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Emotionality, Repression-Sensitization, and Maladjustment

By R. BLACKBURN

Much of the current research on personality questionnaires has concerned itself with response style or bias related to "social desirability", in which the first factor dimension of the M.M.P.I. is implicated (Edwards and Heathers, 1962). Stable personality differences have been detected between those who are placed high and low on this dimension as measured by a number of M.M.P.I. scales (e.g. Pt (Psychasthenia), K (Defensiveness), Taylor's MAS (Manifest Anxiety), Welsh's A (Anxiety) Scale—see Christie and Lindauer, 1963). However, a lack of integration has resulted from a failure to recognize that the same personality variable is being measured by scales of "social desirability", "repression-sensitization", or the tendency to deny or admit symptoms, and as well as "social desirability", this factor has been identified as "general maladjustment or ego weakness" (Kassebaum, Couch and Slater, 1959), and "neuroticism" (Eysenck, 1962).

The essential characteristic in the self-rating underlying this dimension appears to be a continuum of self-acceptance-dissatisfaction. Thus high "social desirability" subjects, who emerge as "repressors" in other studies (e.g. Byrne, 1961) show elevated thresholds for emotionally charged stimuli, tend to be blocked or evasive to projective tests, show little discrepancy between self/ideal-self ratings, and deny unfavourable traits of aggressiveness or hostility in themselves and others, as opposed to "sensitizers", who show obverse features. This work is summarized by Byrne (1961) and Christie and Lindauer (1963). Byrne, Barry and Nelson (1963) have recently developed a scale of "repression-sensitization" (R-S) which utilizes a number of M.M.P.I. scales denoting, on the one hand, denial or defensiveness (L (Lie), K, and the Dn (Denial) subscale of Hy) and the admission of personal shortcomings and deviations on the other (D (Depression), Pt, and Welsh's A).

The role of questionnaire defensiveness (outright lying apart) has not escaped the attention of M.M.P.I. workers in the past. While the L and K scales were originally conceived as primarily measures of test-taking attitude, it is now accepted that they are related to more permanent personality attributes, in particular self-concept (Dahlstrom and Welsh, 1960). Cuadra (1956), for example, points out that those who score high on L are generally described as ". . . having achieved stability by excluding from consciousness any 'improper' thoughts and from behaviour any socially unacceptable, unconventional actions". Hovey (1956a) related M.M.P.I. scores of student nurses to supervisor ratings of "desirable traits" and occupational adjustment. He found that moderately high K scorers had significantly better ratings than those who scored low or very high on K. It is worth noting that in one factor analysis of a battery of objective and questionnaire tests (Eysenck, 1960), K had the highest positive, and Pt the highest negative loading, on the so-called "normal-neurotic" factor.

Eysenck's interpretation of the "neuroticism' factor is of a continuum of stability-emotional lability. It will be apparent from the preceding discussion that in the questionnaire assessment of subjects' positions on this dimension, low scores may not necessarily indicate "stability", although they may be meaningful in terms of personality attributes. If this is the case, then the concept of this dimension as one of "general maladjustment" must be questioned. Byrne (1961, 1963) draws attention to this problem in discussing the development of his R-S scale,

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which as pointed out seems to have close affinities to, if not identity with Eysenck's "neuroticism" dimension. The distribution of scores on this scale in a large student sample showed a slight positive skew, but the whole range was well represented. Noting that low-scorers (repressors) had little self/ideal-self discrepancy, in his own and other studies, compared with sensitizers, he suggests that two alternatives must be considered; either scales purporting to measure maladjustment identify sensitizers but overlook repressors, or repressors are maximally adjusted. Some evidence on this issue is presented by Chodorkoff (1954), who found that subjects who showed extreme perceptual defence were rated as less well adjusted than those who showed perceptual vigilance. Also, Block and Thomas (1955) consider that self-satisfaction, as measured by low self/ideal-self discrepancy scores, is a reflection of over-control and lack of adaptability. The evidence from these two studies, however, is equivocal, since their personality measures were poorly validated. There is little evidence from psychiatric groups, although Hovey (1956b) found that patients showing dissociation-conversion reactions exhibited little anxiety or emotional distress at a clinical level, and also had significantly higher K scores than patients with somatization or anxiety reactions.

Considering the clinical distinction made between dissociation and anxiety hysteria, and the observed differences in terms of physiological reactivity between "primary" (sociopathic) and "neurotic" psychopathy (Lykken, 1957; Tong and Murphy, 1960) we should indeed expect dissociation hysterics and sociopaths to score lower on a scale of anxiety or emotional over-reactivity in contrast to anxiety hysterics or neurotic psychopaths. Eysenck, however, equates emotional over-reactivity with "neuroticism", and hence his theory demands that these groups should show no significant differences on a scale of emotionality. The problem may be stated alternatively as follows: if low scores (or "repression") on scales purporting to measure maladjustment are synonymous with maximal adjustment or stability, relatively few, if any, repressors will be found in a psychiatric sample, and these should show considerably less in the way of psychopathology compared with high scorers (sensitizers). The alternative is that repressors may be relatively common in a psychiatric population, and differ with respect to type of symptom rather than degree of adjustment. The present investigation was undertaken to investigate these alternatives.

Method

(a) *Subjects*

The records were selected from the files of all neurotic patients seen by the author over a two-year period who had completed the M.M.P.I.; only those who could be unequivocally placed in the "neurotic" category (i.e. neurotic depressions, hysterias, anxiety states, obsessive-compulsives, psychopaths) were selected, and where there was a possibility of psychosis, organic disorder or subnormality the patient was not included. Usual M.M.P.I. validity criteria were adopted. The resulting group consisted of 114 patients representing a random sample (about one-third) of all neurotics examined in the psychology departments of two psychiatric hospitals. There were 59 males (mean age 30·7) and 55 females (mean age 31·4), 63 being seen as in- or day-patients, 51 as out-patients. Diagnoses will not be given, since these were in many cases determined by the psychometric data. However, the full range of neurotic disorder was represented.

(b) *Procedure*

From interview notes an item pool was formed of all symptoms and antecedent stresses which, from the patient's own account, led up to psychiatric referral. These were responses to the questions "Why are you seeking psychiatric treatment?" or "Why have you had to come into hospital?", having been recorded verbatim in all cases. Thus, apart from the limitations inevitably imposed on retrospective data, the pool consisted of all symptoms or stresses which the patient considered important. There were 55 items in all, but only those whose frequency was greater than 6 were retained for further study.

All M.M.P.I. records were then scored for Byrne's revised R-S scale (Byrne *et al.*, 1963).

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While ideally prototypes should be formed from extreme scorers only, the incidence of symptoms in such groups would be too small for comparison. A score of 40 was arbitrarily selected as a cut-off, this score being slightly lower than the mean of Byrne's normative sample. This divided the sample at the 27th percentile, there being 31 low scorers (repressors) and 83 high scorers (sensitizers). The distinction between the two groups is relative and not in any way absolute.

No significant differences were found between the two groups with respect to age, sex or in-patient/out-patient ratio.

Results

(a) *Distribution and Scores of R-S Scale*

The mean scores of the present sample and that of Byrne's normal male group are shown in Table I.

Table I

Mean Scores of Neurotic and Normal Groups on Byrne's R–S Scale

	N	Mean	SD
Neurotics	114	55·70	22·84
Byrne's male students	733	42·25	20·10

The difference between the two groups is highly significant (C.R.=5·93; $p<\cdot001$). This would suggest that the scale is simply a measure of maladjustment. However, comparison of the distributions of the psychiatric group and Byrne's total sample (Fig. 1) reveals considerable overlap. If R-S were a measure of maladjustment, we should expect to find a J-shaped distribution of scores in the neurotics, which is clearly not the case.

Further, the number of neurotics who fall below the mean of Byrne's normal sample is 34 (i.e. 31 per cent.). Repression is evidently not synonymous with maximal adjustment, and the two groups must be considered to differ in terms of some variable which may contribute to, but is not identical with, maladjustment. This will be discussed below.

(b) *Comparison of Stated Symptoms*

There are 18 items from the pool of symptoms and antecedent stresses whose frequency in the population exceeds 6. These are shown in Table II, together with their respective incidence in the low and high scoring groups on R-S. Where cell values fall below 5, χ^2 is corrected for continuity. There are significant

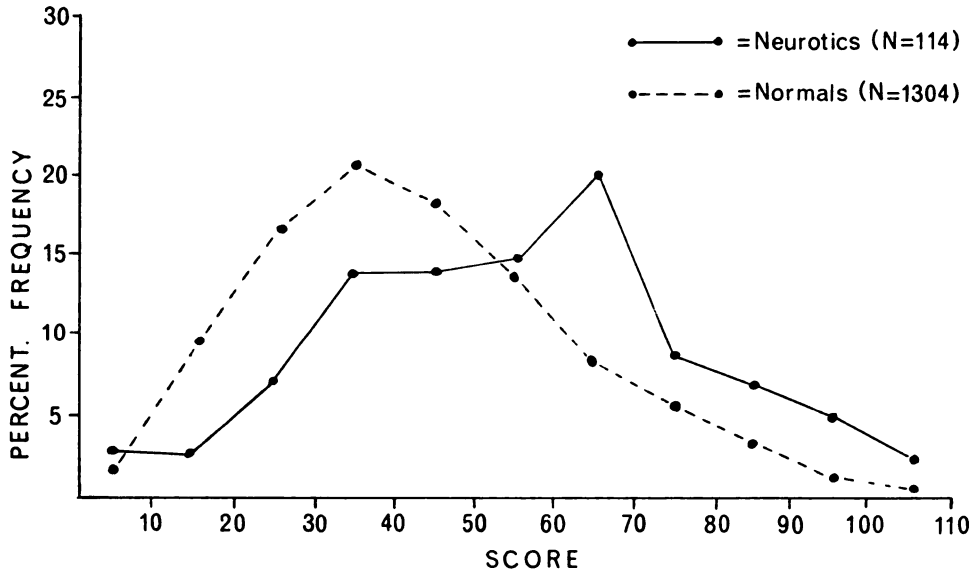


Fig. 1.—Percentage frequency distribution of scores of normals and neurotics on R–S.

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TABLE II

Comparison of Symptoms in Repressor and Sensitizer Groups

Symptom	Repressors (N=31)	Sensitizers (N=83)	χ^2 (d.f.=1)	
Depression	7	31	2·22	N.S.
Sleep difficulty	3	17	1·15	N.S.
Phobias	2	13	1·61	N.S.
Irritability and temper outbursts	6	4	4·28	p<·05
Compulsive thoughts	1	8	0·55	N.S.
Feels tense	2	11	0·47	N.S.
Loss of appetite	0	6	—	(S.)
Loss of interest	2	11	0·47	N.S.
Headaches	2	8	0·03	N.S.
Functional/Conversion	7	6	5·27	p<·05
Stomach disorder	3	5	0·07	N.S.
Social withdrawal	3	6	0·00	N.S.
Attempted suicide	7	13	0·75	N.S.
Petty theft	0	6		(S.)
Sexual offences	4	8	0·03	N.S.
Excess drinking	1	6	0·13	N.S.
Intrapsychic (emotional) conflicts	1	14	2·58	N.S.
External problems	12	13	7·00	p<·01

differences between the groups on five items. The sensitizers show a greater proportion on loss of appetite and petty theft (assumed to have a psychogenic basis), while the repressors have a greater incidence of functional/conversion symptoms (e.g. back pain, "paralysis", asthma), had been more prone to temper outbursts and irritability, and are more inclined to attribute their breakdown to external sources (e.g. work pressure, marital disharmony, family ill-health). There is also a tendency for the sensitizers to state that they suffer from depression, intrapsychic conflicts (feelings of inferiority, worry over trivia, etc.) and phobic symptoms, more than the repressors, although the differences are not significant.

In the majority of items, the null hypothesis cannot be rejected; i.e. a wide variety of neurotic symptoms is found in both groups. In general terms, where significant differences occur, they seem to reflect the greater degree of psychic anxiety in the sensitizers. It is interesting to note that although there is a greater incidence of petty theft in the sensitizers, the two groups do not differ in terms of other acting out or anti-social behaviour, such as sexual offences. The finding of a greater incidence of temper outbursts and irritability among the repressors is a surprising one. A tentative explanation is that prolonged repression or avoidance behaviour may lead eventually to "sparking over" activity, to borrow an ethological concept.

(c) *Repression-Sensitization and Extraversion*

It might be objected that the R-S scale is a compound of both "neuroticism" and "introversion-extraversion". However, the correlation between R-S and Welsh's R Scale, which is the "purest" measure of the introversion-extraversion dimension in the M.M.P.I. (Kassebaum *et al.*, 1959) is not significant (r=+·059).

DISCUSSION

While these results do not in themselves provide a clear-cut answer, they strongly support the view that R-S (and concomitantly the first factor dimension of the M.M.P.I., or "questionnaire neuroticism") is not a measure of maladjustment *per se*. While high scores on this dimension are undoubtedly a reflection of poor adjustment, the present evidence indicates that low scores are not the prerogative of the maximally adjusted. In Welsh's early study of

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the operation of the A and R scales in a psychiatric population, he found that low scores on A were characteristic of both conversion reactions and character disorders, while anxiety states scored high (Welsh, 1956). He consequently interprets the first factor as "anxiety", and the present results are not inconsistent with this view. While the concepts of "emotionality" or "ego-weakness" may be equally appropriate, their relationship to "adjustment" is obviously not linear.

The so-called "neuroticism" factor in Eysenck's first monograph (Eysenck, 1947) was defined most prominently by the psychiatric rating "badly organized personality". The patient high on emotional reactivity seems more likely to be so diagnosed, while, as Hovey (1956b) showed, dissociation-conversion hysterics may exhibit little emotional distress. In Eysenck's study, the distribution of the factor weighted scores of items defining the "neuroticism" factor was entirely normal, not, as predicted, J-shaped. His explanation that severe stress had probably resulted in a number of non-neurotic individuals suffering breakdown and being included in the psychiatric sample is most unlikely; no bimodality is apparent in the curve. A more feasible interpretation would be that the dimension is related to emotional reactivity which is normally distributed in psychiatric patients. The distribution of R-S in the present sample supports this notion.

According to Byrne (1961), the R-S Scale correlates significantly and negatively with authoritarianism. Morrow and Berger (1964) recently demonstrated that high scorers on an authoritarianism scale in a criminal psychiatric population tended to attribute their offences to superficial, non-psychological causes, while low scorers gave explanations in terms of emotional conflicts. This parallels the present finding that many repressors attribute their breakdown to external causes, sensitizers tending towards psychological explanations. It also emphasizes the repressor's uncritical self-acceptance, and lack of insight into his own shortcomings.

The sensitizer, being emotionally overreactive, is more likely to experience anxiety under stress than the repressor, and hence is more likely to be recognized as psychiatrically disturbed. On the other hand, the deviant behaviour and non-emotional symptoms of the repressor under stress are less likely to be recognized as having a psychological origin. It is possible that a large number of patients in general practice are of this latter kind, the incidence of neurosis being generally considered quite high among such patients. However, it is apparent that sensitizers form a majority of psychiatric patients; hence the mean scores of unselected neurotic samples will inevitably be higher on scales of "neuroticism". For the reasons given, this does not constitute sufficient evidence that such scales can be considered measures of maladjustment.

Summary and Conclusions

In view of the evidence that repression-sensitization is essentially normally distributed in the present neurotic sample, and that low scorers differ from high scorers only with respect to certain symptoms rather than degree of neurotic illness in general it seems justifiable to conclude that emotionality, as measured by questionnaires, cannot be equated with "general maladjustment" or "neuroticism". To a large extent, low scores on scales measuring this dimension appear to reflect lack of insight and uncritical self-acceptance rather than stability, and such scores in psychiatric patients are most likely an indication of dissociation-conversion reactions or primary (sociopathic) psychopathy. There seems no reason to suppose that adjustment itself can be estimated from an individual's position on the so-called "neuroticism" dimension; other variables are undoubtedly involved.

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