimmack & Hartmann, 1997) have performed two-way ANOVAs to explore interactions between anxiety and social desirability. A consistent finding emerging from these studies concerns the lack of significant interactive effects. In line with those studies, the present findings revealed fewer interactions than would be expected by chance alone. Thus, there was only one interaction concerning self-esteem in the TMAS×SDP categorization ($F_{(1, 106)} = 5.60, P < 0.05$).

3. Discussion

The results from the one-way ANOVAs show repressors, compared to the other groups, to be most emotionally intelligent, with high self-esteem and life satisfaction, and a tendency to use adaptive (rational, detached) rather than maladaptive (emotional, avoidance) coping strategies in dealing with stress. Thus, in 23 of the 24 one-way ANOVAs there was at least one significant difference between the repressor group and the other three groups, with the former invariably providing more socially desirable responses. In every single significant ANOVA across the three classification schemes and the eight dependent variables, the repressor group differed significantly from the non-defensive/high anxious group.

Most self-report studies in the area have reported very similar patterns of findings (e.g. Furnham & Traynar, 1999; Furnham et al., 2001; Myers & Steed, 1999; Myers & Vetere, 1997). However, as noted in the introduction, studies based on physiological measures have revealed discrepancies between objectively measured and self-reported anxiety. In short, whilst repressors report less anxiety, they actually experience more than the other groups according to physiological measures.

Trait EI was among the dependent variables that provided the clearest results, with the repressor group scoring significantly higher than every other group in the TMAS×MCSD and the

TMAS×IM classifications. In addition, repressors scored significantly higher than the non-defensive/high anxious group in the TMAS×SDP classification. It is perhaps to be expected that repressors will be particularly sensitive to variables with a strong affective component, since they seem to be continuously engaged in an effort to convince themselves and others that they have a wide range of positive attributes and are not prone to negative affect (Furnham et al., 2001; Weinberger et al., 1979).

In accordance with previous findings, this study revealed a lack of significant interactions between anxiety and social desirability (Furnham & Traynar, 1999; Furnham et al., 2001; Schimmack & Hartmann, 1997), irrespective of the particular scale used to measure the latter. This does not accord well with the notion that repressors are different from the other three groups in Weinberger et al.'s (1979) classification. It is therefore important to determine whether the differences between repressors and the other groups can be explained solely on the basis of the anxiety or the social desirability components of the repressive coping style. The lack of interactive effects between anxiety and social desirability suggests that the differences between repressors and the two high anxious groups can be accounted for by anxiety whereas the differences between repressors and the non-defensive group can be accounted for by social desirability. Note that this explanation does not propose the presence of synergistic effects of anxiety and social desirability that set the repressor group apart from the other three groups.

The literature on repressive coping suggests that it is the self-deceptive rather than the impression management aspect of social desirability that is more closely related to the concept of repression (Derakshan & Eysenck, 1999). A central aim of this paper was to investigate whether Paulhus' (1984) distinction between self-deceptive positivity and impression management has any bearing on the concept of repression, as defined by Weinberger et al. (1979). In line with previous self-report research on repression (e.g. Furnham & Traynar, 1999), the results showed that anxiety is more salient than social desirability in distinguishing repressors from others groups.

In evaluating the role of different types of social desirability in the identification of repressors it is useful to examine the contrasts between the repressor and the non-defensive/low anxious groups since they differ only on the dimension of interest, i.e. social desirability. It is clear from Table 1 that the scores of the two groups do not vary greatly when different measures of social desirability are employed. Thus, with the exception of four cases (two in trait EI and two in rational coping), the repressor group did not have significantly different scores from the non-defensive/high anxious group in any other analysis. Moreover, none of the three social desirability scales showed a consistent advantage in differentiating between these two groups. Thus, the TMAS×MCSD classification produced two of the four cases in which repressors differed from the non-defensive/low anxious group whereas the other two cases were observed in the TMAS×SDP and TMAS×IM classifications, respectively.

Overall, the findings showed that the role of social desirability, irrespective of how it is conceptualised, is limited relative to the role of anxiety in the identification of repressors. However, it is important to qualify the conclusions of this paper. Thus, it should be noted that studies suggesting that the utility of social desirability in the identification of repressors is limited are mostly based on self-report. It is therefore possible that social desirability has a more important role to play when objective measures are employed. Also, the choice of dependent variables can have an impact on what aspect of the repressive coping style becomes prominent in the analyses. Therefore, dependent variables capturing emotional content (e.g. trait EI) are likely to lead to more

salient anxiety effects. However, the effects of social desirability seem to be limited even when the dependent variables under consideration are strongly susceptible to dissimulation (e.g. self-estimated IQ; Furnham et al., 2001). In regard to the apparent lack of discrimination between the three social desirability measures, it is possible that the way the BIDR was scored in this study (scores were not dichotomised as recommended by Paulhus, 1991) increased the overlap between its two subscales and the MCSD.

In summary, the results of this study indicate that in relation to identifying repressors, little changes as a function of different social desirability scales even when, as in the case of Paulhus' measures, they tap into distinct aspects of the construct. On the basis of findings from this and previous studies in the area, it is reasonable to conclude that anxiety is the driving force in Weinberger et al.'s (1979) classificatory system, at least as far as self-reports on socially appealing variables are concerned. Therefore it appears that the 2×2 classification can be successfully achieved with a relatively wide range of social desirability measures. Future research may examine the extent to which this holds true for different anxiety measures (see also Furnham & Traynar, 1999). In addition, it would be interesting to design studies that can explore anxiety x social desirability interactions at the interval level rather than continue to rely on mean or median splits that discard potentially useful information.

References

- Altamus, M., Wexler, B. E., & Boulis, N. (1989). Changes in perceptual asymmetry with the menstrual cycle. *Neuropsychologia*, 27, 233–240.
- Altrocchi, J. (1961). Interpersonal perceptions of repressors and sensitizers and component analysis of assumed dissimilarity scores. *Journal of Abnormal and Social Psychology*, 32, 528–534.
- Asendorpf, J. A., & Scherer, K. R. (1983). The discrepant repressor: Differentiation between low anxiety, high anxiety and repression of anxiety by autonomic-facial-verbal patterns of behaviour. *Journal of Personality and Social Psychology*, 45, 1334–1346.
- Bar-On, R. (1997). *Bar-On emotional quotient inventory: technical manual*. Toronto: Multi Health Systems.
- Baumeister, R., & Cairns, K. (1992). Repression and self-presentation: When audiences interfere with self-deceptive strategies. *Journal of Personality and Social Psychology*, 62, 851–862.
- Baumeister, R., Dale, K., & Sommer, K. (1998). Freudian defence mechanisms and empirical findings in modern social psychology. *Journal of Personality*, 66, 1081–1124.
- Bell, A., & Cook, H. (1998). Empirical evidence for a compensatory relationship between dream content and repression. *Psychoanalytic Psychology*, 15, 154–163.
- Bonanno, G. A., Davis, P. J., Singer, J. L., & Schwartz, G. E. (1991). The repressor personality and avoidant information processing: A dichotic listening study. *Journal of Research in Personality*, 25, 386–401.
- Brockner, J. (1988). *Self-esteem at work: research, theory, and practice*. Lexington, MA: Lexington Books.
- Brosschot, J., de Ruiter, C., & Kindt, M. (1999). Processing bias in anxious subjects in repressors, measured by emotional Stroop inference and attentional allocation. *Personality and Individual Differences*, 36, 777–993.
- Brown, L. L., Tomarken, A. J., Orth, D. N., Loosen, P. T., Kalin, N. H., & Davidson, R. J. (1996). Individual differences in repressive-defensiveness predict basal salivary cortisol levels. *Journal of Personality and Social Psychology*, 70, 362–371.
- Burns, J. (2000). Repression predicts outcome following multidisciplinary treatment of chronic pain. *Health Psychology*, 19, 75–84.
- Burns, J., Evon, D., & Strain-Saloum, C. (1999). Repressed anger and patterns of cardiovascular, self-report and behavioural responses. *Journal of Psychosomatic Research*, 47, 569–581.
- Byrne, D. (1961). The repression-sensitisation scale: Rationale, reliability and validity. *Journal of Personality*, 29, 334–349.

- Charbot, J. (1973). Repression-sensitization: A critique of some neglected variables in the literature. *Psychological Bulletin*, 80, 122–129.
- Cramer, P. (1998). Coping and defence mechanisms: What's the difference? *Journal of Personality*, 66, 919–946.
- Crowne, D. P., & Marlowe, D. A. (1964). *The approval motive: Studies in evaluative dependence*. New York: Wiley.
- Cutler, S. E., Larsen, R. J., & Bunce, S. C. (1996). Repressive coping style and the experience and recall of emotion: A naturalistic study of daily effect. *Journal of Personality*, 64, 379–405.
- Davis, P. J. (1987). Repression and the inaccessibility of affective memories. *Journal of Personality and Social Psychology*, 53, 585–593.
- Derakshan, N., & Eysenck, M. (1997). Interpretive biases for one's own behaviour and physiology in high-trait-anxious individuals and repressors. *Journal of Personality and Social Psychology*, 73, 816–825.
- Derakshan, N., & Eysenck, M. (1999). Are repressors self-deceivers or other-deceivers? *Cognition and Emotion*, 13, 1–17.
- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Egloff, B., & Hock, M. (1997). A comparison of two approaches to the assessment of coping styles. *Personality and Individual Differences*, 23, 913–916.
- Egloff, B., & Krohne, H. W. (1996). Repressive emotional directedness after failure. *Journal of Personality and Social Psychology*, 70, 1318–1326.
- Fox, E. (1993). Allocation of visual attention and anxiety. *Cognition and Emotion*, 7, 207–215.
- Fox, E., O'Boyle, C. A., Barry, H., & McCreary, C. (1989). Repressive coping style and anxiety in stressful dental surgery. *British Journal of Medical Psychology*, 62, 371–380.
- Freud, S. (1915/1966). Repression. In J. Strackey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol.14). London: Hogarth.
- Furnham, A., & Cheng, H. (2000). Perceived parental behaviour, self-esteem and happiness. *Social Psychiatry and Psychiatric Epidemiology*, 35, 463–470.
- Furnham, A., & Osborne, A. (1986). Repressive-sensitisation, self-image disparity and mental health. *Educational and Psychological Measurement*, 46, 125–133.
- Furnham, A., Petrides, K. V., Sisterson, G., & Baluch, B. (2001). Repressive coping style and positive self-presentation (in preparation).
- Furnham, A., & Traynar, J. (1999). Repression and effective coping styles. *European Journal of Personality*, 13, 465–492.
- Gudjonsson, G. H. (1981). Self-reported emotional disturbance and its relation to electrodermal reactivity, defensiveness and trait anxiety. *Personality and Individual Differences*, 2, 47–52.
- Holtgraves, T., & Hall, R. (1995). Repressors: What do they repress and how do they repress it? *Journal of Research in Personality*, 29, 306–317.
- Jamner, L. D., & Schwartz, G. E. (1986). Self-deception predicts self-report and endurance of pain. *Psychosomatic Medicine*, 48, 211–223.
- Jensen, M. R. (1987). Psychological factors predicting the course of breast cancer. *Journal of Personality*, 55, 317–342.
- King, A. C., Taylor, C. B., Albright, C. A., & Haskall, W. L. (1990). The relationship between repressive and defensive coping styles and blood pressure responses in healthy, middle-aged men and women. *Journal of Psychosomatic Research*, 34, 461–471.
- Kneier, A., & Temoshok, L. (1984). Repressive coping reactions in patients with malignant melanoma as compared with cardiovascular disease patients. *Journal of Psychosomatic Research*, 28, 145–155.
- Kreitler, S., & Kreitler, H. (1991). The psychological profile of the health-orientated individual. *European Journal of Personality*, 5, 35–60.
- Lehrer, P. (1998). Emotionally triggered asthma: A review of research literature and some hypotheses for self-regulation. *Applied Psychophysiology and Biofeedback*, 23, 13–41.
- Mendolia, M., Moore, J., & Tesser, A. (1996). Dispositional and situational determinants of repression. *Journal of Personality and Social Psychology*, 70, 856–867.
- Myers, L. B. (2000). Identifying repressors: A methodological issue for health psychology. *Psychology and Health*, 15, 205–214.
- Myers, L. B., & Brewin, C. R. (1994). Recall of early experience and the repressive coping style. *Journal of Abnormal Psychology*, 103, 288–292.

- Myers, L. B., & Brewin, C. R. (1996). Illusions of well-being and the repressive coping style. *British Journal of Social Psychology*, 35, 443–457.
- Myers, L. B., & Derakshan, N. (2000). Monitoring and blunting and an assessment of different coping styles. *Personality and Individual Differences*, 28, 111–121.
- Myers, L. B., & Reynolds, D. (2000). How optimistic are repressors? The relationship between repressive coping, controllability, self-esteem, and comparative optimism for health-related events. *Psychology and Health*, 15, 677–687.
- Myers, L. B., & Steed, L. (1999). The relationship between dispositional optimism, dispositional pessimism, repressive coping and trait anxiety. *Personality and Individual Differences*, 27, 1261–1272.
- Myers, L. B., & Vetere, A. (1997). Repressors' responses to health-related questionnaires. *British Journal of Health Psychology*, 2, 245–257.
- Nassau, J., Fritz, G., & McQuaid (2000). Repressive-defensive style and physiological reactivity among children and adolescents with asthma. *Journal of Psychosomatic Research*, 48, 133–140.
- Newman, L., & Hedberg, D. (1999). Repressive coping and the inaccessibility of negative autobiographical memories: Converging evidence. *Personality and Individual Differences*, 27, 45–53.
- Newton, T., & Contrada, R. (1992). Repressive coping and verbal-autonomic response dissociation: The influence of social context. *Journal of Personality and Social Psychology*, 62, 159–167.
- Nolen-Hoeksema, S., McBride, A., & Larson, J. (1997). Rumination and psychological distress among bereaved partners. *Journal of Personality and Social Psychology*, 72, 855–862.
- Paulhus, D. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598–609.
- Paulhus, D. (1991). Measure and control of response bias. In J. P. Robinson, P. R. Shaver, & L. Wrighton (Eds.), *Measures of Personality and Social Psychological Attitudes*. London: Academic Press.
- Petrides, K. V., & Furnham, A. (2000a). Gender differences in measured and self-estimated trait emotional intelligence. *Sex Roles*, 42, 449–461.
- Petrides, K. V., & Furnham, A. (2000b). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 27, 45–53.
- Petrides, K. V., & Furnham, A. (2002). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality* (in press).
- Roger, D., de la Banda, G. G., Lee, H. S., & Olason, D. T. (2001). A factor-analytic study of cross-cultural differences in emotional rumination and emotional inhibition. *Personality and Individual Differences*, 31, 227–238.
- Roger, D., Jarvis, G., & Najarian, B. (1993). Detachment and coping: The construction and validation of a new scale for measuring coping strategies. *Personality and Individual Differences*, 15, 619–626.
- Roger, D., & Najarian, B. (1989). The construction and validation of a new scale for measuring emotion control. *Personality and Individual Differences*, 10, 845–853.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Schimmack, U., & Hartmann, K. (1997). Individual differences in memory representation of emotional episodes: Exploring the cognitive processes in repression. *Journal of Personality and Social Psychology*, 73, 1064–1079.
- Shaw, R. E., Cohen, F., Doyle, B., & Palesky, J. (1985). The impact of denial and repressive style on information gain and rehabilitation outcomes in myocardial infarction patients. *Psychosomatic Medicine*, 47, 262–273.
- Sparks, G., Pellechia, M., & Irvine, C. (1999). The repressive coping style and fright reactions to mass media. *Communication Research*, 26, 176–192.
- Taylor, J. A. (1953). A personality scale of manifest anxiety. *Journal of Abnormal and Social Psychology*, 48, 285–290.
- Tudor, T., & Holmes, D. (1973). Differential recall of successes and failures: Its relationship to defensiveness, achievement motivation and anxiety. *Journal of Experimental Research in Personality*, 7, 208–224.
- Weinberger, D. A. (1990). The construct validity of the repressive coping style. In J. L. Singer (Ed.), *Repression and Dissociation: Implications for personality theory, psychopathology and health*. Chicago, IL: Chicago University Press.
- Weinberger, D. A., Schwartz, G. E., & Davidson, R. J. (1979). Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioural and physiological responses to stress. *Journal of Abnormal Psychology*, 88, 369–380.