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Personality dimensions through the schizophrenia borderline

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While the schizoid dimension of personality has often been thought to be unitary, it has recently been suggested that several dimensions may be involved. In this study two separately derived normal population personality scales from within the psychoticism domain, the Rust Inventory of Schizotypal Cognitions (RISC), a scale designed to measure the positive cognitive schizotypal dimension, and the Eysencks' P scale from within the Eysenck Personality Questionnaire, were administered to a group of 608 Venezuelan university students. It was found that the RISC and the EPQ had only a small correlation of 0.12. It was concluded that at least two dimensions were involved in the schizophrenic/normal spectrum, and that the EPQ Psychoticism scale was in fact measuring a dimension of personality disorder rather than a general factor of psychoticism.

It has long been argued that the bizarre idea systems of the schizophrenic, the odd ideas of the schizotypal personality, and normal cognition lie on a continuum (Chapman, 1966; Chapman & Jean, 1980; Heston, 1970; Kraepelin, 1919; Spitzer, Endicott & Gibbon, 1979). If this is the case then the position of an individual on this continuum should be psychometrically measurable, and scales or diagnostic interviews have been designed for this purpose (Baron, Asnis & Gruen, 1981; Baron, Gruen, Rainer, Kane, Asnis & Lord, 1985; Chapman, Chapman & Raulin, 1976, 1978; Claridge & Broks, 1984; Eysenck & Eysenck 1976; Eysenck, Eysenck & Barrett, 1985; Golden & Meehl, 1979; Rust, 1987). Eysenck & Eysenck (1976) have argued that the dimension involved, which they called Psychoticism, is unitary, and is orthogonal to Extraversion and Neuroticism as measured by their scales. However, the Eysencks' Psychoticism scale has been shown not to correlate with other scales also purporting to measure the schizoid dimension (Claridge & Broks, 1984), and the DSM-III and related category systems (APA, 1980) have now led to the widely held view that the schizophrenic–normal spectrum is not unitary. It has been postulated (Lanin-Kettering & Harrow, 1985; Spitzer *et al.*, 1979) that different dimensions relate different aspects of schizophrenic symptomology to the schizoid personality, to personality disorder, and to the schizotypal personality respectively.

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The present study looks at the relationship between the Psychoticism scale of the Eysenck Personality Questionnaire (EPQ), and the Rust Inventory of Schizotypal Cognitions (RISC) (Rust, 1988), a scale specifically constructed to measure the schizotypal cognitive aspect of personality as an extension of the positive symptomology of schizophrenia and the borderline schizotypal personality.

Method

Subjects

The subjects were 608 students (102 males and 506 females) drawn from the Faculty of Humanities of the Central University of Venezuela. The mean age of the group was 24.96 years with a standard deviation of 6.47 years. The Central University is a large, prestigious university which draws students from a wide range of cultural and socio-economic backgrounds.

Questionnaires

The Eysenck Personality Questionnaire (EPQ) (94-item Spanish version) (Eysenck & Eysenck, 1976) was administered. This questionnaire contains four scales: Extraversion (E), Neuroticism (N), Psychoticism (P) and Lie (L). The reliability of the latest version of the Psychoticism scale (Eysenck *et al.*, 1985) is 0.78 for males and 0.76 for females.

The Rust Inventory of Schizotypal Cognitions (RISC) (Rust, 1987, 1988) is a short psychometrically constructed questionnaire for tapping the positive cognitive symptomology of the schizotypal dimension in the normal population. It takes as its source the idiosyncratic ideas of those who are seen to be schizotypal or eccentric; DSM-III category A of schizophrenia and DSM-III categories 1, 2, 4, 7 of schizotypal personality disorder (APA, 1980). These schizotypal ideas form the extremes of the cognitive schemata of suspicion, magical ideation, ritual, subjectivity, thought isolation, and self-delusion which are not uncommon in the normal population. The RISC is 26 items long (13 positive and 13 negative) and is normally distributed in the general population. It has a split-half reliability of 0.77, and has shown a high level of discrimination between a group of acute schizophrenic presenters at psychiatric hospitals and clinics, and normal controls. The RISC has been standardized on a normal population to eliminate extreme items associated in the public mind with 'mad' behaviour, and no items in the RISC are rejected or accepted by less than 20 per cent of the normal population. It thus overcomes the major problem found in most scales of its type, where items are often too obviously 'mad' to be taken seriously by the general population. The RISC, for example, has the item 'Sometimes my thoughts seem so loud I can almost hear them', rather than 'I sometimes hear imaginary voices'. The Spanish version of the RISC was used. Parallelism of items across an English version in London and Hong Kong, and a Spanish version in Venezuela was one of the criteria for item selection in the RISC's construction (Rust, 1987) so that the RISC is relatively immune from culture bias.

Procedure

The subjects were given the RISC and the EPQ to complete within the university setting and were asked to answer every question. Testing took place in classes of about 30. Both scales are forced choice, the EPQ having two categories of yes/no, the RISC having four categories of: (1) strongly agree; (2) agree; (3) disagree; (4) strongly disagree.

Results

The mean RISC score was 34.27 (SD = 5.48), which compares well with the 35.67 mean (SD = 7.67) of the 140 subject group on which the RISC was constructed (Rust, 1987). The correlation with age was -0.08 ($P < 0.05$), the younger subjects

tending to have higher RISC scores. There were no significant sex differences. The means and standard deviations for the Eysenck Personality Questionnaire were Psychoticism (mean = 6.51, SD = 4.27), Extraversion (mean = 16.63, SD = 3.99), Neuroticism (mean = 13.60, SD = 5.03) and Lie (mean = 11.17, SD = 3.66). The correlations between the variables appear in Table 1. It can be seen that the RISC correlates significantly with P ($r = 0.12$, $P < 0.001$), N ($r = 0.38$, $P < 0.001$) and L ($r = -0.19$, $P < 0.001$), but not with E ($r = -0.04$). The correlation of 0.12 between the RISC and the EPQ P scale is highly significant owing to the large sample size. However given that both scales are related to purported psychotic dimensions its most noticeable feature is its low level. The square of 0.12 is 0.014, thus less than 2 per cent of the variance of one of the scales is accounted for by the other. The correlations of the Lie scale with the P scale (−0.39) and the N scale (−0.29) were both significant. The correlation of the RISC with the Lie scale was statistically significant but somewhat lower (−0.19), suggesting a relatively low contamination of RISC scores with lying.

Table 1. Correlations between the RISC and the Eysenck P, E, N and L scales

	RISC	P	E	N
P	0.12**	—	—	—
E	−0.04 (n.s.)	−0.16**	—	—
N	0.38**	−0.01 (n.s.)	−0.21**	—
L	−0.19**	−0.39**	0.11**	−0.29**

* $P < 0.01$; ** $P < 0.001$.

Discussion

Thus it seems the RISC and the EPQ Psychoticism scales are only slightly related and must therefore be measuring rather different constructs. Inspection of item correlations showed that a common element between the two scales exists only for paranoid items, and an inspection of the face validity of the items confirms that this is the only area in which the test specifications overlap. Items other than the paranoid within the EPQ Psychoticism scale seem to be more obviously related to psychopathy and personality disorder than to the schizotypal personality and borderline schizophrenia. Our results confirm those of Claridge & Broks (1984) who found that only their STB scale (related to personality disorder) correlated with EPQ Psychoticism. The STA scale (related to the schizotypal and borderline schizophrenic personality) had no relation with Eysenck's Psychoticism. Claridge & Broks (1984) also found that, like the RISC, both of their scales correlated with Eysenck's Neuroticism scale, and all these results suggest that Eysenck may well have been misguided in attempting to construct a Psychoticism scale completely orthogonal to Neuroticism. In particular, our results show that the dimensions representing the psychopathically and the schizotypally inclined are rather distinct.

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