

The personality of patients in the 'artificial practice'*

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ALL doctors recognize that personality factors are important in producing a patient's illness record. Even in organic illness, personality may play a part in deciding the patient's behaviour. This is an important if secondary factor in deciding the course of the disease and its treatment. In psychiatric illness personality plays a leading part. The emotional background of the neuroses has been studied in depth but the disease process and the patient's inherent stability or lack of stability are treated as one factor. Thus a neurotic has become a person with a neurosis rather than a person with inherent emotional instability. This would not matter but it leads to misdiagnosing disease in people who are not really ill.

Unlike neuroticism other personality traits are often overlooked, thus extraversion, introversion, rigidity and social adaptability are seldom considered in the detail that they deserve.

The lack of objective, clear, and easily applied measures for personality traits may explain some of this. For example, Rorschach testing and Thematic Apperception tests require both time and expertise and are unsuitable for frequent use under conditions where time is short, either in general practice, or in medical or psychiatric outpatient departments.

Questionnaire tests are more easily applied although they must be administered by suitably-trained personnel. Some, like the Minnesota Personality Inventory are elaborate and time consuming. In contrast the Maudsley Personality Inventory is both short and easy to apply. It has been well tested and adequately validated (Jensen 1958, Cronbach and Meehl 1955). This test forms the basis of the personality study reported below. It is supplemented by other observations of a more general nature. I tried to construct a comprehensive picture of the personality of the patients in the 'artificial practice'.

Method

Every patient completed the full scale of the Maudsley Personality Inventory at the admission interview. This is a list of 48 questions which the patient completes by putting a ring round the appropriate answer. There are only three possible replies to each question; yes, no, don't know. The scales measure two dimensions of personality; neuroticism or an individual's emotionality, and extraversion or his outgoing proclivities. Both scales score from 0 to 48. The maximum score for each question is two and the total is built up over 24 questions. The questions are not set out in order so the patient cannot guess the aim of the questionnaire.

In his original work Eysenck conceived neuroticism and extraversion to be independent (Eysenck 1947), but more recent work suggests that there is a negative correlation between neuroticism and extraversion (Coppen and Kessel 1963). Other work

*Artificial practice—500 adults whose medical history for a year has been recorded in detail, and whose personal characteristics have been measured. This system has been used to study the relation between different types of people and their diseases.

suggests that although there is no relation between the two dimensions the scores may vary with age and sex (Shaw and Hare 1965).

Extraverts are, by tradition, built broadly and evidence to this effect has been published (Rees and Eysenck 1945). They correlated a series of 'e' scores with an index of body build based on measurement of height and chest width. I measured the index* of every patient in the artificial practice. The result of this study was reported in the article on physique (Jacob 1968a). There was no correlation between the index and the 'e' score.

I attempted to construct a clinical scale for extraversion based on observations of the behaviour of patients. There was no correlation between these measurements and the 'e' score of the patient as measured by the Maudsley Personality Inventory. I interpret this as inaccuracy in my scale. This need not be considered further here.

There was a clear association between the incidence of frank neurotic breakdown and a high 'n' score on the Maudsley Personality Inventory. This confirmed the accuracy of the Maudsley neuroticism rating.

In an earlier investigation I found it necessary to investigate an aspect of personality which I called 'general competence'. This was defined as the patient's ability to achieve equilibrium with his environment (Jacob 1963). I now feel that 'social adaptability' might be a better description for this particular aspect of someone's personality. Competence is a measure of how well someone meets the needs of his environment. Social adaptability has two aspects; a material and an emotional. Material adaptability can be assessed by observing the patient's material environment through his or her house-keeping standards.

It is easy to construct a scale allotting points to the quality of housekeeping standards so that the highest score indicates the best standard. I used the same scale that I constructed for the investigation quoted above. It is described in detail elsewhere (Jacob 1962). Another indication of social adaptability is the ability to achieve a stable marriage. This information had been gathered for an earlier part of the study (Jacob 1969).

Emotional adaptability can be estimated only by oblique methods. The simplest approach for survey purposes is to measure the incidence of failure to adapt in the group under observation. Two types of evidence were collected. The first related to the frequency of children's stress disorders in each demand-attendance group.† The illnesses selected were bronchial asthma in children, enuresis and school phobia. These three conditions indicate a failure to establish a satisfactory child-parent relationship and reflects on the parent's ability to adapt to his or her children. The second type of evidence was the incidence of 'unnecessary' admission to hospital. This does not refer to decisions to admit made for clinical reasons. This refers to the situation in which the patient is not seriously ill and in which there are no social or medical reasons to obstruct domiciliary management. There are occasions under these circumstances when the parents or relatives of the patient object and press for admission. The doctor may or may not yield to this demand, but the situation indicates a desire to avoid social responsibility by those involved. This indicates lack of emotional adaptability.

The data for these two series of observations were collected for the adults and the dependent children both separately and combined.

The patients were grouped in the four demand-attendance categories used in previous parts of the study. The analysis was made by the 't' distribution and the X^2 test.

*This is known as the Rees-Eysenck Index.

†Demand attendance group—method of classifying patients according to number of episodes of illness and items of service required in the observation year.

Results

Maudsley personality 'n' score. The perimean A* group was used as standard. They had the lowest mean 'n' score. The suprimean A group had a slightly higher score, but the difference was not significant. The perimean multiple group came next with an increase which was significant and the suprimean multiple group had the highest score. The results indicate that neuroticism is associated with frequent illness rather than simply a high demand for medical attention. The figures are shown in table I.

TABLE I
NEUROTICISM SCORES OF THE 'ARTIFICIAL PRACTICE'

Patient category	Mean 'n' score	Standard deviation	Degrees of freedom	't'	Probability
Perimean A	23.56	11.42	∞	standard	—
Suprimean A	24.74	10.76	∞	0.62	P> 0.05
Perimean multiple	26.81	10.69	∞	2.25	0.05> P> 0.025
Suprimean multiple	28.41	10.82	∞	3.76	P<0.001

*Perimean A group—patients with less than three episodes of illness in the observation year and requiring less than ten items of service.

Perimean multiple group—patients with three or more episodes of illness and requiring less than ten items of service in the observation year.

Suprimean A group—patients with less than three episodes of illness and requiring ten or more items of service in the observation year.

Suprimean multiple group—patients with three or more episodes of illness and requiring ten or more items of service in the observation year.

Maudsley personality inventory 'e' score. Once again the perimean A group was used as standard. This group had the highest 'e' score. The perimean multiple group was next in order but the difference was not significant. The suprimean multiple group followed and the trend to introversion was significant. The lowest group was the suprimean A group. The figures are given in detail in table II.

TABLE II
EXTRAVERSION SCORES OF THE 'ARTIFICIAL PRACTICE'

Patient category	Mean score	Standard deviation	Degrees of freedom	't'	Probability
Perimean A	27.19	3.27	∞	standard	—
Perimean multiple	25.71	8.35	∞	1.7	0.10> P> 0.05
Suprimean multiple	24.58	7.91	∞	4.11	P<0.001
Suprimean A	22.35	10.57	∞	3.05	0.005> P> 0.001

Social adaptability. The housekeeping standards of the different groups were similar. There was a higher incidence of children's stress disorders in the suprimean multiple group, but this was not significant. There was no evidence that any group was particularly given to forcing unnecessary admission. The social study showed that breakdown in marriage was more common in the suprimean multiple group than in the other three groups (Jacob 1968b). This was the only evidence of failure of social adaptability.

Discussion

The relation between personality, morbidity and demand for medical attention is recognized, but different practitioners give different weights to the importance of personality and morbidity in producing the demand for medical attention. Some workers suggest that frequent attendance for minor illness is a symptom of an underlying per-

sonality disorder (Balint 1956). Others recognize that the concentration of morbidity in terms of frank illness varies from practice to practice and that the demand for medical attention mirrors the health of a patient (Taylor 1953).

The difficulty in assessing these view-points is the absence of itemized studies of personality correlated to morbidity patterns and demand for medical attention. This type of study is possible in an artificial practice, but its validity depends on the accuracy of the method used to evaluate personality.

The evidence at present is that the Maudsley personality inventory is a satisfactory method of estimating personality in a survey situation. It is particularly useful in this context because the diagnosis of neuroticism is not made by the doctor from the history of a frank neurosis or frequency of attendance. The figures show that the patients in the supranean multiple group have the highest 'n' score. This is associated with introversion which supports the observation by Coppen quoted above.

Almost half the patients in the supranean multiple group had experienced frank neurotic breakdown, although only one fifth had the breakdown in the observation year (Jacob and Pearson 1967). There was no evidence of a neurosis-other cluster*, thus it seems that the conventional equation that high demand is equivalent to a symptom of a neurosis is wrong. It seems that neuroticism is not disease. There is also a possibility that extraversion may mask or compensate for neuroticism.

The figures in the morbidity study indicated that the perimean groups could not disregard illness to a great extent (Jacob 1968b). When this is considered in conjunction with the observation that the morbidity pattern of the supranean multiple group consists of predominantly organic conditions, it seems possible that the patient's illness record may influence his personality test performance. In other words frequent illness may induce both neuroticism and introspection. This hypothesis gains support from the fact that the prolonged illness of the supranean A group is associated with the lowest 'e' score of all.

Another possibility is that the association between these personality factors and morbidity is not a cause and effect association. One must remember that the supranean multiple group is the least intelligent (Jacob 1968c). People who are unintelligent, emotionally labile and introspective may be disease prone because they have a nervous equipment which is unable to deal with environmental stress. In other words mental inadequacy may be a sign of somatic inadequacy with vulnerability to disease.

The 'artificial practice' is as a whole well adapted socially, but the supranean multiple group shows evidence of lack of sexual adaptability. As a group the 'artificial practice' shows a real drive to self improvement. People with dirty homes and parents who reject their children are in a small minority which requires special study.

Summary

The personality study in the 'artificial practice' is described.

The results show that the supranean multiple group is both neurotic and introverted.

The supranean A group is introverted and the perimean multiple group neurotic, although less neurotic than the supranean multiple group.

In this context neurotic does not mean that the patient suffers from a neurosis, but that he is emotionally labile.

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*Cluster—group of illnesses experienced by a multiple patient in the observation year.

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REFERENCES

- Balint, M. (1957). *The doctor, his patient and the illness*. London. Pitman Medical Publishing Co. Ltd.
- Coppen, A., and Kessel, N. (1963). *Acta psychother. (Basel)*. **11**, 174.
- Cronbach, L. J., and Meehl, P. B. (1955). *Psychol. Bull.* **52**, 281.
- Eysenck, H. J. (1947). *Dimensions of personality*. London. Routledge and Kegan Paul.
- Jacob, A. (1962). *M.D. Thesis*, University of St. Andrews.
- Jacob, A. (1963). *J. roy. Coll. gen. Practit.* **6**, 436.
- Jacob, A. (1968a). *J. roy. Coll. gen. Practit.* **15**, 363.
- Jacob, A. (1968b). *J. roy. Coll. gen. Practit.* **16**, 215.
- Jacob, A. (1968c). *J. roy. Coll. gen. Practit.* **16**, 463.
- Jacob, A. (1969). *J. roy. Coll. gen. Practit.* **17**, 12.
- Jacob, A., and Pearson, J. (1967). *J. roy. Coll. gen. Practit.* **13**, 303.
- Jensen, A. (1958). *Acta Psychol. (Aust.)*. **14**, 314.
- Shaw, G. K., and Hare, E. H. (1965). *Brit. J. Psychiat.* **111**, 226.
- Taylor, S. (1953). *Good general practice*. London. Oxford University Press.

A Dublin schoolchildren's smoking survey. ANGUS O'ROURKE, M.B., B.Ch., D.P.H., NOELIE O'SULLIVAN, M.A. and KEITH WILSON-DAVIS, B.A., M.B.C.S. *Irish J. med. Sci.*

As a preliminary to organizing a health education programme an attempt was made to assess the extent of cigarette smoking among Irish schoolchildren.

A 20 per cent sample of children aged 11-18 years in Dublin city and county were interviewed. There were 4,502 children in the sample—2,710 boys and 1,792 girls. One third of all boys smoked and one tenth of the girls. The proportion of smokers increased with age and at 18 only 20 per cent of boys and 30 per cent of girls had never smoked. Half the boys who smoked had started by the age of ten years and ten per cent before the age of seven years. Smoking in boys was more common when both parents were smokers but this relationship was not shown in girls.

Many children had difficulty in answering questions about their parents' attitude to smoking, suggesting that this was often not made clear. Only one-third of parents were said to approve of their child smoking. Nevertheless, children who smoked had considerably more pocket money than children who did not smoke. Boys in social group I received less pocket money than those in lower social groups and also smoked less. They tended to start to smoke at an earlier age than the other children but did not maintain the habit.

"The numbers of children smoking are an admonition to act on the problem. The fact that so many felt relatively free to smoke points to an area of responsibilities still to be discharged."