# DIFFERENT STROKES FOR DIFFERENT FOLKS: RESULTS OF A SMALL STUDY COMPARING CHARACTERISTICS OF A TC POPULATION WITH A COMMUNITY DRUG PROJECT POPULATION<sup>1</sup>

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#### Abstract

This paper reports the findings of a small study undertaken in Scotland and England. A small sample of 50 drug treatment service users was interviewed using the Maudsley Addiction Profile (MAP) and Lucid Adult Dyslexia Screening (LADS). Half of the sample was resident in a therapeutic community (TC), whilst the other half were attending a community drug project and, almost exclusively, receiving long-term prescriptions for methadone. Whilst the main intention of the study was to explore the prevalence of dyslexia amongst treatment seeking populations, this paper examines the differences found between the users of the two treatment types. The TC population was significantly more likely to have been injecting prior to treatment, were using a more extensive range of drugs and were more likely to report psychological health problems, including suicidal ideation. The paper examines whether current UK policy on residential treatment is responsible for these differences and what these findings might mean for both treatment delivery and estimating the cost-benefits of treatment interventions.

#### Introduction

Three main instruments were used in this study in order to collect the necessary data. The level and severity of dyslexia was tested through the use of a computerised adaptive test called LADS (Lucid Adult Dyslexia Screening). The nature and extent of the dependent behaviour was tested using the Maudsley Addiction Profile (MAP). Finally, a small sub-sample of ten individuals were interviewed using a short interview schedule specifically designed for this study. Analysis of both the LADS screening and the interviews and any correlation with the MAPs outcomes, will be reported upon at a later stage and this paper is intended simply to report upon and discuss the different character profiles found within the two treatment populations.

The purpose of this paper is to report upon the results of the MAP data insofar as this data suggests differences in severity of dependence and associated issues between the two sub-populations. The dyslexia-related findings of the wider study are to be presented in a subsequent paper and are not discussed here.

# **Methodology and Instruments**

The Maudsley Addiction Profile is designed as a brief, interviewer administered questionnaire for dependence assessment, treatment outcome and general research application (Marsden et al., 1998). The questionnaire was originally designed as a response to a UK-wide call for standardised models of outcome measuring in the

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addictions field (Task Force to Review Services for Drug Misusers, 1996) and was subsequently refined for use as the core instrument in the major study National Treatment Outcome Research Study (NTORS) (Gossop, Marsden, Stewart and Kidd, 2003).

The MAP, like a number of other similar treatment-oriented substance-misuse screening instruments, measures problems in four domains recognised within the treatment literature to impact upon successful intervention outcome: substance use, health-risk behaviour, physical and psychological health and personal/social functioning (Ardila and Bateman, 1995).

The substance use section of the MAP records both frequency and intensity of the use of a range of commonly used/misused substances over a recall period of 30 days. The recall period is a compromise between the commonly used 7 days which often fails to adequately record episodic or intermittent (binge) misuse and longer periods of 6 months or a year which pose problems of accuracy in respondent recall. Frequency is recorded over the 30 day period with the use of "prompt cards" whilst intensity is assessed through verbatim reports of typical daily consumption. In scoring the MAP, these verbatim reports are converted into standardised units. Route of administration is recorded as oral, intranasal, inhalation and injection.

The health risk behaviour domain records frequency of injection, together with self-reported evidence of sharing of injecting equipment (including paraphernalia such as spoons, filters etc.). In addition, respondents are asked to recall frequency of unprotected sexual activity within the 30-day recall period, together with an estimate of number of sexual partners.

The physical health domain comprises a series of questions adapted from Darke et al.'s more extensive Opiate Treatment Index (1991, 1992). Each symptom is recorded on a five-point Likert-type scale measuring frequency during the recall period. Psychological health is similarly recorded using questions derived from the anxiety and depression sub-scales of the British Symptom Inventory (BSI) (Derogatis, 1975).

Finally, the personal/social functioning domain examines client activity within the 30-day recall period in respect of relationship conflict, employment and criminal activity. The level of conflict with sexual partners, relatives and friends is measured in a similar way to the relevant domain in the Addiction Severity Index (McLellan et al., 1992) except that in the MAP, respondents are also asked to recollect frequency of contact. Employment and criminal activity is similarly measured in terms of frequency and intensity with respondents questioned about a series of crimes commonly associated with substance misuse.

Completed MAPs can be scored in each domain to provide an overall level of dependence measure which is comparable across treatment populations and primary drug types (both alcohol and drug misusers).

The study comprised a series if interrelated stages<sup>3</sup>:

- Literature search
- Leaflet and interview schedule design
- Piloting of the chosen instruments
- Recruitment of the required sample
- Collection of the data
- Feedback to individuals and agencies
- Data analysis

In addition, an initial on-line survey of the views of drug treatment professionals regarding the prevalence of dyslexia amongst their caseloads and their impression of its relevance to the treatment process was undertaken. This provided an early indication that a study of the type envisaged would be of value.

The consent form was written in simple everyday language. and substantial sections took the form of comic-style cartoons. Both the consent form and the MAP were subsequently tested with a small group of drug users in the Fife area, for readability and comprehensibility. In the event, this pilot group (5 current drug treatment service users) became quite enthusiastic about the project and requested a further session. No members of the pilot group were included within the final sample of 50 individuals.

A range of drug treatment services were contacted to request access. Given Kirk and Reid's (2003) recent study of dyslexic offenders in a Scottish custodial establishment, no agencies were approached where referral is overtly coercive, such as Drug Courts, Drug Treatment and Testing Order Projects etc. Thus, although some of the eventual sample were indeed attending court-mandated treatment, the majority were not and were therefore primarily a cohort of drug misusers rather than offenders.

Both residential and non residential agencies were contacted and the final sample comprised 25 attenders of non-residential treatment services and 25 residents from two residential rehabilitation agencies. Both the residential agencies were "concept-based" therapeutic communities (see Yates et al., 2006).

Fieldwork was completed in May and June 2006 and data was subsequently analysed by hand. Transcripts of interviews were also analysed manually. In two cases, responses were judged to be identifiable and the clients involved were re-contacted and permission sought to use specific quotations within the final report. In both cases, permission was given without hesitation.

### Limitations of the process

There are a number of limitations to this study, not least the relatively small sample size. However, a good deal of effort went into ensuring that the sample was representative of the wider drug treatment population: with one notable exception. No female respondents were included within the final sample. The decision to exclude female substance misusers was taken at a relatively early stage in the study since the literature estimates male to female ratios of between 4:1 and 3.3:1 (and, in

<sup>&</sup>lt;sup>3</sup> Although these stages were largely chronological, there was, inevitably, a significant amount of overlap. The literature search, for instance continued throughout the study period.

terms of the wider study, similar estimates are offered for relative prevalence of dyslexia). It was therefore felt that within a sample of 50, the data collected from female respondents would be unlikely to achieve statistical significance.

There were, additionally, some minor difficulties in administering the MAP, which is normally intended for use at initial assessment and for outcome monitoring thereafter. In the majority of cases, respondents' drug/alcohol use had been modified by their contact with their respective treatment service. This was particularly the case with the residential cohort, where almost all respondents were drug-free. Respondents were therefore asked to recall the 30-day period immediately prior to their current treatment episode. Clients who indicated either, that they had difficulty in recalling this period, or that they had been in treatment for 8 weeks or longer, were interviewed as normal but excluded from the final sample. In fact, most respondents claimed to have very good recollection of the recall period and this was particularly true of the residential cohort.

Respondents who were clearly intoxicated at the time of interview, or who reported being upon medication above certain daily limits, were neither tested nor interviewed. Typically, this included a small number of respondents in non-residential treatment services receiving a prescription of methadone above 70 millilitres per day. This was not an issue with respondents in residential treatment settings, who were either drug and/or alcohol free or on low, detoxification levels of medication at the time of interview. Finally, one individual was of a minority ethnic background. He described himself as "Scottish Asian" and appeared to have no difficulty with English language. Indeed, he had been born in Scotland and regarded Urdu as "just the language I have to use at home".

All respondents were asked before commencement of the test whether they wished their results to be communicated to the relevant keyworker. All but two agreed to this procedure. These two requested that they received their results individually. In both cases, a further appointment was agreed later in that same day, at which they were given a detailed appraisal of their results. The delay was felt to be appropriate since it was important for the administrator to be confident about the test results and to have a clear view of the implications and the appropriate action to be recommended in each case.

Consent forms were coded numerically, with the same code used on the MAP questionnaire and all other data collected. A further code indicated the respondent's "handedness" since some studies have indicated a tendency towards higher prevalence of dyslexia amongst left-handed males (Snowling, 2000; Owen et al., 1971; Tonnessen et al., 1993).

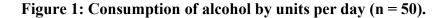
## **Results from the MAP interviews**

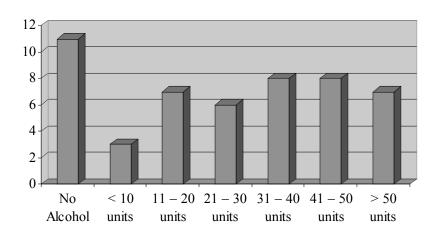
Of the 50 individuals assessed with the Maudsley Addiction Profile, the majority (94%) were using more than one substance. All were using at least one substance – overwhelmingly either heroin or alcohol – on a daily basis. The amounts consumed were generally very high.

Daily (and even regular) users of alcohol were typically consuming between 8 and 60 units per day<sup>4</sup>. Heroin users were using between 0.5 and 3.5 grams per day, whilst those who noted that they were also smoking cannabis – and cannabis was generally described by this group as a secondary drug of choice – would typically smoke between 5 and 15 joints per day<sup>5</sup>. 72% were using one of the benzodiazapine drugs (usually either diazepam or nitrazepam) in addition to their primary drug of choice; typically between 50 and 150 milligrams per day. Those using either cocaine hydrochloride or crack cocaine (68%) were smoking, inhaling or in some cases, injecting, between 0.5 and 3.0 grams per day<sup>6</sup>.

Many respondents were using methadone mixture either via prescription or purchased illicitly on the streets. No distinction was made in this study between prescribed and illicit medications since the intention was to understand overall consumption figures prior to the current treatment episode. 64% were using methadone in a variety of combinations. Almost all were using methadone mixture orally although two respondents were using physeptone (injectable methadone), which had been stolen from a pharmacy. Of the rest, around half were using prescribed methadone often "topped up" with illicit methadone. The remainder were purchasing blackmarket methadone to supplement their heroin supply.

Only four respondents reported use of amphetamine and in all four cases, the reported usage was below five days in the 30-day recall period. As a result, amphetamine has not been individually recorded below.





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<sup>&</sup>lt;sup>4</sup> The current UK Government recommended safe limits for adult males is 3 – 4 units per day to a maximum of 21 units per week.

<sup>&</sup>lt;sup>5</sup> The amount of cannabis in a single rolled cigarette (*joint* or *spliff*) is understandably subject to huge variation but each joint is likely to contain at least 0.5 grams.

<sup>&</sup>lt;sup>6</sup> A single *rock* of crack cocaine has been assumed to contain the equivalent of 0.5 grams

Figure 2: Consumption of heroin by grams per day (n = 50).

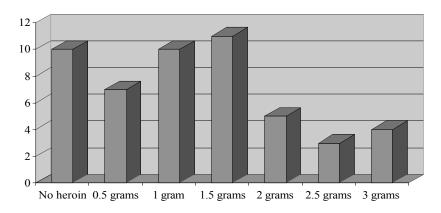
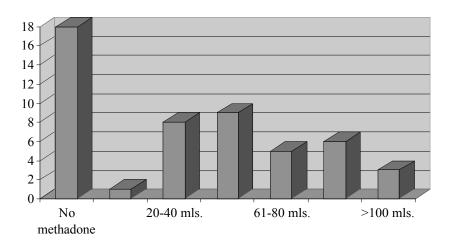


Figure 3: Consumption of methadone (prescribed & illicit) in millilitres per day (n = 50).

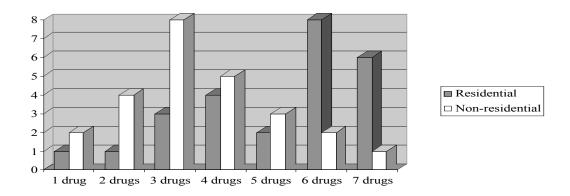


Note: Those reporting use of below 40 mls. Per day were almost invariably reporting use of illicit methadone purchased in order to supplement a heroin habit.

Other, heavily used substances, notably, cocaine, benzodiazepines and cannabis, showed a similar profile of consumption.

Although there was little or no discernable difference between the residential and the non-residential cohorts in terms of the types of drugs consumed and the frequencies of consumption, those interviewed in residential settings were significantly more likely to have been using by injection (80%) than those interviewed in non-residential agencies (36%). The residential cohort also reported a wider use of substances over the recall period.

Figure 4: Total number of substances used in the residential (n = 25) and non-residential (n = 25) cohorts.

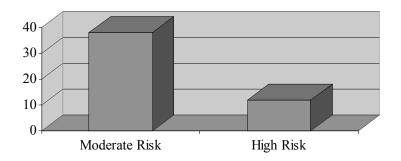


Total number of drug use incidents is measured in MAP by calibrating the number of drugs used multiplied by the number of days used in each type. Thus an individual reporting that they had used heroin and diazepam on a daily basis over the 30-day recall period plus alcohol on every other day, would score 75 ( $[2 \times 30] + [1 \times 15] = 75$ ).

Since the MAP measures for 8 drugs identified as problematic with space to add a theoretically unlimited list of other drugs not identified, technically, there is no limit to the number of drugs/days which could be reported. However, in practice, the majority of other drugs reported within the other category, could successfully be assigned to one of the named drugs (thus both lofexidine and subutex were classified with methadone and ecstasy was classified as amphetamine). Moreover, those reporting use of cocaine, overwhelmingly used both cocaine hydrochloride powder and crack-cocaine (generally according to which version was available on that particular day) and these two were therefore elided in the final calculations.

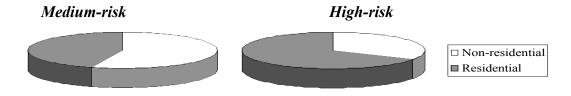
Thus, the overall range was judged to be from 0-240 (8 drug types x 30 possible days). This range was further sub-divided into moderate and high-risk consumption categories, with 120 drugs/days as the division point. 38 respondents (76%) were moderate risk (range: 26-120) and 12 (24%) were high risk (range: 122-219).

Figure 5: Total number of MAP drugs/days in medium and high risk consumption categories (n = 50).



When separated into residential and non-residential categories, once again, those in residential treatment were more likely to be in the high-risk consumption category than their non-residential equivalents. Twice as many individuals in the residential cohort were high-risk consumers when compared to their counterparts. Moreover, the range within the high-risk category for the residential cohort was somewhat higher overall at 135 - 219 with an average score of 162. The non-residential cohort, by contrast, reported a range of 122 - 162 with an average score of 143.

Figure 6: MAP drugs/days in medium and high-risk consumption categories by treatment type (n = 50).

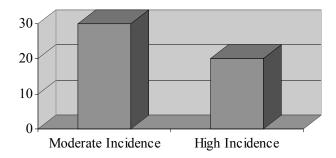


The disparity in drug consumption intensity, would appear to show that drug users presenting to residential treatment are likely to be more heavily dependent and living more chaotic lifestyles. This in itself is not entirely surprising since many local authorities have a policy of only referring for residential treatment when community-based options have failed.

Health risk behaviour was relatively low across the whole cohort. Few had had more than one sexual partner within the 30-day period and 19 (36%) had had no sexual partner at all during that time. Of the 29 (58%) who had been injecting, 15 reported sharing injection equipment, with twice as many sharers in the residential cohort (10: 66%) as there were in the non-residential one (5: 33%).

Both physical and psychological health is measured by the MAP in a ten-question matrix which allows overall scoring in a range from 0 - 40. As with drugs use incidence, these scores were divided evenly into *moderate* and *high* incidence of health problems. 20 respondents (40%) reported high incidence of health problems.

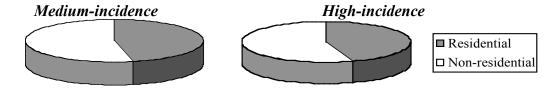
Figure 7: MAP physical health indices in medium and high-risk incidence categories (n = 50).



The physical health problems most commonly reported were stomach pains, tremors and joint pains: symptoms which might generally be expected amongst a sample of drug users the majority of whom were reliant upon an intermittent supply of tolerance-creating drugs with the consequent risk of regular experience of withdrawal symptoms.

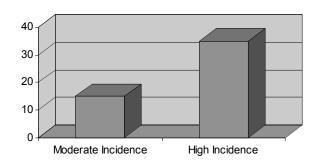
There was though, little discernable difference between the residential and non-residential cohorts in reporting incidence, with approximately half of the high-incidence reports coming from each sub-group.

Figure 8: MAP physical health indices in medium and high-risk categories by treatment type (n = 50).



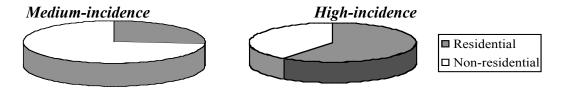
With psychological health however, the picture looked significantly different. 35 respondents (70%) reported high incidence of psychological difficulties including panic attacks, depression and suicidal ideation.

Figure 9: MAP psychological health indices in medium and high-risk incidence categories (n = 50).



There were significant differences too, between the two sub-groups. Of those reporting high incidence of psychological distress the majority (60%) were from the residential cohort.

Figure 19: MAP psychological health indices in medium and high-risk categories by treatment type (n = 50).



In terms of both social conflict and criminal activity, scores ranged from 0 to 100 and 0 to 692 respectively. In neither domain were there significant differences between the two sub-groups. Those reporting low scores for social conflict often noted that they had no contact with partners, relatives and/or friends and therefore, limited opportunity for conflict of the kind described.

A surprising number (10: 20%) reported that they had committed no crimes other than possession of controlled drugs<sup>7</sup> during the recall period. Those who reported committing crimes on a daily basis (28: 56%) were generally shoplifting or dealing in drugs. Drug dealing accounted for some 92% of criminal activity in those committing more than 200 crimes in the recall period. In part, this is because those actively involved in selling controlled drugs as part of their strategy to support their own individual habits, might typically commit between 20 and 50 such offences each day. Unemployment was the norm across the whole sample with only two reporting any days paid work in the recall period. Of those two, one had worked for 15 of the 30 days within the "black" economy, as a mini-cab driver whilst the other had worked for 2 days as a window-cleaner.

## **Summary**

This was a necessarily small, unfunded study in an area where there is no substantive body of literature against which to compare data outcomes. However, it does appear possible to draw some tentative conclusions from the data available.

There were clear differences between the residential and non-residential sub-groups which are likely to have resulted – at least in part - from current British drug policy which generally reserves the (apparently) more expensive option of residential rehabilitation for those individuals who have demonstrated an inability (often, after a significant number of failed treatment episodes in community settings) to cease or

<sup>&</sup>lt;sup>7</sup> Throughout this study, the term "controlled drugs" relates specifically to those drugs listed within the Misuse of Drugs Act 1971. This terminology remains consistent regardless of whether the drugs in question were legally prescribed or obtain illicitly through diverse sources.

moderate their misuse of drugs without the highly structured and intensively supportive environment offered by residential treatment settings.

Differences between these two populations are important given the current emphasis, in UK drug policy, on comparative treatment outcomes and the consequent "value for money" of various types of treatment episode (Roberts, Bewley-Taylor and Trace, 2006; Healthcare Commission/NTA, 2006). A number of large-scale treatment outcome studies, including NTORS, DARP, TOPS and DATOS<sup>8</sup> have consistently shown a strong correlation between the severity of dependence and reduced retention, compliance and thus, overall treatment outcomes.

If drug-free therapeutic communities (and, indeed, other residential rehabilitative facilities) are routinely responding to the needs of a treatment-seeking population which is significantly more damaged than that seen by comparable community-based agencies, then this must inevitably impact upon respective treatment outcomes. Simple comparative, cost-benefit analyses which assume a homogeneous population across a number of treatment modalities may be quite misleading and, specifically, may seriously underestimate the impact of treatment episodes within a therapeutic community.

Results from this small study appear to indicate that there may be value in further investigation into the characteristics of treatment populations presenting to the various treatment modalities made available within the UK. If residential treatment services are seeing drug users whose needs are more complex and whose prognosis is less favourable than in other services, then this factor would need to be taken account of in any calculation of comparative treatment episode cost.

<sup>&</sup>lt;sup>8</sup> *NTORS*: National Treatment Outcome Research Study. *DARP*: the Drug Abuse Reporting Programme. *TOPS*: Treatment Outcome Prospective Study. *DATOS*: Drug Abuse Treatment Outcome Study (see: Gossop, 2005).

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