

# PSYCHIATRIC ORIENTATION: A STUDY OF ATTITUDES AMONG PSYCHIATRISTS\*

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OVER the past few years, workers in many diverse fields have become interested in the framework of the psychiatrist-patient relationship as a matter for study in its own right. Yet the pattern of professional opinions, conveniently subsumed under the term "orientation", which the psychiatrist brings with him to the clinical situation, has received very little attention. In this paper an attempt will be described to measure certain aspects of psychiatric orientation, and to explore how these may be correlated with other variables.

Everyday observation suggested that of the many complex factors contributing to a given psychiatrist's orientation, two main *attitudes* were of particular importance and appeared to be susceptible to investigation. The first attitude is characterized by a paramount interest in the organic aspects of mental illness, by avoiding all "subjective" or intuitive concepts, by deriving conceptual models closely allied to those of general medicine, and by concentration mainly on physical methods of treatment. This viewpoint will be called the "O" orientation. The second attitude derives largely from psycho-analysis, and expresses greater interest in psychological factors, with emphasis on the need for "understanding" the patient and the exploration of unconscious forces, while relying heavily on inter-personal relations in therapy. This will be designated the "A" attitude. These two positions correspond roughly to the "directive organic" and the "analytic psychological" approaches of Hollingshead and Redlich (1958), though the distinction was not made with their categories in mind, nor, unlike theirs, is it intended to distinguish different groups of individuals.

Three points must at once be made clear. Firstly, there is no implication that these two attitudes, although sufficiently distinct to warrant an attempt to measure them separately, are necessarily antithetical; the relationship between them was a matter for empirical investigation. Secondly, there is no implication that they provide an exhaustive analysis of orientation: other attitudes may well be equally important, but the two mentioned afford a convenient starting point. Thirdly, this study is concerned with matters of opinion only, and does not attempt to discover how such views are carried through into psychiatric practice, and still less how they may affect therapeutic results.

## METHOD

Having regard to the circumstances under which the inquiry was conducted, and the nature of the results it was hoped to obtain, a questionnaire technique was the only method possible. Full details of the method of construction of these scales, their final forms and scoring keys, together with a review of the relevant literature, are given elsewhere (Kreitman, 1959). Copies of the questionnaires are also available from the author on request. The essential steps were as follows:

Two separate scales were constructed, each designed to measure one of the attitudes. For each scale, four arbitrary sub-divisions were first made in an

\* Based in part upon a thesis submitted under the London M.D. Regulations.

attempt to ensure that all aspects of the attitude were covered, equal scope being allowed to prejudice and to reason, to criticism and to enthusiasm. Each subdivision was then allotted by inspection six items. To avoid response-set difficulties, items in each section were worded in positive and negative directions in equal numbers.

Each scale, in its preliminary form of twenty-four items, was then submitted to a panel of four judges, consisting of one psycho-analyst, two "middle of the road" psychiatrists, and one expert on physical methods of treatment. They were requested to rate on a five-point scale to what degree *both the "yes" and "no" responses to each item* represented endorsement of the attitude incorporated in the scale, the general nature of these attitudes having been previously explained to them.

Sixteen items in each scale were then selected on the basis of (a) a sufficient degree of concordance between the judges (on both the "yes" and "no" responses) and (b) a distribution of item "extremity" (corresponding to item "difficulty" in a cognitive test) which gave a sufficiently wide span to represent the full gamut of opinion. This range, wider than the cluster about the fifty per cent. mark usually adopted for attitude scales, was selected in view of the probability of low intercorrelations between individual items (Thorndike, 1949).

After administration to a test population of 78 psychiatrists (see below) an item analysis of each scale was carried out on the upper and lower halves of the distribution, using unweighted scores. One item in the "A" scale and two of the "O" scale were subsequently rejected as insufficiently discriminating, but one other which failed to discriminate by virtue of its (rated) "extremity" was deliberately retained (see above). The ratings assigned by the judges to each item were checked against the  $\chi^2$  value obtained on item analysis, using the more extreme of the "yes" or "no" responses as the value for that item, and good correspondence was found. The judges' ratings of "yes" and "no" responses were therefore employed as a scoring key for all subsequent uses of the scales. A "?" response was subsequently added, being scored as the average of the "yes" and "no" responses. Split-half reliabilities were not computed, as the conditions under which such calculations are justified did not appear to be met.

After an average period of three months (range one to five months) thirty individuals were selected at random for re-testing, to determine the *reliability* of the inventories. The test-re-test correlation coefficient for the "A" scale was .83; that for the "O" scale .71; there were reasons for supposing that the first of these, at least, is artificially low. In an attempt to *validate* the scales, subjects were asked on completion of the questionnaire to rate their sympathy with psycho-analysis and with the "organic approach to psychiatry". Owing to certain typographic artefacts, only the first of these self-ratings could be used; a correlation of .79 (for the "A" scale) was obtained (the self-rating itself had a test-re-test coefficient of .90, yielding an unattenuated correlation of .83\*). Finally, the test population was divided into those subjects who were in psycho-analytic training or who were practising analysts, and the remainder. "A" scale scores discriminated between these two groups beyond the .001 per cent. level.

Besides seeking to discover how the "O" and "A" attitudes might be distributed in a given population, it was hoped to correlate these with various other factors. One group of variables so selected related to personality, and a second to age, status, and the nature of the individual's previous medical and psychiatric training.

\* Corrected for attenuation of the criterion only. If both scale scores and criterion are corrected,  $r = .91$ .

Assessments of *personality variables* were made by the following:

(1) The Guilford-Martin personality inventory (1940), scales S, T, D, C, and R. These scales, which are derived from factor-analytic studies, are described as follows:

“S factor: social introversion-extraversion: shyness, seclusiveness, tendency to withdrawal from social contacts, versus sociability, tendency to seek social contacts and to enjoy the company of others.

T factor: thinking introversion-extraversion: an inclination to meditative or reflective thinking, philosophizing, analysis of oneself and others, versus an extravertive orientation of thinking.

D factor: depression: habitually gloomy, pessimistic mood, with feelings of guilt and unworthiness, versus cheerfulness and optimism.

C factor: cycloid disposition: strong emotional fluctuations, tendencies towards flightiness and emotional instability versus uniformity and stability of mood, evenness of disposition.

R factor: rathymia: a happy-go-lucky, carefree disposition, liveliness, impulsiveness, versus an inhibited, over-controlled, conscientious, serious-minded disposition.”

Advantage was taken of the high reliability of the Guilford-Martin scales to shorten what would be otherwise an unduly cumbersome inventory, and, in so doing, to delete a few items which were clearly inappropriate for the population under study. The number of items so deleted was determined by calculating, by the Spearman-Brown formula, what degree of shortening would yield scales with a reliability of .85 or slightly over; for the “T” scale a value of .80 was taken.\*

From the description of the “T” factor, it seemed that this scale might well polarize the two attitudes under investigation. It was accordingly predicted that the “T” scale would be positively associated with “A” scores and negatively with “O” scores. No other formal hypotheses were set up concerning the Guilford-Martin scales.

(2) The “A” and “R” scales of the Minnesota Multiphasic Personality Inventory (Welsh and Dahlstrom, 1956). The original M.M.P.I. scales were each designed to differentiate between normals and certain abnormal populations. The new “A” and “R” scales have been developed from careful factor-analytic work, and represent two major factors underlying the whole of the inventory within the space of two relatively short scales. The authors suggest that the “A” scale is concerned with what may conveniently, if loosely, be thought of as anxiety, while the second, which has been provisionally designated “expressive-repressive”, relates to the number of emotional outlets which an individual has, and his general emotional warmth.†

(3) A Jungian therapist on the hospital staff kindly supplied ratings on a 5-point scale of introversion-extraversion in Jung’s original meaning of these

\* The deleted items were numbers 4, 11, 18, 24, 25, 28, 29, 30, 33, 35, 42, 45, 68, 78, 80, 81, 84, 92, 99, 102, 115, 122, 126, 139, 149, 151, 153, 157, 158, 173, 175, as numbered on the standard form of the test. In a few instances American phraseology was translated into current English.

† One item, no. 39, was deleted from the “A” scale, and three items, nos. 5, 34, and 37, were deleted from the “R” scale for reasons similar to those given above. As before, some slight changes in phraseology were necessary to avoid obscurities and absurdities for this population. The items of the two scales were printed together in random order, and scored in the manner recommended by the authors.

terms, for 45 subjects with whom he felt himself to be sufficiently acquainted.

From Jung's description and illustrations of his typology (1924) it appeared that introversion would be associated with increased psychological awareness, while extraversion would tend rather to emphasize the "objective" world. Accordingly it was predicted (i) that high ratings for introversion would correlate positively with high "A" scale scores, and (ii) that high ratings for extraversion would correlate positively with "O" scale scores.

The *personal data* collected included details of age, status within the hospital, length of post-graduate but pre-psychiatric medical training, and, lastly, details of duration and place of psychiatric training and practice.

The *test population* used in this study comprised the entire medical staff of the Maudsley and Bethlem Royal Hospitals, who, on May 31st, 1956, were engaged in direct clinical work with patients. Excluded were subjects who had received less than three months' psychiatric training and those of cultural backgrounds other than European or North American. The potential population comprised 83 individuals, of whom five declined to co-operate, giving an acceptance rate of 93.6 per cent. The 78 subjects who completed the questionnaire included 73 men and 5 women. Details of their age, experience in general medicine and in psychiatry are given in Tables I, II and III.

TABLE I

*Composition of Test Population by Age*

Age (years)	% (N=78)
25-30	33.3
31-35	33.3
36-45	19.3
46+	14.0
	<hr/> 99.9
Mean Age	=35.5 years
Median	=33.5

TABLE II

*Composition of Test Population by General Medical (Pre-Psychiatric) Experience*

Time spent in General Medicine (years)	% (N=78)
-2.0	38.5
2.5-4.0	19.2
4.5-6.0	24.4
6.5-8.0	11.5
8.5+	6.4
	<hr/> 100.0
Mean time	=3.8 years
Median	=3.4

TABLE III

*Composition of Test Population by Psychiatric Experience*

Time spent in Psychiatry (years)	% (N=78)
-3	52.7
3.5-6.5	19.1
7.0-11.0	11.4
11.5-22.0	8.9
22.5+	7.7
	99.8
Mean time = 6.6 years	
Median = 3.0	

## RESULTS

*(a) Results of Attitude Scales*

The range of scores theoretically available on the "A" scale was from -80 to +94. The range of scores actually obtained was from -50 to +94. The mean score was +41.5,  $\pm 3.8$ ; the median score was +44. These findings suggest that, for this group at least, the scale might ideally have contained fewer negative and more positive items. The distribution obtained was that of an approximately normal curve, somewhat truncated at the positive end of the scale.

For the "O" scale, the range available was from -50 to +77, and the actual distribution obtained was about the same, the distribution being perfectly normal in form. The mean score was +5.7,  $\pm 2.4$ ; the median score was +4.

*(b) Results of Personality Scales*

As might have been expected with such a sophisticated group of subjects, the mean scores obtained on the various scales were invariably lower than those published for "normals". This was true of all scales with the exception of the Guilford-Martin "S" scale. Although not all the distributions obtained were strictly normal, a matrix of intercorrelations was calculated.\* Comparison with other reports showed this matrix to be strikingly similar, i.e., there were high and positive correlations between the Guilford-Martin T, D and C scales (the traits underlying Eysenck's second order factor of neuroticism) each of which had low, non-significant correlations with the "R" scale (which underlies Eysenck's factor of introversion-extraversion). With regard to the M.M.P.I. scales, it was found that, as claimed by the Minnesota workers, the "A" and "R" scores did not correlate significantly ( $-0.19$ ).

Some implications of these findings will be reviewed in the discussion.

*(c) Intercorrelations**(i) Correlation of "A" and "O" scales.*

The correlation coefficient between the "O" and "A" scales was found to be  $-0.64$  (Pearson's Product Moment). This bears out what was previously suggested regarding the two attitudes being sufficiently distinct to be measured separately, yet not necessarily being antithetical.

\* This seemed legitimate since the outcome was not of critical importance, cf. attitude and personality correlations in section (c)ii.

It was decided not to employ correlation coefficients at this point, chiefly because the distributions of scores on the various scales were not sufficiently uniform to enable such coefficients to be compared readily. Instead, the simpler median  $\chi^2$  technique was used. The results are expressed in Table IV as the levels of confidence with which the null hypothesis can be rejected. The "two-tailed" form of the test was used except for the "T" scale associations, for which directional hypotheses were available. The signs indicate the direction of the associations. It will be seen that the two predictions concerning the association of the "T" scale with the attitude scales are borne out. It may also be noted that the "A" scale has significant associations with the Guilford-Martin "D" (and the D+C) as well as with the Minnesota Anxiety Scale and the Guilford-Martin "T". On the other hand, the "O" scale correlates only with the Guilford-Martin "T" in a negative direction.

TABLE IV  
*P Values of Tests of Association ( $\chi^2$ ) between Attitude and Personality Scales*

	Guilford-Martin						M.M.P.I.	
	S	T	D	C	D+C	R	A	R
A scale	—	+5%	+1%	—	+2%	—	+5%	—
O scale	—	-5%	—	—	—	—	—	—

(iii) "A", "O" and Jungian typology.

It will be recalled that a Jungian analyst had rated 45 of the subjects for introversion and extraversion in the original Jungian meaning of these terms. These 45 individuals were compared with the total group for the "A" and "O" scores, and no differences were found, i.e., they may be considered a representative sample as far as these variables are concerned. They were similarly tested with respect to the Guilford-Martin "T" scale, with the same result.

Although a five-point scale had originally been employed, it was subsequently compressed to three categories representing marked introverts, ambiverts, and marked extraverts. Analysis of variance showed that the "A" scores differed significantly between these groups (see Table V) supplementary "t" tests indicating that maximum differentiation was achieved at the introvert extreme of the continuum.

TABLE V  
*Analysis of Variance of "A" Scale Scores between Jungian Typological Groups*

Source	df	SS	MS	F ratio
Between groups	2	8,247.02	4,123.51	4.51 (p < .05)
Within groups	42	38,388.98	914.02	

"t" tests: Extravert/ambivert,  $t = .315$ ,  $df = 27$  N.S.  
Ambivert/introvert,  $t = 2.219$ ,  $df = 28$ ,  $p < .025$  (one-tail).

There was no such association between Jungian typology and the "O" scores.

Thus the prediction concerning the positive correlation of the "A" attitude with introversion is borne out, but that relating to the association of the "O" attitude and extraversion is not.\*

\* However, in a separate analysis, it was found that Jungian typology was significantly associated with the Guilford "T" scale ("thinking introversion"), especially in the lower or extravert part of the range. It has already been shown that the "T" scale is negatively related to the "O" attitude. See Table IV.

## (d) "A" and "O" scores and age

No significant association was found between attitude scale scores and age.

## (e) "A", "O" scores and experience

In this connection 19 subjects, who were consultants, were excluded. These might differ from the rest of the test population in that they would have been appointed to a specific hospital post partly on the basis of their having already reached a more or less stable orientation, and to have selectively furthered their interests ever since. In this respect, they would differ from the post-graduate students and junior staff who might still be considered to be at a formative age.

A rather complex pattern of statistically significant associations between attitude and previous experience in both psychiatry and in general medicine was found. This can perhaps be most easily illustrated if the data are presented with each variable in turn held constant, as shown in Tables VI and VII. The significant trends are indicated by a thick ( $\cdot 01$  per cent.) and thin ( $\cdot 05$  per cent.) arrows, while the figures in the cells relate to the mean scores and their standard errors. Table VI illustrates the findings for the "A" scale scores. It will be seen that for the group as a whole there is a significant increase in "A" scores with increasing psychiatric experience, a change chiefly due to those with relatively less general medical post-graduate experience. The latter variable alone is not reflected in the attitude of the group as a whole, nor of those subjects who were at an early stage of their psychiatric training, but its effects do become manifest later on, lower scores being associated with greater time spent in general medical training before commencing psychiatric work.

A more detailed analysis based on a nine-cell instead of a four-cell table, which will not be presented here, enables greater precision as to time. It shows that there is a marked increase in "A" scores between those of up to  $1\frac{1}{2}$  years'

TABLE VI

*Mean "A" Scale Scores of Fifty-nine Non-Consultant Subjects by both General Medical Experience and Psychiatric Experience*

Psychiatric Experience	General Medical Experience		Total
	Up to 3.5 years	4.0 years and over	
Up to 2.0 years .. ..	a 26.70 ± 7.98	b 26.69 ± 10.93	w 26.69 ± 7.27
	↓		↓
2.5 years and over ..	c 56.56 ± 8.28	d 33.00 ± 7.48	x 45.85 ± 5.85
Total .. .. .	y 45.89 ± 6.56	z 29.74 ± 6.50	N=59

Number of subjects in each cell; a=10, b=16, c=18, d=15.

Total N=59,  $\chi^2$  of N=1.510,  $p < \cdot 30$ .

t value	df	p beyond
t.wx = 2.053	57	.05
yz 1.752	57	(.10)
ab —	—	—
cd 2.111	31	.05
ac 2.360	26	.05
bd .477	29	—

psychiatric training and those of two to three years, but no significant increase thereafter. It is in the third year students also that the negative association with general medical experience emerges, though it does not do so for the more junior and more senior groups. Thus the third year of psychiatric training appears to be the crucial time for change in "A" attitude.

The findings for the "O" scale scores are illustrated in Table VII. It will be seen that there is a fall in scores with increase in psychiatric experience, a change which is particularly associated with those who have spent relatively less time in general medicine (significant at the .01 per cent. level). Apart from this, general medicine training does not appear to have any other effect.

The more detailed analysis of variance shows that the fall in "O" scores with progressive psychiatric experience progresses evenly during training (three years) and continues thereafter. There is also a trend of borderline significance ( $f=3.02$ ), showing that for the group as a whole, increased time in general medicine is associated with higher "O" scores. In addition, there is a significant effect demonstrable among the third-year students suggesting that this influence of general medical training upon "O" scores is most marked in this group.

TABLE VII

*Mean "O" Scale Scores of Fifty-nine Non-Consultant Subjects by both General Medical Experience and Psychiatric Experience*

Psychiatric Experience	General Medical Experience		Total
	Up to 3.5 years	4.0 years and over	
Up to 2.0 years .. ..	a 20.50 ± 6.20	b 10.81 ± 6.05	w 14.54 ± 4.44
	↓		↓
2.5 years and over ..	c -4.42 ± 4.45	d 7.47 ± 6.67	x 0.97 ± 3.85
Total .. .. .	y 4.46 ± 4.17	z 9.19 ± 5.27	N=59

The number of subjects in each cell is as for Table VI.

t value	df	p beyond
t.wx=2.310	57	.05
yx .737	57	—
ab 1.063	24	—
cd 1.469	31	—
ac 3.264	26	.01
bd .371	29	—

To summarize these findings, it may be said that increased psychiatric training is associated with a rise in the "A" attitude and a fall in the "O" attitude, effects which are most marked (especially for the "O" attitude) in those with relatively less medical experience. Further analysis suggests (a) that the increase in "A" attitude is significant only up to the end of the third year of psychiatric training and thereafter flattens out, while the fall in "O" scores is progressive throughout, (b) that it is the third year of psychiatric training which is particularly important in attitude change; at this point the effects of previous medical experience emerge most clearly.

#### (f) "A", "O" and status

So far, the effect of different kinds of experience has been described with a group of subjects below consultant status. Yet it is evident that the attitudes of



the consultant body must be of considerable relevance to the type of orientation which the more junior staff develop. As an approximate measure of this, the mean "A" and "O" scale scores were calculated for the consultant and non-consultant groups. Unfortunately, the consultant group cannot be regarded as fully representative, as four consultants had declined to co-operate in the study, and, from the author's personal impression, would probably have scored somewhat lower than the mean "A" value given in the Table. A further four were not included since they had acted as judges, although they had been requested to do so precisely because they appeared to constitute between them a representative group. The results are shown in Table VIII.

TABLE VIII  
*Effect of Status on Attitude Scores*

Subgroup	N	Mean A Score	Mean O Score
Consultant	19	54.32 ± 6.05	2.37 ± 3.46
Non-consultant	59	37.41 ± 4.70	6.78 ± 3.02
t value		2.206	.961
at df=76, p<		.05	N.S.

The directions in which the mean scores differ is in accordance with the findings previously noted concerning duration of previous experience, that is to say, the consultants have higher "A" scores and lower "O" scores than the junior members of the test population, but only the "A" scores differ at an acceptable level of significance.

(g) "A", "O" and non-psychiatric qualifications

Approximately 60 per cent. of the test population and 54 per cent. of the non-consultant section possessed higher qualifications other than the Diploma in Psychological Medicine. These were nearly always the M.R.C.P. or an M.D. Analyses to determine whether possession of such higher degrees were reflected in differences in attitude gave negative results.

#### DISCUSSION

Before these results can be assessed, it is first necessary to consider briefly the instruments employed.

The attitude scales used in this study can have little claim to perfection. Perhaps the major objection to their use must be that only one sample of subjects was used in their elaboration and final application. It can only be said that subject to this limitation, the scales appear to be of reasonable consistency, and, for the "A" scale at least, of satisfactory validity. Moreover, no better scales appear to be available, since those elaborated by Levinson and his colleagues (Sharaf and Levinson, 1955; Gilbert and Levinson, 1957) have been shown to be heavily influenced by general social attitudes (Carstairs and Heron, 1957), are compounded of two distinct attitudes unequally represented in one inventory which purports to represent a single continuum, and was elaborated for American use in a setting very different from that of the present study.

Most psychiatrists and some psychologists are keenly aware of the limitations of personality scales. With a sophisticated group such as that used in the present study, this scepticism may be even more marked and is supported by the finding that the mean scores obtained were significantly lower than for "normal

subjects". But it must be remembered that data on "normals" is unobtainable for such highly educated subjects, that the group as a whole is not being compared with other populations since only intra-group differences and correlations with other variables are at issue, and lastly, that the matrix of scale intercorrelations, as far as it is admissible, is substantially the same as for other samples, implying that no one scale is uniquely failing in its purpose.

It will be recalled that significant associations have been demonstrated between the "A" attitude and the Guilford-Martin "D" and "D+C" scales, as well as with the M.M.P.I. "A" scale. That is to say, an interest in the psychological aspects of psychiatric work appears to correlate with a self-assessment which includes many neurotic features. Clearly this may mean either (a) a psychological or psycho-dynamic orientation is characteristic of the more neurotic individuals, or (b) that such individuals have more insight into their own personalities, or greater willingness to admit to neurotic traits. Which of these two interpretations is correct cannot be decided by the kind of investigation that has been carried out here. There were also significant associations between the "A" attitude and both the Guilford-Martin "T" scale\* and the ratings of introversion made by the Jungian therapist. Hence it may be concluded that the degree to which a psychiatrist is interested in the psychological aspects of psychiatry reflects certain aspects of his personality: more specifically it relates to (a) his neurotic tendencies, or his self-awareness, or honesty of reporting, or any combination of these, and (b) his degree of introversion in Jung's sense.

On the other hand, the "O" attitude fails to correlate with any of the personality measurements, except for a negative correlation with the "T" scale. This implies that interest in the physical aspects of mental illness is unrelated to personality variables except "thinking extraversion" and that only weakly.

The relationship of experience to orientation has been seen to be rather complex. It has been demonstrated that, so far as awareness of psychological factors is concerned, a relatively long period spent in general medicine renders the doctor relatively resistant to the increasingly psychological orientation which characterizes a psychiatric education; such an individual progresses slowly in comparison with his colleagues. It may be suggested that such an individual comes to psychiatry with an already well-developed interest in some medical field, such as neurology or metabolic disorders, and that he is reluctant to expand his basic concepts. Even without such specific interests, perhaps many years spent in somatic medicine render him slow to grasp the less tangible nature of psychological factors. For the first two years or so, all his contemporaries are in too great a state of intellectual flux for any intra-group discrepancies to be apparent; but by the third year the differences emerge—the background shows through, so to speak. Thereafter, some degree of levelling up occurs. A further increase in the "A" sympathies occurs, if the scores of the consultant body can be taken to represent fairly the effect of increased experience, but progression after the end of the third year is of minimal significance.

For the organic orientation the findings are to some extent complementary to the above. Progressive psychiatric training is associated with a decline in sympathy with the somatic approach, a trend which in this case, however, continues to operate well beyond the third year (*v. supra*). This fall is most highly

\* The "T" scale has frequently been noted to have fairly high loadings on the neuroticism factor. It is doubtful if this is particularly relevant in the present context since the "D" and "C" scales, which have higher loadings, fail to polarize the two attitudes in the same way. It will also be recalled that the "T" scale is significantly associated with Jungian personality types.

marked in those who have had relatively less time in general medicine, and who therefore may be considered to be less imbued not only with a preoccupation in somatic pathology, but also with wider questions of the entire philosophy of medicine as practised in general hospitals. Once again, the maximum discrepancies in outlook are found in the third year of training, when high "O" scores are found to be positively related to the length of previous medical experience.

These experiential factors can be fairly easily understood, but there is another explanation of the findings regarding the changes in the "A" or psychological orientation which deserves a passing mention. If personality variables are indeed associated with differences in the strength of this attitude, as the results of this inquiry suggest, then the possibility emerges that the changes in "A" scores attributed to training may be due, to some extent at least, to concurrent changes in personality. It is a common experience for the young psychiatrist to find that his patients, especially those receiving any kind of planned psychotherapy, are capable of arousing anxieties in a manner which does not occur with patients presenting with organic disorders, and quite commonly he feels personally involved in his work to a degree which is corrected only after a good deal of further experience. There is also much discussion in the psychiatric hospital of the manner in which the therapist's own personality may affect treatment. Further, it is difficult for such knowledge as the trainee acquires in the clinic not to influence—rightly or wrongly—his understanding of humanity in general, with inferences for himself in particular. All these factors may lead to awareness of facets of personality he has not previously considered. In short, the setting, together with relative youth, is highly conducive to personality change. If this occurred, moreover, such alterations would be expected to take place fairly early on and then to cease, or at least to slow down unless the doctor changes to some highly specialized form of practice, such as intensive psychotherapy. The data relevant to this hypothesis has been inspected but does not permit a clear-cut interpretation. In any case, only a prospective study could provide a definite answer.

Nothing has been said or knowingly implied regarding the optimal balance of orientation. Which approach or what blending of both attitudes is to be desired and in what contexts can only be a matter of experience and further experiment. The final test is presumably the therapeutic one, and here the studies of Whitehorn (1955, 1957) may be mentioned; he showed that even when patients are matched and the "prescribed" therapy is the same, different psychiatrists obtain consistently better results with schizophrenic subjects than do others, a discrepancy he attributes to many complex personal and ideological factors. There is a need for similar studies in almost every therapeutic field.

#### SUMMARY

1. The construction is described of two attitude scales designed to measure interest in and sympathy with the psychological ("A") and organic ("O") approaches to many current psychiatric problems. These attitude scales appear to have satisfactory consistency, test-re-test reliability, and validity.

2. The scales were administered to 78 psychiatrists who also supplied certain biographical data and completed modified forms of the Guilford-Martin S, T, D, C, R Inventory and the M.M.P.I. "A" and "R" scales. Ratings of introversion-extraversion in Jung's original sense were also made on 45 subjects. It was predicted that positive associations would be found between "A" scores and (i) Jungian introversion and (ii) "T" scale scores, while, conversely, that

"O" scores would be correlated negatively with (iii) Jungian introversion and with (iv) the "T" scale.

3. The two attitude scales were found to correlate  $r = -.64$ . Endorsement of the psychological orientation was significantly and positively associated with the Guilford-Martin T, D, and D+C scales and with the M.M.P.I. "A" scale, as well as with Jungian ratings of introversion. On the other hand, sympathy with the organic orientation showed a negative association with the "T" scale, but no other personality correlates. Thus hypotheses (i), (ii) and (iv) were borne out.

4. Increasing psychiatric experience was associated with an increase in "A" scores and a fall in "O" scores, while duration of general medical training had a converse association. The third year of psychiatric training was found to be a crucial one for changes in psychiatric outlook.

5. These findings are discussed and some interpretations offered. Attention is drawn to the need to investigate whether and to what degree the clinician's personality and beliefs may affect therapeutic results.

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