

AN ACTION TEST OF HYPOTHESES CONCERNING THE ANAL PERSONALITY¹

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Psychoanalytic characterology posits that distinctive traits which are associated with conflicts in various impulse areas will be manifest in extreme degrees when the conflict is inadequately resolved. 48 Ss performed a hand-eye coordination task (action test) in an odorous dirty medium reminiscent of fecal matter. Poor performance of this task was taken as an index of ineffective defenses against anal impulses. It was predicted that indecisiveness and narrow intellectualism would be associated with ineffective defenses. Ss with unsuccessful action tests showed slower decision making and a selective sensitivity for anal concepts. Questionnaire study indicated that they also profess greater discomfort in areas which are characteristically troublesome for anal personalities.

Psychoanalytic study of individuals with prominent fixations on the anal stage of psychosexual development has yielded the impression that their characteristic defense tactics frequently result in an intellectualized approach to life problems, emotional issues, and interpersonal relationships. It seems, furthermore, that while the mere presence of anal fixations may lead to a sound, creative, and subtle *intellectual mentality*, the latter may decompensate into an *intellectual disturbance* marked by emptiness, ritualism, and pedantry, when defensive efforts are weakened or impulses gain in strength. This has been observed in adolescents in particular (A. Freud, 1936). A second normal compulsive trait often discerned in anally fixated people is that of cool and impassive *deliberateness* in taking action and in making decisions. Its pathological extreme are the paralyzing doubt and *indecisiveness* resulting from decompensated or overly rigid defenses against anal impulses. Normal intellectuality and deliberateness are usually ego-syntonic and adaptive personality traits, whereas their pathological extremes are often experienced

as symptoms requiring amelioration. The present study reports an action test of the prediction that relatively ineffective defenses against anal impulses are associated with indecisiveness and intellectual disturbance.

Previous research dealing with anal personality traits has, on the whole, been discouraging. Although one or two factor-analytic investigations have isolated *traits* corresponding closely to the informal impressions reported in the clinical literature, it has not been possible to assign individuals to an anal *type* in accordance with casual clinical usage.

Barnes (1952) isolated two factors, one of orderliness, reliability, and law abidance, the other of sadism, and this accords well with the psychoanalytic formulation. Earlier still, Sears (1936), in his study of trait attribution, discovered that the traits of stinginess, obstinacy, and disorderliness tended to be correlated in the evaluation of subjects by their peers. This too is theoretically consistent.

Schlesinger recently (1963) collated anality questionnaires employed in various experimental investigations, including that reported in the present study, and submitted a total of 154 items to factor analysis. Among the first 12 factors which she extracted were regularity and meticulousness, retentiveness as a style of

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life, obstinacy, frugality, concern about dirt and contamination, anxiety over possible loss of control, and sensitivity to smells. Once again, the intercorrelations of factor loadings tend to confirm clinical and theoretical preconceptions, and the extracted factors led to telling results in an investigation of personality and vocational choice.

Although these findings suggest that a single questionnaire could be constructed for the assessment of anal personality characteristics, this would not serve the purposes of the present study, since the qualitative analysis of defensive operations is the chief variable under consideration.

The action test utilized in the present study consists of a fecal-like stimulus and yields a measure of the effectiveness with which the subject coped with the stimulus. This performance criterion was employed to measure defense effectiveness because, according to psychoanalytic theory, effective defenses, in addition to reducing anxiety, also promote adaptation, whereas ineffective defenses do neither. Accordingly, relative task success was taken to reflect an adaptive strength, and relative failure, an adaptive weakness. Another part of the study made use of a questionnaire assessing anxiety about anal stimuli. In this way, defense effectiveness could be approached from both sides. More specifically, the action test does not attempt to determine whether the subject is anally fixated or even whether he is in conflict about anal impulses. Rather, it seeks to evaluate the adequacy with which he resolves whatever anal conflicts are present. Thus, it makes no distinction between individuals without noteworthy anal fixation and individuals who are flexibly defended against anal impulses. The questionnaire already mentioned does, however, make this distinction by means of items which tap stable anal character traits. Finally, it should be noted that rather different personality pictures result from the *choice* as well as the *effectiveness* of various defense mechanisms. However, no effort is made in the present study to compare, say, repression with reaction formation or projection. Only the degree of defense effectiveness, in terms of performance success, is measured.

METHOD

The subjects were 48 male college freshmen and sophomores enrolled in an introductory psychology course. They were obligated to participate in the study as a course requirement. All subjects were first tested in a group session and then individually. In the group session, a modified form of the Remote Associates Test (RAT) was administered (Mednick, 1962). This test is said to yield a measure of creative thinking and seems manifestly to demand a certain flexibility of associative processes. In the context of the present study, it seemed a suitable measure of conceptualization and could serve to evaluate intellectual functioning of the kind which is hypothetically vulnerable to ineffective anal defenses. Its specially adapted form consisted of one part of 10, and a second part of 20 items. The first 10 required neutral solutions; the remaining 20 items were mixed, 10 requiring neutral and 10, anal solutions, appearing in random order. Both sets of neutral items were matched for difficulty. The instruction to the test was as follows: "In this test you will be presented with three words and asked to give the word *related* to *all three*." For example, "sweet" is the solution word for COOKIES, SIXTEEN, and HEART. No anal illustration item was, however, presented. A sample anal item is SHOOT, HORSE, HOUSE—SHIT (SHOOT THE SHIT, HORSESHIT, SHITHOUSE).

Fifteen minutes were allowed for the first 10 items and 30 for the other 20. The test was scored for the number of items solved correctly.

The second task administered in the group session was a specially prepared questionnaire which contained 18 items tapping a variety of anal anxieties, 16 items tapping anal character traits, and 9 items tapping nonanal anxieties. Twenty-five neutral items were added to these. Of the anal character traits and anxiety items, about half dealt directly with matters of the toilet or feelings about dirt and cleanliness, and half with more derived traits and preoccupations commonly associated with anal character structure, according to the clinical literature (e.g., Reich, 1949). Examples of anal anxiety items are: "Handling wet and slimy things upsets me," and "I get upset when I realize how much time I waste that should be used for study." Examples of anal character traits are: "I bathe (or shower) frequently," and "I am a punctual person." An example of a nonanal anxiety is: "I fear that I am mentally ill." The subjects endorsed each item on an 11-point scale from "very characteristic of me" to "not characteristic of me." In this way, every subject earned scores for anal anxiety, anal character, and nonanal anxiety. Thus, in addition to the measure of adaptive strength drawn from the action test, the questionnaire provided the second common criterion of defense effectiveness, freedom from anxiety.²

² Further factor-analytic information concerning this questionnaire may be obtained from Schlesinger (1963).

The individual session was begun with a Dot Estimation task. This test was administered to evaluate the subject's decisiveness in making simple judgments. Fifteen cards, $8 \times 11\frac{1}{2}$ inches in size, with random arrays of dots, from 19 to 267 in number, were exposed to the subject for 2 seconds at the rate of one card every 5 seconds. During the 3 seconds intervening between exposures he was to write down his "estimate of the number of exposed dots." In a second trial, the subject was to repeat the procedure with the difference that he himself would determine when the next card was to be exposed. He was informed that in this trial his "score would be equally weighted for accuracy and speed of estimation."

Subsequent to this task, the action test assessing the effectiveness of defenses against anal stimulation was administered. The subject's task required that he immerse his arm, up to the elbow, into a bucket filled with water at room temperature which was hidden from his view by a curtain. Three irregularly shaped flat bits of aluminum, larger than those commonly used in jigsaw puzzles, had been dropped by the experimenter to the bottom of the bucket. A card with the outlines of six such pieces was displayed in full view of the subject. The instruction was to explore the contours of the three pieces, one after another, and to decide as quickly as possible to which of the displayed outlines it corresponded. The subject was required to leave his arm immersed until he had reached a decision. Then he was to remove the piece and place it on the table beside the bucket so that the experimenter might record the results. Four trials of three judgments each were administered using water as a medium. This was followed by four trials in a mixture of used crankcase oil and two pounds of flour. This dirty and odorous medium was assumed to arouse anxieties and other responses similar to those commonly attached to feces. While there were marked individual differences in response to this task—some subjects had had experience working in gas stations—it was quite clear from most subjects' behavior and verbal report that they found it decidedly unpleasant. Different aluminum figures were used in the water and oil trials. The number of correct judgments and the time required for each trial were recorded. To keep up their interest, subjects were informed of the number of correct judgments made in each trial.

RESULTS

Each subject's performance on the action test was expressed in quotients of time-required-per-correct-matching in water and in oil. A subject whose efficiency in oil was less than it had been in water was said to be defending relatively ineffectively against the presumed anal stimulation of the oil medium. However, since the entire sample showed an average increase in efficiency from water to oil, the subjects were divided at the median

of efficiency shift scores (the difference between water and oil efficiency). Those below the median are referred to as good defenders (GD), implying that they either had no noteworthy conflict about anal stimulation or were dealing effectively with whatever conflict they had. Those above the median are referred to as poor defenders (PD).

The prediction that ineffective defenses against anal stimulation would be associated with indecisiveness was borne out by a sign-test evaluating the estimation latencies for Part II of the Dot task. On 11 out of the 15 stimulus cards the PDs' latencies were longer than the GDs' ($p = .006$). There are no consistent differences in accuracy of dot estimation between GD and PD subjects.

In order to test the prediction that ineffective defenses against anal stimulation would be associated with an intellectual disturbance, the relationship between action test and RAT performance was examined. The product-moment correlation between number of anal items solved and efficiency shift scores on the action test was $r = -.29$ ($p = .05$) indicating that GDs tend to solve more such items. But the correlation of action test with neutral RAT solutions was $r = -.01$. That anal and neutral items tap fairly distinct psychological functions is further suggested in that the number of anal RAT solutions was only slightly correlated with the number of neutral ones ($r = .13$).

It was a matter of interest to compare performance on the newly developed action test with questionnaire ratings, a more conventional instrument for the assessment of character traits and anxieties. Whether a measure of performance which did not aim directly at measuring the conscious experience of anxiety yielded the same results as a measure based on the subject's report of such manifest anxiety, would also be of theoretical interest. Accordingly, two groups of 12 subjects each were randomly chosen from the extremes of the anxiety questionnaire. The range of anxiety scores for the high-anxious group was from 14 to 7 and that for the low-anxious group from 0 to 3 with a possible maximum score of 18. These two groups performed differently on the action test, high anal-anxious scorers showing

deterioration in the oil medium, and low scorers showing improvement ($t = 2.06$, $p < .05$). This indicates that subjects who describe themselves as *anxious* about anal concerns, show relative impairment of performance when the water medium is replaced by the oil medium. Neither anal *character* nor nonanal anxiety showed such an association with the action test. For each of these latter comparisons, $r = .02$. The differential association of anal anxiety and character traits with the performance criterion is quite in keeping with theoretically grounded expectations and will be discussed below. The questionnaire measures of anal anxiety and anal character were, however, significantly correlated with each other ($r = .32$, $p < .05$).

Would the anal anxiety questionnaire have served as well as the action test in confirming the predictions about indecisiveness and intellectual disturbance? To deal with this question, parallel computations were made. The measures of anal anxiety drawn from the questionnaire were positively correlated with the Dot latencies. On 13 of the 15 stimulus cards, the high-anxious subjects had longer average latencies than the low-anxious ones ($p = .002$). However, it was not found that they solved more anal RAT items, as was the case in comparing GDs and PDs. The action measure, therefore, yielded a correlation that would not have been obtained from the questionnaire.

DISCUSSION

Performance of the action test, as a sample of the subject's adaptive potential in response to anal stimuli, was expected to hinge on the effectiveness of his defense, not on the relative importance of anal eroticism in his personality make-up. This expectancy is borne out in that stable character traits commonly thought to be derived from anal interests were not correlated with efficiency shift scores while self-reported *anxiety* about anal impulses did predict these scores. Both anxiety and inadequate adaptation are generally deemed to be consequences of ineffective defenses. Since anal character traits are, however, also known to occur in more or less stable people, free of anxiety, one would expect a far from perfect correlation between

anal character and anal anxiety in the population at large. An underlying assumption, as yet to be specifically tested, is that while anal anxiety ought to be found only when evidence of anal character traits is also present, it is quite common to find the latter without the former. The statistical correlation should therefore be moderate, as it was in the present sample ($r = .32$). This permits the interpretation that there may have been well-functioning anal personalities among the GDs. From a theoretical standpoint, the distinction between having no anal conflicts and having anal conflicts, but resolving them successfully, is dubious. In principle, it is impossible to avoid dealing with erotic and aggressive impulses in oneself. The above distinction, therefore, refers mainly to the degree in which the successful resolution is evident to an observer or so deeply repressed or fully integrated as to escape notice.

Although the reported findings seem to bear out clinical impressions of the obsessive-compulsive personality constellation, especially of the linkage between an involvement with dirt and a characterological emphasis on intellectualization and action inhibition, the findings can be explained in at least two ways. The first explanation is based on the presumed causal sequence of insufficient or undependable defensive efforts failing to suppress the mounting anxiety which is triggered by unacceptable anal impulses. This leads to functional disruption. A more detailed account of this is given elsewhere (Rosenwald, 1961).

A second explanation is possible. The PDs' relative impairment in the oil medium may not have resulted from anxiety, but from a playful lingering over a substance which, in the case of these subjects, was enjoyable precisely because it lends itself to implicit anal experiences or fantasies. In other words, a kind of self-indulgence, rather than anxiety, may have retarded their performance. This would be consistent with the clinical understanding of anal, or compulsive, personalities. Even severely neurotic individuals who observe stringent taboos against anal temptations frequently betray a fascination with dirt and destructiveness. However, in the present context, playfulness or fascination constituted an adaptive weakness because all

subjects knew that they were being timed. The instructions to the action test as well as to the previously administered Dot task had set a competitive pace for the entire session. Furthermore, that the action test was positively related to the anxiety questionnaire lends additional credence to the broad maladaptation hypothesis, whether the inefficiency in the oil medium is interpreted as resulting from functional disruption, playful lingering, or a combination of both these factors.

The RAT findings also suggest that sensitization factors, that is, factors of fantasy or other symbolic activity, contributed to the action test performance. The negative correlation between anal RAT solutions and efficiency shift scores may be explained by reference to the PDs' sensitivities to anal stimuli: Just as they were captivated and/or hindered by the anal appeal of the oil medium, so they were also alert to the opportunities for a symbolic anal response to the relevant RAT items. In other words, neither sensitization nor disruption through anxiety can be ruled out from the available data. The concatenation of erotic and anxiety factors is a frequently observed clinical phenomenon and can be conceived as an outcome of ineffective defenses.

Several ambiguities arise in considering each of the employed measures separately. For instance, the drop in efficiency from the water to the oil medium may reflect a generalized discomfort reaction to unfamiliar stimuli or an aspect of tactile insensitivity rather than a functional disruption caused by attitudes toward dirt. It is also possible that Dot Estimation scores are related to psychophysical acuity. It may, therefore, be hypothesized that subjects whose sensory receptivity for tactile cues is easily disturbed also show a judgmental distractibility in response to visual cues. That is to say, subjects who were disturbed in one situation were also disturbed in another. Similarly, it is possible that the correlation between anal anxiety scores on the questionnaire and efficiency shift scores is not mediated by particular impulse defense patterns. All one need assume is that a subject will respond accurately when

asked whether he likes or dislikes a mess. Those who say they dislike it, prove to be consistent in that they perform poorly under messy conditions. Finally, one can dispense with the defense theory in explaining the PDs' advantage on anal RAT items. One can say that those subjects who had the greatest tolerance for the dirty medium, that is, the least squeamish subjects, also have fewer inhibitions against somewhat improper solution words.

However, when considered simultaneously, these various reinterpretations are not so persuasive. Taken together, they would imply that the action test is at once a measure of the subject's distractibility under the stress of unfamiliar conditions, of the subject's squeamishness about impropriety, and of the subject's positive liking for messiness. Although one cannot rule out that sensory acuity (and tactile sensitivity specifically) affects performance on the action test, this alone could not account for the correlation of the action test with the RAT, with the questionnaire, or perhaps even with the Dot task. Furthermore, while the action test and the Dot task have a sensory dimension and a concentration factor in common, this is not the case for the anal anxiety scores on the questionnaire, which were related both to the action test and to the Dot Estimation scores. All in all, it seems more parsimonious to abide with the theory and with the clinical observations which prompted this experiment. But further research linking the action test and questionnaire with factors like stubbornness, emotional constriction, and stinginess, will perhaps provide a more cogent demonstration of the cluster of anal traits.

Although the RAT is supposedly a measure of creative thought, the superior performance of the PDs may be viewed apart from considerations of creativity because their advantage was confined to anal items. The lack of correlation between these and the neutral RAT items suggests that solution of anal items is not so much a sign of creativity, as of a readiness for the expression of anal symbols and themes. On the other hand, the PDs' intellectual disturbance did not cause them

any disadvantage in comparison with GDs' RAT performance.

In the past, researchers have often assumed that an emotional conflict and the resulting defensive efforts necessarily entail the eclipse of the relevant symbols and ideas from the subject's mind. However, especially in the case of anal characters, clinicians often remark on a rather eager, though incomplete, expression of libidinally or aggressively charged ideas. Defenses such as projection, reaction formation, and isolation and a host of so-called counterdefenses avert unconscious psychic dangers by modifying the content of forbidden wishes, rather than by eradicating them altogether. This phenomenon is reminiscent of a recent study in which lowered perceptual thresholds were observed in subjects with a preference for "externalizing" defenses (Lewit, Brayer, & Leiman, 1962).

An extreme form of intellectual disturbance found in compulsion neurosis is the emergence into awareness of unacceptable dirty or destructive ideas. Further research may show whether the present RAT finding is a mild form of such a disturbance. Because particular defenses are associated with particular contents, great care must be taken in generalizing the present RAT results. For instance, ineffective resolution of conflicts about dependency might be associated with predominantly avoidant defenses rather than

counterdefenses. The result might be a suppression of, rather than a sensitization to, pertinent symbols and ideas. In brief, the hypothesis concerning intellectual disturbance in PDs is supported inasmuch as they show a bias which sensitizes them to drive-related, but not to neutral, associative contents.

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