

Amphetamine Taking among Young Offenders*

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This study sampled the London area remand (under 21) population to try to ascertain the current incidence of amphetamine taking, for comparison with the earlier study by Scott and Willcox (1965) on a slightly younger group. In addition to laboratory analysis of urine samples collected during reception procedure at the Remand Centre, we also assembled some psychological test data, information as to current offence, and patients' reports as to their drug-taking habits, if any.

We aimed at a sample of 1,000 individuals drawn so that they were spread over all days of the week (except Sunday, which is a 'closed' day) in actual reception proportions. The study began in mid-April, 1967, and continued until 1 June 1968; however, the recording of psychological and offence data was phased in at a later commencing date, so that these aspects of the study cover a little over half the main sample only. Urine analysis was completed for 972 cases (87.4 per cent of new receptions on the days concerned), and psychological material collected on 532 (81.2 per cent for the period covered). There is no reason to suppose the short-fall of sampling to be in any way related to the occurrence of drug-taking.

Laboratory method. Amphetamines and methyl-amphetamine were detected in urine by thin layer chromatography, and their presence confirmed by gas-liquid chromatography. The methods used have been described in detail elsewhere (Marks and Fry, 1968, Becket *et al.* 1967). Results were reported on the basis of confirmation by the latter analyses only.

Results. (a) *Incidence:* Of the 972 urine samples analysed, 67 (6.9 per cent) showed positive indications of amphetamine or methyl-amphetamine content. This incidence is markedly and significantly lower than that reported by Scott and Willcox (1965) for Remand Home males—a slightly younger age-group; comparing their chromatography-confirmed incidence of 50 out of 420 cases, $\chi^2 = 10.01$, for which with 1 df *p* is appreciably less than .01.

It is difficult to explain our different results from the earlier study. It is possible that the use in the earlier study of a non-specific and crude screening procedure

which regularly detects some 'amphetamine-like substances' in all urines, contributes to the discrepancy as well as the use of paper chromatography—a technique with similar or lower sensitivity and specificity than our own initial screening method—as their definitive procedure. Differences in the type of individual tested, and the period of time that elapsed between their being taken into custody and obtaining a sample of urine, may also be important. The time-lapse between arrest and reception was beyond the possibility of control, being determined by the necessities of police inquiries and appearance in Court. However, we obtained details of reported number of hours in custody before reception, and examination of this information indicates that the variable time-lapse did not appreciably affect the general incidence found ($\chi^2 = 1.0664$ for detected incidence in those received within 24 hours of arrest and those received after more than 24 hours, for which $p > .30$).

Our data showed that there was no evidence of any association of amphetamine taking with weekends, or any particular part of the week; nor was there any difference in incidence between summer and winter months.

(b) *Psychological concomitants:* (i) There was no association between amphetamine-taking and intelligence level as measured by either Raven's Progressive Matrices or a verbal intelligence test (Abstractions). This result is in agreement with that reported by Scott and Willcox (1965). (ii) We administered two personality tests: HDHQ (Caine *et al.* 1967) and Form C of 16 PF (Cattell and Eber, 1954). Our tested sample included 32 amphetamine-positive urine cases, and we compared personality test results for these with a sub-sample of 50 negative cases. These negative cases were selected randomly from all negatives after excluding any who admitted drug-taking (of any kind) and any whose offence involved drugs. HDHQ provides a Total Hostility score and a score for Direction of Hostility; the positives had slightly and significantly higher Total Hostility scores on average, and a mean Direction score which was positive (i.e. intro-punitive) and significantly different from the mean of zero for the negative controls. Examination of the five component scores which

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provide these Total and Direction scores showed that all the difference between the two groups was attributable to the two intro-punitive components (Self-Criticism and Guilt), on which the positives scored higher ($p < .02$ and $p < .05$ respectively). The amphetamine-takers thus appear more self-critical and guilty in feeling than non-takers, suggesting more conflict within themselves.

The 16 PF test is factor-analytically developed and is claimed to measure the major dimensions of personality. In addition to the 16 dimension scores it provides a score (MD) for 'motivational distortion' comparable to 'lie' scales. It is also possible to combine certain scores to give scores on four second-order factors. Comparing the 32 amphetamine-positive and the 50 control negative groups we found differences in mean scores at a significant ($p < .05$) or near-significant ($p < .10$) level on five factors: MD, H(Adventurous *v.* Timid), L(Suspecting *v.* Accepting), O(Guilt-prone *v.* Confident), and Q1 (Radicalism *v.* Conservatism). In addition, the amphetamine-positives had higher Anxiety and lower Extraversion mean scores than the negatives on these second-order factors ($p < .01$ and $p = .02$ respectively).

Summarizing these two sets of results, which on the whole appear reasonably consistent and suggestive of some possible personality differences between

drug-takers and non-takers: the takers appear less likely to distort their responses to such questionnaires, are more shy, retiring, introverted, anxious, self-critical and guilt-ridden, less self-confident and resilient, more radical than traditional, in comparison with those not involved in drug-taking. Since we confined our attention solely to involvement with amphetamines in this study, our results suggest that it might be possible further to define the drug-taking personality intelligibly by similar methods more extensively used.

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