

Personality study of V.D. patients

Using the psychoticism, extroversion, neuroticism inventory

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A previous paper (Wells, 1969) described an investigation using Eysenck's Personality Inventory (EPI) to explore the personalities of patients attending venereal disease clinics. The results indicated that such patients, and particularly certain sub-groups, differed markedly from normal in their scores for introversion and neuroticism. Furthermore, these differences operated systematically and in a way which supported the clinical observations and predictions of venereologists.

The present study extends the previous one by deriving further information about the pattern of introversion and neuroticism and by exploring the occurrence of a factor identified as Psychoticism (Eysenck and Eysenck, 1968a, b; 1969). This psychoticism factor (P), a predisposition to psychotic breakdown, and present as a graded characteristic in the normal population (Eysenck and Eysenck, 1968b), is of interest in exploring the personalities of patients in venereal disease clinics, many of whom exhibit pronounced psychiatric problems, though not selected primarily as a psychiatric group.

The earlier study (Wells, 1969) elicited degrees of extroversion and neuroticism quite well related to known aspects of patients' psycho-sexual behaviour, which were extreme when compared with those in subjects judged to be normal by the EPI. This present study serves a similar purpose by exploring the V.D. patient's position on derived personality dimensions and relating this information to the normal standardization group and clinical samples, this time mainly in regard to psychoticism.

In view of previous findings of neuroticism and because this factor and psychoticism are not completely independent but slightly correlated ($r = 0.3$), it was thought that V.D. patients' scores for psychoticism might tend to be somewhat higher than those of normal controls. Moreover, one might expect to find substantially higher P scores as a reflection of the disturbed interpersonal adjustments which

frequently accompany venereal infection. This might be especially so in the case of highly promiscuous women who presumably ignore or defy much stronger social and moral taboos than men who live promiscuously.

If it be true that a woman must break much more completely with social conventions and expectations than a man if she is to act promiscuously, then her overt behaviour may well be related to poorer intrapersonal organization and integration, which may manifest itself, amongst other ways, in a high level of psychoticism. In fact, in the previous study (Wells, 1969), women patients generally were shown to have high neuroticism scores and, at the extreme, the women who picked-up their sexual consorts on a casual basis approached clinical levels in emotional lability as measured by the neuroticism scale. It therefore seems reasonable to suppose that the intrapersonal and interpersonal problems inherent in such behaviour may also have their counterpart in poor personality integration, as measured by the psychoticism scale, and that the promiscuous woman will be clearly distinguishable from normal controls by scoring much more highly on the scale between the normal person and the clinical psychotic. This was the main prediction and expectation at the outset of the study.

Method

Eysenck's PEN Inventory was given to every successive patient newly admitted to the male and female clinics for venereal disease. A very few illiterates, and semi-literates, and persons with language difficulties, had to be excluded otherwise the sample was unselected. The Inventories were distributed by the nursing staff who arranged for the patients to complete them after their first session at the clinic.

The number of patients included amounted initially to 199 men and 127 women, but after scoring this was reduced to 161 men and 115 women; the remainder were excluded because of their high scores on the Lie-scale. The criterion for such exclusion was that the subject should have scored 9 or more on the Lie sub-scale: a procedure in keeping with the instructions for the EPI

(Eysenck and Eysenck, 1964), from which this group of items was abstracted. No refusals were recorded, and patients were encouragingly co-operative.

The patients were told that they were taking part in a research programme involving a whole range of hospital and non-hospital subjects. When they had completed the inventory they were asked to give their clinic number and assured of their anonymity. Only at a later stage were the additional data, relating to age, sex, diagnosis, social class, source of infection or contact, and number of previous infections, collected direct from the case sheets. This information, together with test scores and whether the patient had completed treatment and surveillance or had defaulted, composed the basic data. A number of sub-groups was then constructed for cross-tabulation and comparison.

Results

Comparisons of scores for the whole group were based on the normal data provided by Eysenck and Eysenck (1969) in standardizing their inventory. Additionally scores of sub-groups were compared with each other.

This over-all comparison between the present data and the published norms was preceded by applying F-tests to check the comparability of the distributions. This criterion satisfied, *t*-tests were applied to see whether there were any significant differences between the means derived from the present study and those of the normative data. The results yielded some interesting findings (Table I).

The first point to emerge is that male V.D. patients differ from the normal population only in that they tend to be very significantly more extroverted ($P < 0.001$). On the other hand, the female V.D. patients are more introverted than the normal population, and very substantially more neurotic ($P < 0.001$). Such findings are in keeping with the previous study using only the dimensions of extroversion and neuroticism (Wells, 1969). Furthermore, the female V.D.

patients of this study also scored very highly on psychoticism, their scores showing little significant difference from the scores of psychotic in-patients. The psychoticism scores of the female V.D. patients proved to be significantly higher than those of the males ($P < 0.001$), whereas there is no sex difference for psychoticism in normal subjects. Otherwise, the pattern of V.D. patient scores is similar, though the male scores were very significantly higher for extroversion and lower for neuroticism ($P < 0.001$).

Social class comparisons between the present subjects and those of the standardization study presented a picture very similar to that summarized by Eysenck and Eysenck (1969), where scores on all three measures of psychoticism, extroversion, and neuroticism tend to be greatest amongst the members of the lower status social groups.

The break-down of scores according to age group (Table II) also reflects one main feature of the standardization data, namely that extroversion scores tend to decline with age. Similar declines in scores for psychoticism and neuroticism are less apparent except for neuroticism in females. It should be noted that psychoticism scores of the sort recorded for the female V.D. patients have much more in common with those of clinical psychiatric groups; accordingly a comparison of age trends on this dimension might more properly be made with psychiatric patients than with normal controls but, unfortunately, these data are not yet available.

Table III reveals a number of score patterns which seem to call for explanation. For example, for both sexes, those scoring highest on extroversion are those whose sexual contacts were described as 'friends'. But, is it that the term 'friend' is more readily applied by the sociable extrovert than by others, or is there a real difference of behaviour? This is the sort of question which requires further

TABLE I Scores of V.D. clinic patients compared with the PEN scores of the standardization sample

Sex	Group	PEN scores						No. of cases
		Psychoticism		Extroversion		Neuroticism		
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Male	V.D. clinic patients	2.48	2.36	13.95	3.30	7.42	4.58	161
	*Normal sample	2.50	2.71	12.75	4.12	7.33	4.37	1012
	*Psychotics	4.83	3.28	10.04	4.58	9.64	4.90	156
	*Neurotics (in-patients)	4.70	3.09	10.54	4.82	11.19	5.22	83
Female	V.D. clinic patients	4.39	3.41	11.90	4.43	11.36	4.26	115
	*Normal sample	2.02	2.22	12.36	3.68	8.64	4.35	1320
	*Psychotics	4.92	3.64	10.26	4.44	9.46	5.13	154
	*Neurotics (in-patients)	4.46	3.26	9.67	4.45	12.99	4.81	132

*Standardization data for the instrument as published by Eysenck and Eysenck (1969)

TABLE II *Psychoticism, extroversion, and neuroticism scores, by sex and age*

Sex	Age group (yrs)	PEN scores						No. of cases
		Psychoticism		Extroversion		Neuroticism		
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Male	10-19	2.41	2.21	15.06	2.86	6.88	5.18	17
	20-24	2.88	2.58	14.51	3.16	8.19	4.50	57
	25-29	1.90	2.09	13.97	3.51	7.19	4.53	31
	30-39	2.44	2.30	13.36	3.62	6.85	4.52	39
	40+	2.29	2.31	12.29	2.34	7.12	4.69	17
Female	10-19	4.29	3.18	13.29	3.71	11.97	3.88	34
	20-24	4.74	4.03	11.95	4.47	11.63	4.61	38
	25-29	4.73	2.76	10.91	4.44	10.36	3.86	22
	30-39	2.80	2.48	10.73	5.19	11.27	4.37	15
	40+	5.50	4.28	10.33	5.09	10.00	5.62	6

TABLE III *Psychoticism, extroversion, and neuroticism scores, by sex and by source of contact*

Sex	Source	PEN scores						No. of cases
		Psychoticism		Extroversion		Neuroticism		
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Male	Marital	2.55	2.39	13.50	3.69	6.50	4.32	22
	Friend	2.29	2.19	14.79	2.67	7.24	5.05	38
	Casual	2.63	2.45	13.91	3.29	7.80	4.53	95
Female	Marital	4.58	3.56	9.65	3.82	11.50	4.07	26
	Friend	3.95	3.00	13.05	4.43	11.38	4.83	42
	Casual	4.50	3.52	12.35	4.15	11.15	3.88	46

study of the semantics of such key terms. But the most striking pattern is that of the woman infected by her husband—a picture of both very high psychoticism and very high neuroticism, coupled with an extremely marked degree of introversion.* This pattern of high neuroticism and introversion amongst innocent wives, like that of high neuroticism and extroversion amongst men using casual consorts, has been noted and described elsewhere (Wells, 1969). The factor of psychoticism is of most interest in the present study, where scores for both the innocent wife and the casually promiscuous woman run at such abnormally high levels.

*In fact, the scores of these women on the introversion-extroversion scale differ significantly from those of women infected by 'Friends' ($P < 0.005$), or by casual acquaintances ($P < 0.01$).

Table IV gives a break-down of scores for completed treatment and default for both sexes. In the earlier study (Wells, 1969), a relationship was found between high neuroticism scores and likelihood of defaulting: in the case of women this was a marginal feature not of statistical significance, but the more pronounced finding for the men held in this study also; the neuroticism scores for defaulters are significantly higher than for those who completed their surveillance ($P < 0.005$). The positive relationship between a higher extroversion score and a tendency to default from surveillance demonstrated by this new inventory, was statistically significant for the females ($P < 0.01$), but not for males. Scores of psychoticism, like those of neuroticism, appear to

TABLE IV *Psychoticism, extroversion, and neuroticism scores by sex and by whether patient completed treatment surveillance*

Sex	Treatment response	PEN scores						No. of cases
		Psychoticism		Extroversion		Neuroticism		
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Male	Completed	2.02	1.95	13.63	3.32	6.80	4.48	89
	Defaulted	3.04	2.68	14.35	3.26	8.19	4.62	72
Female	Completed	4.53	3.42	11.09	4.57	11.53	4.18	76
	Defaulted	4.13	3.41	13.49	3.71	11.03	4.46	39

offer little help in predicting the tendency of women to default, as the differences between the defaulters and the rest are not significant. However, the male defaulters are clearly distinguished by their relatively higher score on the neuroticism scale, and also on the psychoticism scale where the difference was significant ($P < 0.01$).

Conclusions

These findings confirm many of the trends noted in the standardization of the PEN (Eysenck and Eysenck 1969):

(1) Extroversion declines with age, and middle-class people tend to score lower on extroversion, neuroticism, and psychoticism than those from the lower social classes.

(2) Scoring on the extroversion and neuroticism scales in this study was very similar to that obtained with the EPI (Wells, 1969), and suggests that useful cross-comparisons may be made of findings on the EPI or PEN scales. The similarity between the scores for introversion and neuroticism, as measured independently by the previous EPI study and by the present one, gives one greater confidence in the findings of both than if each stood alone.

(3) The new measure of psychoticism which has been added to the evolving picture of the V.D. clinic patient appears to have a special relevance in view of the high scores which occur among the male defaulters and female patients in general.

Though aspects of the male patient's personality are of considerable interest, it is the women who seem most likely to prove the key to disease control: it is they who compose the main reservoir of infection with gonorrhoea and who most need to be understood and communicated with if venereal disease is to be controlled. It is to be hoped that recognition of the high levels of psychoticism which are typical of women patients may help to suggest new lines of thought and research about this most important health-risk group.

Summary

This paper describes a study in which 326 successive patients admitted to male and female V.D. clinics were screened for personality characteristics, using Eysenck's Inventory of Psychoticism, Extraversion, and Neuroticism. The results confirmed many of the findings previously noted and indicate that the male patients tend to be significantly more extroverted than normal controls, whereas the female patients tend to be substantially more introverted and neurotic than their controls. The most significant finding was that female patients tend to deviate from normal to such a degree that their scores approximate to

those of in-patient psychotics on the psychoticism dimension and to those of clinical neurotics on the neuroticism measure. The interactions between scores on the dimensions measured and such other features as age, sex, social class, source of infection, and the tendency to default from surveillance, are also summarized and discussed.

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Une étude de la personnalité de sujets atteints de maladies vénériennes à l'aide de l'Inventaire du psychoticisme, de l'extraversion et du neuroticisme

SOMMAIRE

Cet article concerne une série consécutive de 326 malades, hommes et femmes, de dispensaires antivénéériens dont les caractéristiques de personnalité furent étudiées à l'aide de l'Inventaire de psychoticisme, d'extraversion et de neuroticisme d'Eysenck.* Les résultats confirment ceux de nombreuses recherches antérieures et indiquent que les hommes ont une tendance significative à être plus extravertis que les témoins normaux; au contraire, les femmes ont une tendance à être notablement plus intraverties et névrotiques que les témoins. La constatation la plus significative fut que les femmes tendent à dévier du normal à un tel degré que leurs bilans s'approchent de ceux des psychoticiques hospitalisés en ce qui concerne la dimension du psychoticisme et de ceux des malades cliniquement atteints de névroses dans la dimension du neuroticisme. Les interactions entre les réponses, quant aux dimensions envisagées et tels autres facteurs tels que l'âge, le sexe, la classe sociale, la source de l'infection et la tendance à se dérober à la surveillance, sont aussi résumés et discutés.

*Terminologie utilisée par Eysenck (Londres) dans ses publications (N.D.T.).