SCHIZOTYPAL AND BORDERLINE PERSONALITY TRAITS IN RELATION TO HETEROSEXUAL BEHAVIOUR IN ‘NORMAL’ ADOLESCENTS

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Summary—We studied the relationship between the predisposition to major psychoses and the level of self-reported experiences of heterosexual behaviour in 153 secondary students. ‘Normal’ equivalents of Schizotypal and Borderline Personality Disorders were assessed respectively by the Schizotypal Personality (STA) and Borderline Personality (STB) scales introduced by Claridge and Broks (1984). The level of self-reported heterosexual behaviour was assessed by means of a modified version of the Guttman scale developed by Bentler (Garcia-Sevilla, Muntaner, Moreno and Trullas, 1984). Results showed a significant positive relationship between the level of heterosexual behaviour and STB. No significant relationships were found with STA. The potential significance of these findings in order to validate STA and STB scales is discussed.

INTRODUCTION

Claridge and Broks (1984) have been engaged in a line of research that can be understood as a confluence of interests shared by the individual differences theory and by psychiatry. These authors have investigated the occurrence of ‘psychotic’ characteristics within normal samples, following their theory that measurement of a dimensional predisposition towards functional psychosis should be possible. The authors constructed a symptom-based two-scale questionnaire (STQ), following the work of Spitzer, Endicott and Gibbon (1979), whose main aim was the empirical assessment of two forms of ‘Borderline’ dimensions extending from normality to the major psychoses. The scales known as Schizotypal Personality (STA) and Borderline Personality (STB), correspond to predispositions towards the DSM-III categories of Schizotypal and Borderline Personality Disorders (APA, 1980), respectively. STA seems to tap schizotypal characteristics of a more ‘symptomatic’ item content, whereas STB would assess personality characteristics of a general antisocial kind (Claridge and Broks, 1984). Although there has been little psychometric work on the STQ, findings reported concerning its relation to the Eysenck scales give considerable support to its construct validity. Results reported by Claridge and Broks (1984), show a positive relationship between Neuroticism (N) and both scales, as could be expected from the Borderline concept on which they are based; the Psychoticism (P) scale was positively related only to STB, suggesting that the two scales do cover different characteristics of psychosis proneness.

The development of the two scales raises the question of their relation to the major psychoses, which has also been a major topic in the clinical field during the last years for the two DSM-III categories (Gunderson, Siever and Spaulding, 1983; Gunderson and Elliot, 1985). Since the measurement of premorbid adjustment has been recognised as a useful tool in the prediction of outcome of schizophrenia and in separating process and reactive syndromes (Zigler and Levine, 1981; Stoffelmayr, Diallovou and Hunter, 1983; Schultz and Herron, 1979) and since among the different indicators of premorbid adjustment, the level of heterosexual development in the premorbid period figures prominently (Cannon-Spoor, Potkins and Wyatt, 1982), the relationship between Claridge and Broks’ scales and degree of heterosexual experiences becomes an important area of investigation.

The aim of the present research was to study the relationship between the level of heterosexual behaviour and the ‘psychotic’ characteristics assessed by STA and STB scales in a sample of young people of both sexes. This study could also contribute to the validation of the aforementioned scales.
METHOD AND PROCEDURE

Subjects

This study involved 153 secondary students, divided into 66 boys ($\bar{x}$ age = 16.29 yr, SD = 0.57) and 87 girls ($\bar{x}$ age = 16.12 yr, SD = 0.50).

Material

Each subject answered the three scales administered:

STA scale (Claridge and Broks, 1984) in a Catalan-language version (Muntaner, 1985). This scale has 36 items based on the diagnostic criteria of 'Schizotypal Personality Disorder' from DSM-III (APA, 1980).

STB scale (Claridge and Broks, 1984) in a Catalan-language version (Muntaner, 1985). This scale has 19 items based on diagnostic criteria of 'Borderline Personality Disorder' from DSM-III.

An enlarged Catalan version of the Bentler Scale for Heterosexual Behaviour (Garcia-Sevilla et al., 1984). This scale has 28 items answered according to whether subjects have or have not experienced each heterosexual behaviour mentioned.

Method

The questionnaires were administered in a classroom, in five groups of no more than 37 Ss each. Subjects responded anonymously, and emphasis was placed on the importance of answering accurately.

RESULTS

Table 1 shows mean scores and standard deviations obtained from the three scales, and the $t$-test comparisons between sexes. It can be seen that females scored significantly higher than males in STA and STB. On Bentler’s scale, males scored higher than females but the difference did not reach significance.

Table 2 shows, for both sexes, Pearson’s correlations between the three scales. STA and STB correlated positively and significantly for both sexes. Additionally, STA correlated positively with Bentler’s scale without reaching significance in either sex; STB correlated positively and significantly with Bentler’s scale in males, but in females the positive relationship did not reach significance.

In order to assess the possible existence of non-linear relations between the two measures of 'psychoses proneness' and Bentler’s scales, Ss were divided into three groups for both sexes, according to their scores on STA and STB. Ss in the lower 33% of the distribution, the central 33% of the distribution, and the top 33% of the distribution, were separated for each scale.

Figure 1 shows Bentler’s scale scores for both sexes in relation to their scores on STA. In the female group we can observe a positive relationship, while in males this effect is not as clear. No

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<th>Table 1. Means and standard deviations for males and females and $t$-test comparison for STA, STB and Bentler scales</th>
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* $P < 0.05$.  
** $P < 0.001$.

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<th>Table 2. Correlations between STA, STB and Bentler scales for males and females</th>
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* $P < 0.05$.  
** $P < 0.001$. 
significant differences between the three groups for either sex were found by means of the Duncan multiple range test.

Figure 2 shows Bentler's scale scores for both sexes in relation to scores on STB. In the female group we can observe a positive linear relationship, but in males the relation follows an inverted U-shape. The Duncan multiple range test showed significant differences in males, between the group STB low and the two others ($P < 0.05$). Duncan multiple range test, in females, showed significant differences between STB low and STB high ($P < 0.05$).

**DISCUSSION**

The obtained means for the STA and STB scales are higher for both sexes than those obtained in populations 2–3 yr older (Muntaner, 1985). Nevertheless, the sex differences found here are in the same direction as those found in other reports (Claridge, Robinson and Birchall, 1983), that is, females scored higher than males on both scales. The obtained scores on Bentler's scale show a level of heterosexual behaviour that could be classified as low, but the most striking characteristic could be the great variability in the scores.

The significant positive correlations between STA and STB are consistent with those obtained by Claridge and his colleagues (Claridge and Broks, 1984) and by Muntaner (1985). From these
results one can affirm that these two traits, in normal Ss, are moderately related. This conclusion is in accordance with the results obtained by Spitzer et al. (1979) in heterogeneous groups of patients. The results bearing on the relationship between the scores on Bentler's scale and STA scale, although not being significant, were clearer in females than in males. Figure 1 shows a linear relationship in females and, on the other hand, a U-shape relationship in males. In any case, the lack of statistical significance in comparing the three groups in males does not allow us to support a hypothesis of a U-shape relationship in the male group.

With respect to the relationship between STB and heterosexual behaviour (Fig. 2), given that the highest Bentler scores were obtained in the middle group of STB scores, one could hypothesize an inverted U-shape function in males. But the lack of significant differences between this group and the highest STB male group does not allow us to confirm this hypothesis within this restricted sample. In females, on the other hand, the observed relation is linear. In fact what was common to both sexes was the tendency toward lower scores on Bentler's scale for the two groups of low STB subjects.

The obtained results with STB are similar to those reported by Eysenck (1976) using the Psychoticism (P) scale in a study involving a large sample of young people, namely students. In spite of one study where no substantial correlations were found between P and sexual behaviour (Barnes, Malamuth and Check, 1984), there is at least some empirical evidence that both P and STB scales are positively correlated to the amount of heterosexual experience. The P and STB scales have also been found to share some common variance, since some studies (Claridge et al., 1983; Muntaner, 1985; Torrubia and Muntaner, in press) show moderate positive correlations between them. Furthermore, both scales share moderate negative correlations with the Lie scale (Claridge et al., 1983; Muntaner, 1985). This amount of research gives additional support to the idea that the STB scale might cover some features of psychoticism that the P scale also measures, namely, personality characteristics of a generally antisocial kind.

On the other hand, it has been suggested that the STA scale covers those aspects of psychoticism related to schizophrenic-like features since it has been found to correlate positively with the PEN P scale, an earlier version of the P scale with an item content more biased towards these 'symptomatic' kinds of features (Claridge and Broks, 1984). Our present results seem to follow the same tendency; the non-significant relationship between STA and heterosexual behaviour confirms that P and STA are probably measuring different aspects of psychoticism.

Some previous studies have pointed out the importance of the level of heterosexual behaviour in the premorbid period as an index of prognosis (Zigler and Levine, 1981; Cannon-Spoor et al., 1982). Bearing in mind the outcomes of our study, one could hypothesize that the STB scale, since it has not shown a negative relation with heterosexual behaviour, could be related to some kinds of psychotic disorders that could have a good prognosis under treatment. This conclusion seems particularly reasonable, since patients meeting the criteria for 'Borderline', in terms similar to those of Borderline Personality Disorder (APA, 1980), show brief psychotic episodes and a more active sexual life than schizophrenics (Claridge, 1985).

With regard to the STA scale, although no significant correlation with sexual behaviour was found, the relationship has always been positive. Thus, we could probably conclude that STA would not be related to psychoses of bad prognosis either.

Although current psychiatric diagnosis, specially in personality disorders, suffers from serious weakness in terms of reliability and theoretical grounding (Frances, 1980; Eysenck, Wakefield and Friedman, 1983), a set of prospective studies, including the assessment of possible later psychotic forms of breakdown in those subjects scoring high on Borderline and Schizotypal Personality traits would probably highlight the relationship between STA and STB scales and psychoticism.

The present outcomes are a contribution to the study of the validity of STA and STB scales in a restricted and highly specific age-group (16 yr old). Extension of this research programme to different ages and backgrounds would be necessary before generalization of the present results could be warranted.

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REFERENCES


