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SOME PERSONALITY CHARACTERISTICS OF IMPRISONED HEROIN ADDICTS

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SUMMARY

A group of 20 imprisoned heroin addicts was compared on 4 personality dimensions with a group of non-addict fellow prisoners and a group of normal controls. The 4 personality measures examined were level of self-esteem, perceived locus of control, tendency to self-deception and tendency to project a flattering self-image. The addict group was significantly lower in self-esteem and significantly less inclined to project a flattering self-image than the normal controls. However the addicts were similar to their fellow prisoners on all the psychological measures. The addict and non-addict prisoners were also similar in respect of various socioeconomic indices and criminal history. The belief that one could give up use of heroin without outside help was found to distinguish a subgroup of addicts who were at an earlier stage in the addiction process. However this subgroup did not differ from the more experienced addicts on the 4 psychological measures.

Key words: Heroin addicts — Personality factors — Imprisonment

Research into personality factors and addiction has produced a bewildering array of, not always consistent, findings and related theories. For instance, the tendency to abuse drugs and develop dependence has been associated with low levels of frustration tolerance [1,2], sensation-seeking needs [3], unconscious self-hatred [4], and inadequate, sociopathic or emotionally disturbed personalities [5,6]. Despite the extensive research and numerous positive findings of differences between addict and non-addict groups, a recent study [7] felt compelled to state that 'No personality characteristics of compulsive users have yet been isolated: in fact heroin addicts vary remarkably in personality types and traits.' The failure to advance knowledge in this area is undoubtedly in part due to the frequent failure of

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research to maintain methodological rigour and conceptual clarity. Indeed, Gendreau and Gendreau [8] regard the positive findings in many studies as artifacts of confounding and uncontrolled subject variables. Platt and Labate [9], also, note two important problems concerning differences between addict and non-addict groups. The first problem concerns whether the discovered differences between addicts and the normal population are unique to addicts or are shared by other deviant and antisocial groups. The second concerns whether the differences uncovered by research are evidence of personality characteristics that predispose an individual to addiction or illustrate personality processes that themselves result from drug dependence. Platt and Labate contend that much research in the area either muddles its treatment of these fundamental problems or entirely neglects them.

Given the shortcomings in this research area it is scarcely surprising that many workers from less speculative fields of addiction research have become sceptical and indeed dismissive about the role of personality in the addiction process. Garb [10], for example, pours scorn on the notion that ‘addiction is to be explained largely on the basis of inadequate or defective personality.’ Other writers argue that personality factors are influential only in the addict’s choice of drug [11] or his choice of initial pathway into drug abuse [12]. A popular argument is that personality is not an important issue because there are certain substances which give rise to dependence regardless of who takes them. While this type of argument may be justified as a response to grandiose claims for the role of personality factors in addiction, there is an inherent danger of taking the extreme view and discounting personality as entirely irrelevant to addiction. It needs to be pointed out that the strength of many of the typical arguments that denigrate the role of personality factors derives from logical error and a related misunderstanding of causation. The logical error involves arguing to the general from the particular, to the proposition that personality factors are generally unimportant from the fact that individual instances can be found where personality has no relevance to an addiction process. The misunderstanding of causation concerns the failure by some writers to recognize that a complex, multifactorially determined process such as addiction can have important determinants which are neither necessary nor sufficient conditions for addiction. The relationship between cigarette-smoking and lung cancer is a striking illustration of this point, for, although smoking can play an important role in the development of lung cancer, lung cancer often occurs in the absence of smoking and very frequently smoking does not lead to lung cancer. Similarly, personality factors, which in certain cases are ostensibly irrelevant, may in others substantially raise an individual’s risk for addiction.

Critics of research into personality factors in addiction often place an unwarranted emphasis on the question of personality factors which might predispose to addiction and argue from this position that the role of personality is limited. Bejerot [13], for example, sees the likelihood of becoming a drug addict as a function of the interaction between amount of exposure to drug

use and personal susceptibility. This formula implies that social, cultural and personality factors have a role in initiation into drug use but that they become progressively more irrelevant the more widespread is drug use within a society. or subculture. While this may well be the case with respect to initiation, this type of formulation ignores the importance of personality processes that are concomitant with or consequent upon drug dependence. There is a great deal of evidence [e.g. 14,15] that certain personality changes almost universally accompany drug dependence, for example an increase in unreliability and selfishness. On similar lines. Alcoholics Anonymous and Narcotics Anonymous describe the addict's reliance on denial and rationalization and argue that the use of such defensive ploys reflects attitudinal change created by the addict's lifestyle. The importance of improving information on personality processes that accompany addiction, rather than predate it, is also underlined by the fact that one of the most popular treatment efforts at present is the therapeutic community, the central feature of which is the confrontation and modification of crucial faults in the personality and character of the addict.

It has already been noted that research, which claims to have found personality characteristics that are distinctive of addicts, has usually failed to distinguish whether these characteristics are antecedents or consequences of the addiction. It is important to correct this confusion, perhaps with prospective, longitudinal studies, both in order to improve our understanding of the addiction process and because information on predisposing or protective characteristics can be put to a useful purpose in preventative programmes. On the other hand, when dealing with people already addicted and, therefore, focusing primarily on the question of treatment interventions, it becomes less of a priority to establish whether a personality factor is an antecedent or consequence of drug dependence. The important question is the relevance of personality factors to the success of treatment. The present investigation takes this perspective, arguing that it is valuable to identify personality characteristics of addicts even when it is impossible to unravel any direction of causality.

In particular, this investigation seeks to demonstrate whether certain personality factors are characteristic of imprisoned heroin addicts when compared with a group of non-addicts and with a group of non-addict prisoners. This approach helps to control for the not unlikely eventuality that some personality differences between addicts and non-addicts are explainable in terms of differences in antisocial attitudes and behaviour rather than in terms of substance abuse.

The psychological factors examined are self-esteem, locus of control (bias in causal attribution), the inclination to self-deception and the tendency to deceive others. Measures of these processes and traits offer advantages over the more widely used psychological tests of the whole personality (e.g. the 16PF) or of general psychopathology (e.g. the MMPI), because they represent unitary and relatively simple personality constructs which are more

manageable conceptually and analytically. In addition these four personality factors can be meaningfully related to addiction at the theoretical as well as the experiential level.

It has already been noted that influential self-help organisations, such as Alcoholics Anonymous, hold as one of the major premises of their rehabilitative approach that self-deception and deceitfulness generally are extremely common traits of alcoholics and drug addicts. It seems clear that deceitfulness and self-deception can be of great instrumental benefit to an individual who is trying to maintain and protect a habit which is both costly and hurtful to himself and others, but it is also probable that self-deception has an important role in the early, initiatory stages of addiction. The self-deception questionnaire used in this study is intended to measure a relatively stable personality tendency towards self-deceptive denial and repression, although it is recognised that situational demands play an important role in generating individual instances of self-deception. It can be hypothesised that a strong tendency towards self-deception will increase an individual's vulnerability to addiction at the initiation stage, when situational factors like peer group pressure and the desire for immediate gratification can combine with a general disposition to greatly increase the probability of self-deception. It is, therefore, reasonable to expect comparatively high levels of self-deception amongst the addict group. On the other hand, the effects of prolonged experience of drug dependence on the tendency towards self-deception are not known and may operate so as to generally lower the level of self-deception.

The instrument used to measure the tendency to deceive others is by its nature, as a self-report questionnaire, extremely limited. It is intended to measure an individual's tendency to, consciously or unconsciously, promote a falsely positive picture of the self. It cannot, be considered predictive of the likelihood that an individual will lie in order to, for example, gain access to drugs or hide the fact of his addiction. Scores on this other-deception questionnaire, therefore, may be entirely independent of addict or prisoner status. However, questionnaires of this type are regarded as useful guides to the reliability and honesty of an individual's response to self-report measures. The comparative results of the 3 groups are, therefore, of intrinsic interest and relevant to the interpretation of the results on the other measures.

The measure of locus of control assesses the extent to which an individual perceives himself or others as determining his fate or destiny. When an individual perceives rewarding events as contingent upon his own behaviour (as opposed to other's behaviour) he is said to have an internal (as opposed to an external) locus of control. Relatively external locus of control scores have been associated with the relatively powerless, e.g. minority groups, the poor and the maladjusted [16]. Most research has found that drug addicts tend to have an external locus of control [17,18], reflecting what many observers would see as the reality of a life dominated by drugs. However,

Berzins et al. [19] report that narcotic drug addicts have an internal locus of control. This contradiction may be more apparent that real, for it is possible that these contrary results reflect different developmental stages in the addiction process. In theory, an internal locus of control can be related to the early initiation phase in addiction, where it is likely that a self-deceptive delusion of control plays an important part in easing an individual into an uncontrollable habit. The finding by Joe [20], that an internal locus of control is associated with lack of insight, supports this line of argument. On the other hand, an external locus of control can be readily related to later stages in addiction where the addict has, by hard experience, learned that much of his personal control over his day-to-day life has been dissipated. A comparison of relatively inexperienced addicts with longer term addicts is, therefore, undertaken in order to help elucidate this problem.

Finally, researchers have frequently noted a low level of self-esteem amongst alcoholics and drug addicts [21,22] and also amongst prisoners [23]. Theorists have posited an important role for low self-esteem in increasing suspectibility to both crime [24] and addiction [25], but it is also likely that feelings of low self-esteem are a common accompaniment of the humiliations and depredation's of the prisoner and addict life-styles, Moyal [26] has discovered a significant correlation between low self-esteem and an external locus of control, a finding which suggests that low self-esteem in addicts may be associated with an individual's developing awareness of loss of mastery over areas of his life. It is not possible within the limits of this study to unravel the cause and effect relations between addiction and self-esteem, but attention is paid to the question whether more prolonged experience of drug dependence tends to lower self-esteem. The correlations between all four psychological measures are also examined.

SUBJECTS

The 3 study groups, addict prisoners, non-addict prisoners and non-addict normals, were male and matched for age (within the range 17—21 years). There were 20 subjects in each group. The addict prisoners were collected over a period of 6 months in a juvenile detention centre in Dublin, which holds approx. 200 convicted and remanded offenders. The subjects were notified to the researcher by the medical service of the detention centre. They had all, before committal to detention, been daily intravenous users of heroin. The study group comprised the total population of such heroin users in the institution during that 6 month period. At the time of interview all subjects had completed methadone detoxification, but were .in no case more than a few weeks past their last use of heroin. All subjects in the group admitted to their drug abuse and took part in the study freely and with a high degree of cooperation. The non-addict prisoner group was selected randomly from the remainder of the population of the same insti-

tution. The only criteria for exclusion from this group was the possibility that the individual had extensive experience with opiate drugs. Occasional • use of cannabis, minor tranquilizers or 1 or 2 experiences with opiates, all of which were common amongst the population of the institution, were not considered sufficient grounds for exclusion. The non-addict normal group was a sample of convenience of young, male civil servants working for the Department of Justice in Dublin, who had no experience of opiate drugs.

PROCEDURE

Each of the subjects was administered the following questionnaires: (1) The standard version of Rotter's [27] internal-external Locus of Control Scale (LOC). The 29 items of the scale include 23 forced choice item pairs, each requiring the subject to choose either the internally or externally keyed alternative, plus 6 filler items. By convention the scale is scored in the external direction and, therefore, the higher the score the more external the locus control (range 0—23). (2) The Self-Deception Questionnaire (SDQ) of Sackeim and Gur [28]. This questionnaire consists of 20 items, the positive endorsement of which is judged to be universally true but psychologically threatening. Items are rated on a 7-point Lickert-type scale for frequency or intensity of the behaviour in question and ratings of 1 or 2 at the negative pole of the scale are scored as instances of self-deception. A high score (range 0—20) indicates a strong tendency to self-deception. (3) The Other-Deception Questionnaire (ODQ) of Sackeim and Gur [28]. This questionnaire consists of 20 positively keyed items from various lie scales. Ratings are made on Lickert-type scales in the same manner as with the SDQ. The range is 0—20 with a high score indicating a strong tendency to promote an unrealistically positive picture of the self to others. (4) The Self-Esteem Scale (SE) of Rosenberg [29]. This is a 10-item questionnaire with some items positively and some negatively keyed for self-esteem. The range of possible scores is 0—10, with high scores indicating high self-esteem.

In addition the 40 subjects in the detention centre answered a questionnaire designed to elicit-demographic details and information about their drug use and criminal careers. These subjects were assured both of confidentiality and that none of their responses would in any way affect their position in the detention centre. Finally, the addict prisoners alone were asked whether they thought they were capable of giving up the use of heroin without •outside help. In an earlier study [30] it was found that this question served to clearly differentiate two groups, one of addicts who had developed considerable tolerance of heroin and had suffered considerable personal damage from their habit, and another of addicts who might be regarded as comparative novices, as yet retaining a delusion of control over their habit. It was considered this question could be useful as a criterion for distinguishing 2 subgroups of the addicts in this study. If the subgroups, on further examination, proved to be at different stages in the addiction process, they could be compared on the 4 psychological measures.

RESULTS

The means and S.D. of the results on the 4 psychological measures are presented in Table I. Differences between groups on the 4 measures were compared by way of analysis of variance. The *F*-test results for the 4 measures were as follows: LOC, F = 1.93 N.S.; SE, *F* = 12.92 *P* <0.005; SDQ, *F* = 0.79 N.S.; ODQ, *F* = 8.23, *P* < 0.005. These results indicate that all three groups were homogeneous with respect to LOC and the SDQ. In the case of SE and the ODQ sequential a posteriori comparison of the differences between the groups was undertaken using the Newman-Keuls test. The same pattern of results emerged for both SE and the ODQ. The addict and non-addict prisoner groups were indistinguishable from each other, but both these groups differed significantly from the non-addict normal group (at the? < 0.05 level). In other words, it was found, in line with previous research, that addict prisoners and non-addict prisoners were significantly lower in self-esteem than normal controls. However, contrary to expectation, it was found that addict prisoners were lower than normals, but not than other prisoners, in the tendency to deceive others and furthermore did not differ from normals or other prisoners in terms of locus of control and tendency to self-deception.

The interrelationships between the 4 psychological measures were examined using Pearson's correlation coefficient over all 60 subjects and over the 40 imprisoned subjects alone. Table II presents the relevant correlation matrix, with asterisks, against statistically significant correlations. For the group of 60, 2 correlations were significant; that between SE and the SDQ and that between the SDQ and the ODQ. The positive correlation between the SDQ and the ODQ replicates a finding by Sackeim and Gur [28]. The positive correlation between SE and SDQ suggests that high self-esteem is associated with high levels of self-deception. For the group of 40 prisoners, there was one significant correlation, that between LOC and SDQ. This result indicated that amongst the prisoners a low level of self-deception was associated with a relatively more external locus of control. Moyal's [26] finding of an association between low self-esteem and an external locus of control was not replicated.

In terms of social class, education and work experience the addict and non-addict prisoners were very similar. Both groups were predominantly from the lower socioeconomic classes. The addict group averaged 6 and the

TABLE I
GROUP MEANS (S.D.) ON THE 4 PSYCHOLOGICAL MEASURES

	LOC	**SE**	**ODQ**	**SDQ**
Addict prisoners	11.4(2.8)	4.9(2.1)	3.7(3.6)	8.6(2.8)
Non-addict prisoners	11.2(2.4)	6 (2.1)	4.6(3.3)	8.0(2.5)
Normal controls	11.8(3.3)	8.3(2.1)	8.0(3.6)	9.2(3.2)

TABLE II

INTERCORRELATIONS BETWEEN THE 4 PSYCHOLOGICAL MEASURES OVER ALL 60 SUBJECTS

Figures in parentheses are the correlations over the 40 imprisoned subjects. *$P < 0.05$; **P< 0.01

	SDQ	ODQ	SE
LOG	–0.22	–0.14	–0.01
	(–0.33)*	(–0.27)	(–0.03)
SE	0.33**	0.23	
	(0.22)	(–0.09)	
ODQ	0.37**		
	(0.18)		

non-addict group 6.4 on the socioeconomic scale of the Census Office (range 1—9). The addict group had left full-time education at the average age of 14 years while the non-addict group had left at the average age of 14.5 years. Twelve of the addict group and 11 of the non-addict group had been employed for <1 year. The 2 groups were also similar in respect of their criminal history. The addicts had a mean of 2.25 previous prison sentences compared with 2.35 for the non-addict prisoners. The large majority of charges for both groups concerned various types of theft and only 2 of the addict group had been charged with drug-related offences. These wide-ranging similarities along with the strong socializing influence of the prison environment may go some way towards explaining the similar psychological profiles of the 2 groups.

The addict prisoners were asked if they thought they could give up using heroin without outside help. Twelve thought they could and 8 that they could not. This question appears to have been a useful criterion for sorting the group into distinct subgroups. Seven of the subgroup who felt they did not need outside help (novice) had had no previous experience of treatment, while only one of the other subgroup (longer term) had never had treatment (Fisher's Exact Probability = 0.05). Nine of the novice subgroup had been abusing heroin for <1 year, while all the longer term addicts had been abusing it for>l year (Fisher's exact probability = 0.0013). Also the novice subgroup reported an approximate daily dose of 0.25 g compared to 0.59 g for the longer term addicts ($t = 2.8$ $P < 0.02$). However, despite these clear-cut behavioural differences, *t*-test comparisons indicated that the 2 subgroups did not differ on the 4 psychological measures.

DISCUSSION

Contrary to expectation, no difference was found in propensity for self-deception between the addict and the normal groups. This result cannot be taken to imply that the addict group has not used or does not continue to

use self-deceptive strategies. However, it does suggest that a high level of self-deception, as an underlying and relatively stable personality trait, is neither an important determinant nor a frequent consequence of drug addiction. The fact that there was no difference in level of self-deception between the novice and longer term addicts indicates that it is unlikely that the drug dependency itself has caused a shift from a high level of self-deception to normal levels. The novice group with their apparent delusion of control over their drug habit exemplify self-deception which is unrelated to any general tendency to denial and repression as measured by the SDQ. The present results, then, suggest that the type of denial and self-deception for which addicts are notorious is unrelated to their level of self-deception in reaction to psychologically threatening material. Rather, one may presume that the addict's self-deception is responsive to specific demands of his situation and may well be confined to issues arising from his drug dependency.

The addict group scored significantly lower on the ODQ than the normals. At first sight this result may appear somewhat counter-intuitive, since it suggests that the questionnaire responses of the normal group are less honest and reliable than those of the addicts and other prisoners. However, while it does provide some assurance that the addicts are not seriously distorting their responses, this result also probably reflects differences in the level of motivation to present a socially desirable front and differences in the perception of what constitutes a socially desirable self-presentation. The fact of their incarceration may make the endorsement of ODQ items more difficult for prisoners, but it is also possible that, from their cultural perspective, such items do not represent worthwhile goals for behaviour. A high score on the ODQ involves the claiming of unrealistically high standards of behaviour, for example that one always apologises to others for one's mistakes. That there is an element of self-deception involved in positively endorsing such items is suggested by the significant correlation over all 60 subjects (r = 0.37) between the SDQ and the ODQ. However, further analysis shows that while for the normal group there was strong relationship between responses on the SDQ and the ODQ (r = 0.61) for the prisoner group there was no significant correlation between the two sets of responses (r = 0.18). This finding implies that the addicts and other prisoners, although as self-deceptive as normals in their reaction to psychologically threatening material, are in fact less self-deceptive in their manner of self-presentation. This may mean no more than that for them it carries little psychological threat that their behavior might be regarded as socially undesirable.

The average LOC score of the addict group was 11.4, a comparatively neutral score, and was similar to the average scores of the other 2 groups. This finding is not consistent with the finding of most research studies that addicts have a relatively external locus of control. The result can also be compared with an average of 6.8, indicating a relatively internal locus of control, obtained by Obitz [31] in his meta-analysis of 10 different studies

of LOC in alcoholics. All the alcoholic groups examined by Obitz were detoxified and under active treatment and this may account for the more internal scores of these groups, since treatment of detoxified alcoholics will very often involve a direct attempt to increase the alcoholic's feelings of personal responsibility. In this study, the LOC scores were similar for both the novice and longer term addicts and did not reflect their different perceptions of ability to give up drug use, perceptions which were expected to be related to levels of locus of control. These generally inconclusive results suggest limits to the usefulness of the LOC questionnaire in this kind of research, although Obitz's study indicated that the LOC can effectively monitor the results of programs specifically designed to raise consciousness of personal control. However, the finding of a significant correlation (r = —0.33) between LOC and the SDQ for the prisoner group provides some corroboration for the contention of Joe [20] that internal locus of control is associated with lack of insight.

In line with most previous research the level of self-esteem of the addict group was found to be significantly lower than that of the normal control group. To this extent the relevance of self-esteem to therapeutic approaches to addiction is confirmed. However, since the addict and non-addict prisoners had similarly low self-esteem there was no evidence to support the view that low self-esteem is associated with addiction rather than imprisonment or other factors, Ziller et al. [32], in a review of the literature, cite a number of studies, which indicate that low self-esteem is strongly related to low socio-economic status-. Since the addict and non-addict prisoner groups in this study were predominantly of low socioeconomic status this factor alone may account for their comparatively low self-esteem. Furthermore, the comparison between novice and longer term addicts indicates that level of self-esteem is unaffected by prolonged experience with addiction. The significant positive correlation between self-esteem and self-deception over all 60 subjects (r = 0.33), implies that self-esteem may sometimes be enhanced at the cost of self-deception. However, since the addict and normal groups were similar in level of self-deception, a low level of self-deception cannot, in this case, be invoked as an explanation for the low self-esteem of the addict group.

While the differences between the addict and normal groups are of interest, the failure to find differences between the addict and non-addict prisoners and between the novice and longer term addicts shows that the case remains unproven for the relevance of these particular personality variables to the addiction process. However, it should be borne in mind that the present sample of addicts, because of their youthfulness and well-established pattern of antisocial behaviour, may not be representative of the wider population of heroin addicts.

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