

# *Irish Drug Abusers II: Their Psychological Characteristics*

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This is the second in a series of three articles based on a study of a cohort of Irish drug abusers. While the social background of the subjects was the subject matter of the first paper (Carr et al., 1980), this article addresses itself to the distribution of certain psychological traits within the cohort. In the final paper a psychosocial typology of drug abusers will be presented.

There is much evidence now to support the view that drug abusers, particularly those who seek treatment, are poorly psychologically adjusted (Braucht et al., 1973). The contributory factors and nature of this poor psychological adjustment vary widely. It seems unlikely now that there is any one specific set of psychological traits or psychiatric disorder which differentiates the drug abuser from other poorly adjusted individuals (Laskowitz, 1965). On these grounds it may be argued that there is little to be gained by continuing the search for the "drug-abuse-prone personality". However, the identification of the distribution of the psychological traits within a specific group of drug abusers is not without descriptive value.

## **Method**

The subjects for the present study were a cohort of 100 drug abusers who attended a drug advisory and treatment centre attached to a large general hospital in central Dublin. All subjects included in the investigation attended the centre for the first time between November 1977 and February 1979.

Demographic and social characteristics of the cohort are presented elsewhere (Can et al., 1980).

Witkin's (1950) Group Embedded Figures Test (GEFT), Scheier and Cattell's (1961) Neuroticism Scale Questionnaire (NSQ) and Rosenweig's (1947) Picture Frustration Study (PFS) were administered to all subjects. The Vocabulary and Digit Span sub-tests of the Wechsler Adult Intelligence Scale (WAIS) were also administered and pro-rated to yield an I.Q. for each subject (Wechsler, 1955).

The GEFT is primarily a perceptual test which assesses an individual's ability to extract a simple geometric figure from a complex design. Individuals who perform poorly on this test are said to be field

dependent. Extensive research has shown that perceptual field dependence is associated with specific personality states (Witkin, 1965). A poorly developed sense of identity, a high level of suggestibility and emotional dependence are among the primary personality characteristics of the field dependent individual.

The PFS is a semi-projective device which facilitates the investigation of individual's responses to frustrating situations. The test itself is composed of 24 such situations presented in cartoon fashion. Individuals are required to identify with the frustrated character in each situation and respond accordingly. Responses to the situations are scored with regard to both type and direction of aggression. The three types of aggression measured by this test are obstacle dominance, need persistence and ego defence. Where the respondent concentrates on the nature of the aggression-producing object, he is said to be responding in an obstacle dominant way. Need persistent aggression occurs where a resolution to the situation is sought despite the frustrating object. Finally, an individual may channel his aggressive feelings into the defence of his ego. Responses on the PFS are also appraised in terms of the direction in which the aggression is channelled. The three directions are named extraggression (where aggression is turned towards the environment), introgression (where aggression is turned towards the self), and imaggression (where aggressive feelings are ignored or suppressed).

The NSQ is a non-projective 40-item inventory which yields an overall neuroticism score and four subscores, viz., tender-mindedness, depression, submissiveness and anxiety. While the GEFT and the PFS indirectly assess aspects of the individual's personality, the NSQ requires direct statements of preference between different options and subjects' responses may be influenced by their beliefs of what is socially desirable.

While it is recognised that I.Q.s derived from the short form of the WAIS employed in the present study have limited reliability, the test was included so as to secure an approximate indication of the level of intelligence within the cohort.

## Hypotheses

It was expected that the poor psychological adjustment of the cohort would be indicated by certain significant deviations from standardisation norms on the psychological tests.

Firstly, it was expected that the proportion of field dependent individuals (as measured by the GEFT) within the cohort would be higher than that within the normal population. This was suggested because previous investigations have shown that alcoholics are significantly more field dependent than normal individuals (Witkin et al., 1959; Karp et al., 1963). The second hypothesis was that there would be a high level of neuroticism within the cohort. This would be indicated by a raised total score on the NSQ. Thirdly, it was expected that the proportion of subjects within the cohort which would respond to frustrating situations, as presented in the PFS, im aggressively (rather than introgressively or extraggressively) would be greater than that within the normal population. That is, it was thought that many drug abusers in situations of conflict would direct their aggression neither towards themselves nor towards their aggressor; rather they would ignore or fail to recognise their negative feelings. Implicit in this hypothesis is the concept of drug abuse as an artificial defence mechanism for coping with repressed feelings of hostility (Wurmsler, 1974). The fourth hypothesis was that in frustrating situations (such as those presented in the PFS) the level of obstacle dominant and ego defensive responses within the cohort would be higher and the level of need persistent responses would be lower than those within the normal population. The fourth hypothesis is based on the view that many drug abusers are unable to respond constructively to frustrating situations. Finally, it was not expected that the level of intelligence within the cohort would be significantly lower than within the normal population. That is, intellectual deficiency was not considered to be a significant factor in the poor psychological adjustment of the cohort.

**Table 1**

Field dependence

GEFT score range	% Drug abusers	% Normal population
(a) 0-8.5 (High field dependence)	71	25
(b) 8.6-14.5 (Normal field dependence)	20	50
(c) 14.6-18 (High field dependence)	9	25

Field dependence X drug

abusers:	$\chi^2 = 42.42$ ,	df = 2,	p < .001
Comparing (a)/(b), (c):	$\chi^2 = 35.82$ ,	df = 1,	p < .001
Comparing (a), (c)/(b):	$\chi^2 = 19.78$ ,	df = 1,	p < .001
Comparing (a), (b)/(c):	$\chi^2 = 9.06$ ,	df = 1,	p < .05

The Chi square was employed to test all hypotheses, and differences were considered to be significant beyond the .05 level (Segal, 1965).

## Results

Table 1 presents the results of the cohort on the GEFT. Almost threequarters of the subjects scored

in the field dependent range. This finding is highly significant and provides support for the first hypothesis.

**Table 2**

Neuroticism

NSQ score range	% Drug abusers	% Normal population
(a) 1-4 (below normal range)	21	30
(b) 5-6 (normal range)	30	40
(c) 7 -10 (above normal range)	49	30

Neuroticism X drug abusers:	$\chi^2 = 7.56$ ,	df = 2,	p < .05.
Comparing (a), (b)/(c):	$\chi^2 = 7.54$ ,	df = 1,	p < .01.

**Table 3**

Components of neuroticism

Components	% Drug abusers scoring above the median for the normal population
Sensitivity	62
Depression	31
Submissiveness	43
Anxiety	89

Depression X drug abuse:	$\chi^2 = 7.50$ ,	df = 1,	p < .01.
Anxiety X drug abuse:	$\chi^2 = 35.88$ ,	df = 1,	p < .001.

A significantly higher level of neurotic trend was present within the cohort in comparison with the normal population (Table 2). The primary component contributing to this neurotic trend was anxiety. 89% of subjects scored above the median for the normal population on the anxiety component (Table 3). These results provide support for the second hypothesis. It is noteworthy that the distributions of the sensitivity tough-minded component and the submissiveness-dominant component of the NSQ within the cohort did not differ significantly from their distribution within the normal population. Also there was a significantly lower level of depression (as measured by the NSQ) within the cohort than within the normal population.

**Table 4**

Direction and modality of responses on the PFS

Response	% Drug abusers scoring above the median for the normal population
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*Direction of aggression:*

Extrgression	30
Introgression	23
Imagression	53

*Modality of response:*

Obstacle-dominant	22
Ego-defence	32
Need-persistent	77

Extrgression X drug abuse:	$\chi^2 = 8.34$ ,	df = 1,	p < .01.
Introgression X drug abuse:	$\chi^2 = 15.77$ ,	df = 1,	p < .001.
Obstacle-dominance X drug abuse:	$\chi^2 = 17.00$ ,	df = 1,	p < .001.
Ego-defence X drug abuse:	$\chi^2 = 6.71$ ,	df = 1,	p < .01.
Need-persistence X drug abuse:	$\chi^2 = 15.72$ ,	df = 1,	p < .001.

Table 4 presents the results of the PFS, A significantly smaller proportion of drug abusers than

normal individuals deal with frustration in an extra-greivous or introgressive fashion. This suggests that the predominant way for subjects within the cohort to deal with conflict is to respond aggressively. However, the proportion of subjects scoring above the normal median on the aggressive factor of the PFS did not reach statistical significance. Thus there is only partial support for the third hypothesis.

Need persistence was the predominant modality of response within the cohort on the PFS, and the need persistent response level within the cohort was higher than within the normal population. Also, a significant proportion of subjects scored below the median for the normal population on the obstacle dominance and ego defence factors of the PFS. These results fail to support the fourth hypothesis.

A significantly greater proportion of drug abusers were of below average intelligence and significantly fewer were of below average intelligence in comparison with the normal population (Table 5). These results support the fifth hypothesis but should be interpreted with caution in view of the reliability of the instrument used.

### Discussion

Three of the hypotheses, i.e. those relating to field dependence, neuroticism and intelligence, were supported by the present study. Partial support was

**Table 5**  
Intelligence

I.Q. range	% Drug abusers	% Normal population
(a) 70-89 (below average)	12	25
(b) 90-109 (normal range)	45	50
(c) 110-149 (above average)	43	25

Intelligence X drug abusers:  $\chi^2 = 9.58$ ,  $df = 2$ ,  $p < .01$ .  
Comparing (a)/(b),(c):  $\chi^2 = 5.6$ ,  $df = 1$ ,  $p < .05$ .  
Comparing (a), (b)/(c):  $\chi^2 = 7.22$ ,  $df = 1$ ,  $p < .01$ .

gained for the hypothesis relating to direction of aggression in frustrating situations and no support was gained for the hypothesis dealing with mode of aggressive response. From these results an integrated impression of the psychological status of the cohort may be formed.

Overall, the subjects who participated in the present study were poorly psychologically adjusted. They were highly field dependent and as such were characterised by a poorly developed sense of identity, a high level of suggestibility and a tendency towards emotional dependence. However, their overall level of intelligence was within or above the normal range. High levels of neurotic trend also characterised the members of the cohort. Anxiety was the primary component. From this it may be deduced that subjects were guilt prone, had high levels of ergic tension and low ego strength (Cattell and Scheier, 1958). Many subjects were apparently more cheerful or elated than is normal (however, from the present author's experience, significantly high scores on the depression component of the NSQ are often indicative of a "masked depression"). In frustrating situations, extraggressive or introgressive responses were rarely made by members of the cohort. Thus their primary

way of dealing with such situations was by ignoring or suppressing their negative feelings. However, they do so with a view to dealing with the object causing the frustration. That is, their responses to frustration were predominantly need persistent, constructive and goal directed.

This final characteristic which goes against the fourth hypothesis becomes meaningful if considered within the context of drug-seeking behaviour or in the light of some observations on drug abusers under treatment. Subjects acquired drugs from two major sources. They either bought them from associates or the "black market" or obtained them from doctors or pharmacies under false pretences. Despite the skill and patience required for these tasks, most subjects (72%) reported having been intensely involved in drug-seeking behaviour in the six months preceding interview, i.e. they responded in a need persistent way to the frustrations posed by both of these sources in their quest for psycho-active drugs. That the cohort tended to be need persistent was evident also by their "manipulative orientation" during treatment. At the centre where the present cohort were treated by a multi-disciplinary team, it was often observed that subjects attempted to "play one team member off against another" with a view to personal gain.

In view of the poor psychological adjustment of the cohort, it should be noted that prior to drug abuse 33% of subjects had received psychological or psychiatric treatment.

### Summary

This article, the second in a series of three, examines the distribution of selected psychological characteristics within a cohort of 100 Irish drug abusers attending a drug advisory and treatment centre attached to a large general hospital in central Dublin. The GEFT, the NSQ, the PFS and a short form of the WAIS were employed to test five specific hypotheses. Overall, the results indicate that subjects who participated in the study, while of average or above average intelligence, were poorly psychologically adjusted. An inadequately developed sense of identity, a high level of suggestibility and emotional dependence characterised members of the cohort. A high level of neurotic trend was also noted. The most significant component contributing to this neurotic trend was anxiety. In frustrating situations, subjects tended to ignore or suppress negative feeling and act in a constructive or goal-directed manner. This final and unexpected result is discussed in the light of observations on drug abusers in drug-seeking and treatment situations.

### Acknowledgement

This paper reports on a research project which was organised by the Economic & Social Research Institute in conjunction with the Jervis Street Drug Advisory and Treatment Centre. The results set out here have previously been reported in an unpublished Master's Thesis carried out by the first author under the supervision of Professor E. F. O'Doherty, U.C.D. We extend our thanks to him for his valuable assistance.

### References

Braucht N.G., Brakarsh D. et al. (1973). *Psycholog. Bull.*, 79: 92-106.

- Carr A., Hart I. and Kelly M.G. (1980). Irish Drug Abusers I: Their Social Background. *J. Irish med. Ass.*
- Cattell R.B. and Scheier I.H. (1958). *Psycholog. Reports* 4: 351-388.
- Karp S.A., Witkin H.A. et al. (1965). *J. Abnor. Psychol.* 70: 262-265.
- Laskowitz D. (1965). In Harms E. (ed.). *Drug Addiction in Youth*, 67-85. New York: Pergammon Press.
- Rosenweig S., Fleming E. and dark H. (1947). *J. Psychol.* 24: 165-208.
- Scheier I.H. and Cattell R.B. (1961). Champaign ,Ill.: Institute for personality and ability testing.
- Siegel S. (1965). Non-parametric statistics for the behavioural sciences. London: McGraw-Hill.
- Wechsler D. (1955). Manual for the Wechsler adult intelligence scale. New York: The Psychological Corporation.
- Witkin H.A. (1950). *J. of Personality*, 19.
- Witkin H.A. (1965). *J. Abnor. Psychol.*, 70: 317-336.
- Witkin H.A., Karp S.A. et al, (1959). *Quart. J. Studies on Alcohol*, 20: 493-504.
- Wursmer L. (1974). *J. Amer. Psychoanaly. Assoc.* 22: 820-844.