

## EYSENCK'S PERSONALITY QUESTIONNAIRE SCORES OF HEROIN ADDICTS IN INDIA

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### SUMMARY

One hundred and ten male heroin addicts were administered 'Eysenck Personality Questionnaire' a self reporting measure. High scores on psychoticism, neuroticism and lie scale and low scores on extroversion in heroin addicts as compared to normal controls ( $n=50$ ) were observed in this study which were comparable with those reported earlier. Further, it appears that high neuroticism scores are more consistent feature of heroin addicts than deviation on extroversion. Also an attempt to uncover epidemiological factors underlying heroin addiction has been made.

Much research has been done in biochemical and pharmacological aspects of drug addiction, but, psychopathology underlying heroin addiction is far from clear and still remains a relatively neglected field. Well-defined personality characteristics of heroin addicts can have substantial preventive value; psychiatrists can recognise potential victims and then, advise accordingly.

Present concept of personality of drug addicts is based on earlier psychoanalytic theories and results of studies of a few cases that have been liberally extrapolated to whole population of drug addicts. As always, paucity of experimental data, has curbed objectivity leaving enough room for subjective perception and interpretation of psychiatrists. Consequently, personality of a drug addict (Retka & Chatam, 1974) has been described as alineated, frustrated, passive psychopathy, aggressive psychopath, emotionally unstable, nomadic, narcissistic, dependent, sociopath, hedonistic, childlike, paranoid, rebellious, hostile, infantile neurotic, over attached to mother, retreatist, cyclothymic, constitutionally immoral, hysterical, neuroesthnic, hereditarily neuropathic, weak character and will, lack of moral sense, self

indulgent, introspective, extroverted, self conscious, pseudo-psychopathic delinquent and finally, essentially normal.

To curtail this existing confusion efforts are on, now, not only to find out the personality characteristics associated with generalised drug abuse, but also to delineate specific personality traits in reference to specific drug abuse (Powell, et al., 1979; Jacobs, et al., 1988; Newcomb, et al., 1988; Sheehan, et al., 1988).

Aim of the present study was to explore the efficacy of 'Eysenck's Personality Questionnaire' and to learn about the personality characteristics and other epidemiological factors predisposing to heroin addiction in Indian population.

### MATERIALS AND METHODS

The subjects of this study were male heroin addicts who reported at the All India Institute of Medical Sciences, De-addiction Clinic from Jan. 1988 to Dec. 1988 and at Sanjivni De-addiction Clinic on 6th July, 1989.

The Eysenck Personality Questionnaire was designed to measure psychoticism, neuroticism stability and extroversion-introversion.

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In addition, it included a lie scale. It is an easily administrable, self-reporting measure presumed to have adequate reliability and validity.

Patients were diagnosed according to ICD-9 (WHO) and those with presence or history of any psychiatric disorder were excluded from the study. Polydrug abuses were not included in the study. However, tobacco smoking was allowed in addition to heroin. The patients scores were compared with the 50 normal controls (Das, 1986) and with the standardized norms of normal adults (Eysenck & Eysenck, 1975).

Purpose of the study was explained in detail to incite a sense of responsible participation in the patients. Absolute confidentiality was assured and executed during administration of this test and thereafter about the information provided.

Results were analysed with students t-test and only values with  $p < .01$  were considered significant.

## RESULTS

Heroin addiction cases were seen in the out patient department of psychiatry at the All India Institute of Medical Sciences for the first time in 1981. The total number of cases reported during that year were 9 which steadily increased to 541 in 1985 and 353 in 1986, 342 cases presented in 1987 and in 1988 their number was 141. Lesser number of patients reporting in 1986, 1987 and 1988 does not mean that its prevalence has decreased as it could be due to similar services available at many other private clinics and voluntary organisations established at this very time, for example, a recently opened sister branch of the De-addiction Clinic of A. I. I. M. S. at Deen Dayal Hospital catered to 210 patients (84% of total drug abusers) from September 1988 till March 1989. Though this figure was not representative of general prevalence of the heroin abuse as it was based on hospital population, yet it was

indicative of increase of drug intake among the general population. Out of 110 patients who reported for de-addiction, 83 (76%) were within the age range of 20-29 years, 17 patients

TABLE I. *E. P. Q.* scores of patients ( $N=110$ ) and control ( $N=50$ ) group

	Patients	Control
<i>Psychoticism</i>		
Mean	7.71	3.46
s. d.	3.19	1.50
	$t=8.92^{***}$	
<i>Extraversion</i>		
Mean	9.42	13.62
s. d.	4.40	2.77
	$t=6.17^{***}$	
<i>Neuroticism</i>		
Mean	12.68	7.94
s. d.	3.96	2.34
	$t=7.81^{***}$	
<i>Lie</i>		
Mean	13.54	11.12
s. d.	3.97	4.35
	$t=3.45^{***}$	

\*\*\* $p < 0.001$

TABLE II. *E. P. Q.* scores of patients group ( $N=110$ ) compared with normative data ( $N=2312$ )

Group	Mean score	Standard deviation
<i>Psychoticism</i>		
Patients	7.71	3.19
Norms	3.78	3.09
	$t=13.01^{***}$	
<i>Extraversion</i>		
Patients	9.42	4.40
Norms	13.19	4.91
	$t=7.90^{***}$	
<i>Neuroticism</i>		
Patients	12.68	3.96
Norms	9.83	5.18
	$t=5.59^{***}$	
<i>Lie</i>		
Patients	13.54	3.97
Norms	6.80	4.14
	$t=16.71^{***}$	

\*\*\* $p < .001$

TABLE III. *E. P. Q. Scores of heroin addicts*

Drug Addicts (Males only)	P			E			N			L		
	Mean	±	S.D.	Mean	±	S.D.	Mean	±	S.D.	Mean	±	S.D.
Eysenck (1975) N-8	6.94	±	5.75	8.88	±	6.98	17.88	±	3.94	8.62	±	3.20
Blaszczynski (1985) N-24 using P. E. N.	7.29	±	3.83	11.87	±	4.03	13.17	±	5.25	6.17	±	4.05
Das, A. K. (1986) N-50	7.42	±	5.83	11.64	±	3.84	12.67	±	3.66	12.36	±	3.98
Sahasi, G. (1988) N-100	7.72	±	3.18	9.43	±	4.40	12.68	±	3.18	13.55	±	3.98
Present study (1988) N-110	7.71	±	3.19	9.42	±	4.40	12.68	±	3.96	13.54	±	3.97
Norms	3.78	±	3.09	13.19	±	4.91	9.83	±	5.18	6.80	±	4.14

(16%) were more than 30 years old and 10 (8%) were using the drug even at 15-19 years age group.

Most of the patients started taking heroin in the company of friends (85%). Comparatively lesser number started taking it on their own initiative (9%) and marginal number took it with strangers due to unfulfilment in love or tension in the family (2%). Quite a large number of patients reported voluntarily at the clinic (68%) followed by those brought by the family members (20%) and friends (10%) and three cases were referred by the doctor (1%).

Majority of the patients (N=42, 38%) attending the drug deaddiction clinic of the institute were taking drugs for just a year. 30 (27%) were addicted to heroin for between 13 months to 24 months, 20 (18%) were consuming it for the last 25 months to 36 months, 14 (13%) were used to taking the drug for 33 months to 48 months and only 4 (4%) were addicted to it for over 5 years.

Most of the patients used  $\frac{1}{4}$  gm to more than 2 gm of heroin per day but maximum number (39) consumed it from  $\frac{1}{4}$  gm to  $\frac{1}{2}$  gm daily.

The E. P. Q. scores of patient group was compared with the control group (Table I) and with the normative data (Table II) and all the 't' values were found to be highly significant. Heroin addicts scored comparati-

vely high on psychoticism, neuroticism and lie scale and low on Extroversion scale (Table III) which is comparable to the scores of drug addicts reported by Eysenck (1975).

## DISCUSSION

Involvement of the youth (76% in 20-29 years age group) more than any other age group in their most formative and productive years calls for concern from all sections of society. Further, majority of these young people had started taking the drugs in the company of friends (85%) and were consuming from  $\frac{1}{4}$  to 2 gm of heroin per day (83%). Duration of drug intake varied from few months to 5 years or more. Quite a sizeable majority of them (68%) voluntarily came to avail the drug de-addiction facilities of the All India Institute of Medical Sciences, New Delhi.

An earlier study by Teasdale and Hinkson (1971) suggested that people who become dependent upon amphetamines may be using these drugs to counteract their lack of confidence and social anxiety. Other studies have also suggested that heroin and barbiturates may be used by addicts to cope with their feelings of hostility and worthlessness (Teasdale et al., 1971).

Heroin addicts in the present study scored comparatively high on neuroticism, psychoticism and lie scale and low on extroversion

which was almost in accordance with the observations of the three studies quoted (Eysenck, 1975; Blaxzcynski, et al. 1985; Das, 1986) except that in Blaxzcynski's study lie scale score was much lower (almost half) and in Eysenck's study N scores were higher than the present study. Sahasi (1988) also observed higher L & N scores among heroin addicts compared to their E and P scores comparatively.

Martin and Inglis (1965), Gasser et al. (1974) and Kaldegg (1975) did not find significant differences in the scores of addicts on extroversion-introversion using Eysenck's Personality Inventory.

Halstead and Neal (1968) found that their group of British Heroin and Cocaine addicts were significantly high on neuroticism and low on extroversion. Fort (1966) indicated that most young men whom he studied, had neurotic character.

Rosenberg (1969) found that mixed group of Australian drug users he studied, were significantly high on neuroticism but average on extraversion. Thus according to the results of our present study as in accordance with other studies too, heroin addicts appear to have statistically significant higher levels of psychoticism and neuroticism as distinct from normal population. Elevated psychoticism explains their manipulative and attention seeking behaviour whereas high neuroticism suggests the possible unsuccessful development of familiar defensive, neurotic, characterological and other common adaptive mechanisms as a way of dealing with stress. Consequently, when faced with stressors involving ordinary human pain, disappointment, anxiety, loss, sexual frustration etc., they may submit to an extraordinary solution through the powerful action of the drug. High neuroticism seems to be a more consistant feature than deviation on extraversion.

Despite universal tacit acceptance of the premise that persons with certain personality

characteristics are more likely to become addicts than persons without, definite causal relationship can not be established in the personality aspects brought forward by our study and heroin addiction without a long term prospective clinical trial. Nevertheless, when encountered with such traits in clinical practice, possibility of present or future addiction can be explored in an individual and a word of advice can be given accordingly.

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