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Levels of conviction following drug treatment – linking data from the National Treatment Outcome Research Study and the Offenders Index

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The National Treatment Outcome Research Study (NTORS) provides information about the pre-treatment behaviour, problems and social circumstances of a cohort of drug misusers admitted to addiction treatment services. It also includes information on self-reported offending following treatment, operational characteristics and interventions, and client outcomes. NTORS, the first national prospective study of treatment outcome among drug misusers to be conducted in the UK, began in 1995 and 54 treatment agencies in England participated in the study. This constituted one in five of the national services and a sample of 1,075 clients. Data were collected at intake with follow-up interviews after one year, two years and four to five years after intake to treatment. The period covered by the study therefore predates the Government's Updated Drug Strategy (Home Office, 2002) and the start of the Drug Interventions Programme.

The project reported here linked the NTORS and the Home Office Offenders Index longitudinal datasets. The Offenders Index (OI) is a database containing details of all convictions for indictable or 'triable either-way' standard list offences passed in adult or youth courts in England and Wales after 1965.

This Findings discusses the extent to which the reductions reported in rates of self-reported crime among the NTORS cohort (Gossop et al., 2000) are reflected in reduced levels of convictions as recorded by the OI following treatment entry. It also examines the relationship between conviction records and self-reported offending to investigate the robustness of the latter. For a discussion on self-reported offending and other outcomes from the original study and a discussion of the strengths and weaknesses of the NTORS methodology in understanding treatment effectiveness, see Gossop et al.,(2000); Gossop et al.,(2001).

Key points

- Criminal convictions reduced after admission to treatment, with further progressive reductions in criminal convictions across the five-year follow-up period. There was a reduction in convictions (for all offences) of 24% after one year, 29% after two years and 50% after five years. The overall number of offences dealt with at court also reduced.
- Reductions in the number of acquisitive offences for which clients were convicted were 22% at one year follow-up, 60% at two years and 77% at five years. For drug offences the reductions were 9%, 16% and 58% respectively.
- There was a clear association between age and convictions. The younger clients (17 to 24 years) were the most criminally active. The older clients (35 years or over) were the least criminally active. However, all age groups demonstrated the same pattern of decreasing convictions following treatment.
- There was a statistically significant association between the conviction measures used in this linking study and the self-reported offending measures used in NTORS. The correlation between these two measures supported the overall finding that levels of crime had fallen after treatment.

The linking project focused on trends in convictions between 1990 and 2002. This period includes the five years before the NTORS clients entered the treatment episode at the start of which they were recruited (1990–1994), the year that that treatment episode started (1995) and the five years following that match the NTORS follow-up period (1996–2000). A further two years of OI data were available (2001–02) – this was included in order to assess whether changes identified during the course of NTORS continued beyond it.

Three measures of conviction were used:

- the number of clients with convictions
- the number of convictions recorded (defined as an appearance in court where there has been at least one finding of guilt; thus a conviction may cover more than one offence)
- the number of offences for which clients were convicted.

The data matching procedure identified 799 of the original 1,075 NTORS cohort with at least one conviction for the period 1963–2002 (the period covered by the OI).

Reduced convictions after treatment

The total number of clients with convictions was plotted for the years 1990–2002. During the six-year period before intake to the NTORS treatment episode, the number of convicted clients rose steadily from just over 200 clients in 1990 to more than 350 in 1995 (Figure 1). There is then a steady fall in the number of clients convicted per year from their peak in 1995 to 170 in 2002.

Clients convicted during 1990–2002 represent 67% (n=725) of the full NTORS sample. Only 15% of this sample were convicted for the first time in the period after treatment entry (1996–2002), while 22% had convictions for the 1990–1995 pre-study period only. More than two-thirds (74%) of those convicted during 1990–1995 had at

least one conviction in the period after treatment entry. Of the clients convicted after the NTORS intake point, 81% had also been convicted in 1990–1995.

Changes in the number of convictions and offences recorded among the cohort were analysed for four age bands: 16–24 (n=284), 25–29 (n=302), 30–34 (n=264) and clients aged 35 and above (n=225). As Figure 2 shows, there was a clear association between age and number of convictions before intake to treatment. The younger clients were the most criminally active and the older clients were the least criminally active. After intake to treatment, there was a marked reduction in the number of convictions for all age groups, and differences between them were less apparent.

A similar pattern of results was found for the number of offences for which clients received a conviction (Figure 3). There were clear reductions after entry to treatment for all age cohorts. Collectively these results suggest that the observed reductions are unlikely to simply reflect clients ‘maturing out’ of offending. This conclusion is supported by analysis of the proportion of clients within each age cohort convicted pre- and post-intake to treatment. Whilst there was a statistically significant difference between the groups prior to treatment (younger clients were more likely to be convicted between 1990–1995), there was no significant difference for the period 1996–2002.

Changes in the total number of convictions and offences for the full cohort at one-, two- and five-year follow-up are shown in Table 1. Compared to the year prior to intake, there was a reduction in convictions for all offences of 24% after one year, 29% after two years and 50% after five years. A total of 1,662 offences were recorded for the year before admission but five years later the number of offences had fallen to 748, a reduction of 55%. Reductions in the average number of convictions and offences from intake levels were statistically significant for comparisons at all follow-up points.

Figure 1 Number of clients convicted in each year

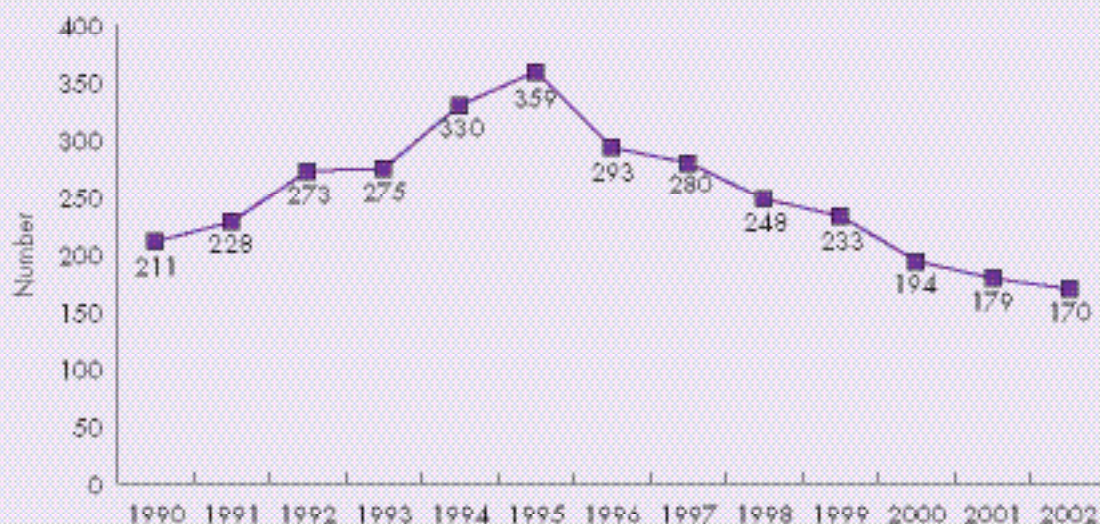


Figure 2 Number of convictions for different age groups at intake (1990-2002)

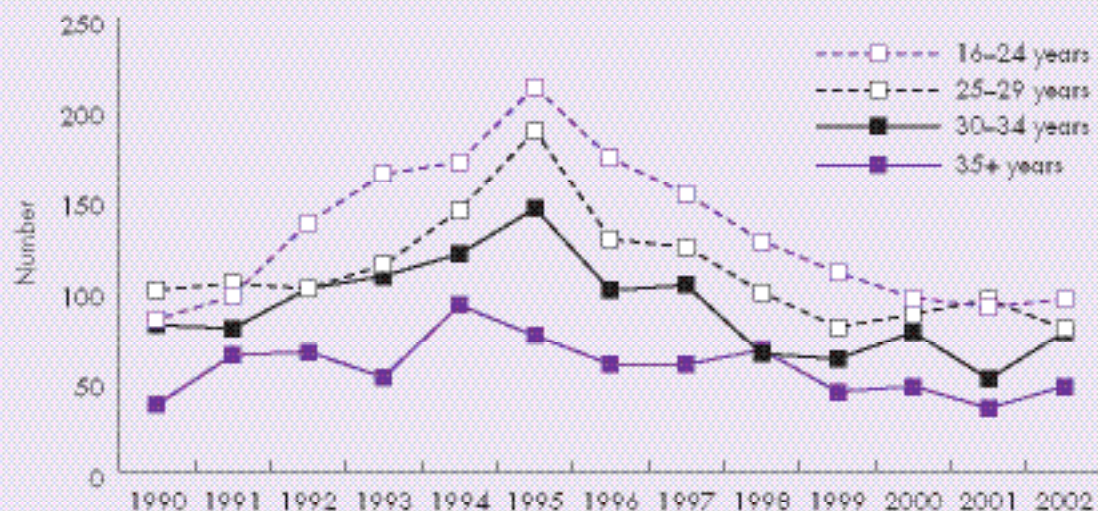


Figure 3 Number of offences for different age groups at intake (1990-2002)

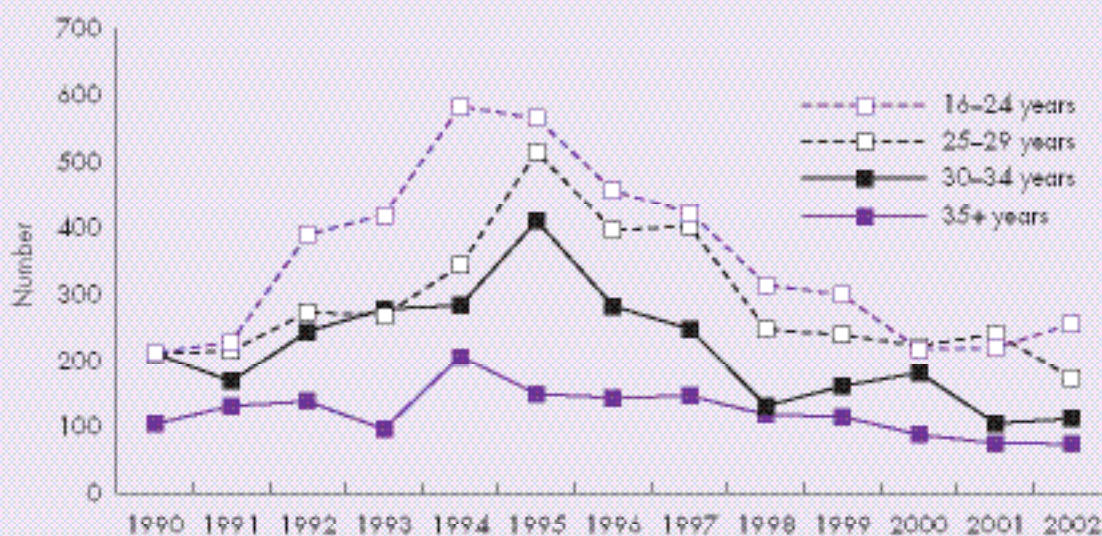


Table 1 Total number of convictions and offences before treatment and percentage reduction at one, two and five years after intake

	Pre-treatment	One year after intake	One-year reduction	Two year after intake	Two-year reduction	Five year after intake	Five-year reduction
Total convictions	612	464	24%	434	29%	308	50%
Total offences	1,662	1,267	24%	1,257	24%	748	55%
Total acquisitive offences	947	737	22%	376	60%	220	77%
Total violent offences	80	53	34%	50	38%	48	40%
Total drug-related offences	121	110	9%	102	16%	51	58%

In previous analyses of self-reported criminal behaviour among the NTORS cohort, acquisitive crimes were identified as among the most commonly occurring offences, particularly among those with the most problematic patterns of drug use. It was hypothesised, therefore, that levels of acquisitive offending might be most affected by treatment. Results for the number of acquisitive offences recorded were found to be more marked than for other types of offence, with reductions after one, two and five years of 22%, 60% and 77% respectively. However, there were also substantial reductions in the number of violent and drug-related offences recorded over the five-year follow-up period.

Factors associated with conviction outcomes

The possible relationship between reduced convictions and the characteristics of clients entering treatment was explored. Analyses were conducted for four groups of clients categorised according to the conviction status during the whole 1990–2002 period:

- clients convicted only in the 1990–1995 period prior to intake (n=160)
- clients who were not convicted the five years prior to intake but had conviction/s post intake from 1996 to 2002 (n=107)
- clients convicted during both prior and post intake periods (n=458)
- clients who were not convicted during prior and post intake periods (n=350).

There were statistically significant differences among the four conviction groups in terms of age, sex, earning a wage, previous methadone treatment and frequency of heroin and crack cocaine at intake, but the patterns of association were complex. Those with pre-treatment convictions (with or without post-treatment convictions) were more likely to be male, not working and also to have been previously prescribed methadone. Clients who had convictions both pre- and post-treatment were younger than those with no convictions or pre-treatment convictions only and were more frequent heroin users. Those with pre-treatment convictions only were less frequent users of crack

cocaine than clients with no convictions, or with both pre- and post-treatment convictions.

Multiple regression analyses were conducted to identify whether client characteristics and substance use outcomes were predictive of changes in the number of offences recorded over a ten year period (five years pre- and post-treatment entry). Separate analyses were conducted for changes in acquisitive offences and changes in all offence categories. The only statistically significant predictor of reduced acquisitive offending was the number of acquisitive offences recorded during the five years before treatment. Reductions in the number of all offences were strongly predicted by pre-treatment levels of offending. In addition, addiction treatment prior to the index treatment episode was negatively associated with reduced offending.

Relationships between recorded convictions and self-reported offending

This study includes measures of both self-reported offending behaviour and officially recorded convictions. However, the two measures were designed for different purposes and do not provide an exact correspondence. There are differences in the time periods covered between the two and there is a time lag between offending and convictions. Also, the OI data were limited to standard list offences. Nevertheless, possible relationships between the conviction measures and the self-reported offending measures were explored.

Clients were grouped according to whether they reported committing no offences, a low number of offences (1–49), or a high number of offences (50+) during the three months before intake. They were then cross-tabulated by the number of convictions (none, 1–2 or more than two) in the year before treatment (Table 2). There was a statistically significant association between the conviction and self-reported offending measures. This effect was largely due to the correspondence between clients in the no self-reported offences/no convictions, and low reported offences/low conviction groups. Those who had no convictions during this year were more likely to report having committed no offences during the three months before treatment entry.

Table 2 Association between NTORS offences and OI conviction data

OI \ NTORS	No offences		Low offending		High offending		Total	
	%	(n)	%	(n)	%	(n)	%	(n)
No convictions	28	(305)	24	(259)	12	(41)	65	(714)
Low rate convictions (1–2)	7	(75)	13	(138)	9	(44)	29	(299)
High rate convictions (2+)	1	(13)	3	(30)	2	(13)	6	(62)
Total	36	(396)	40	(435)	23	(244)	100	(1,075)

Similarly, those who had only one or two convictions during the year were more likely to report having committed only a relatively small number of offences before admission to treatment.

Among those with more than two convictions, no specific relationship was found between self-reported offending and number of convictions, although this may be because only 2% of clients were categorised in both the high convictions/high offending group, or the low probability of clients having more than two convictions in a single year (only 6% of the full sample).

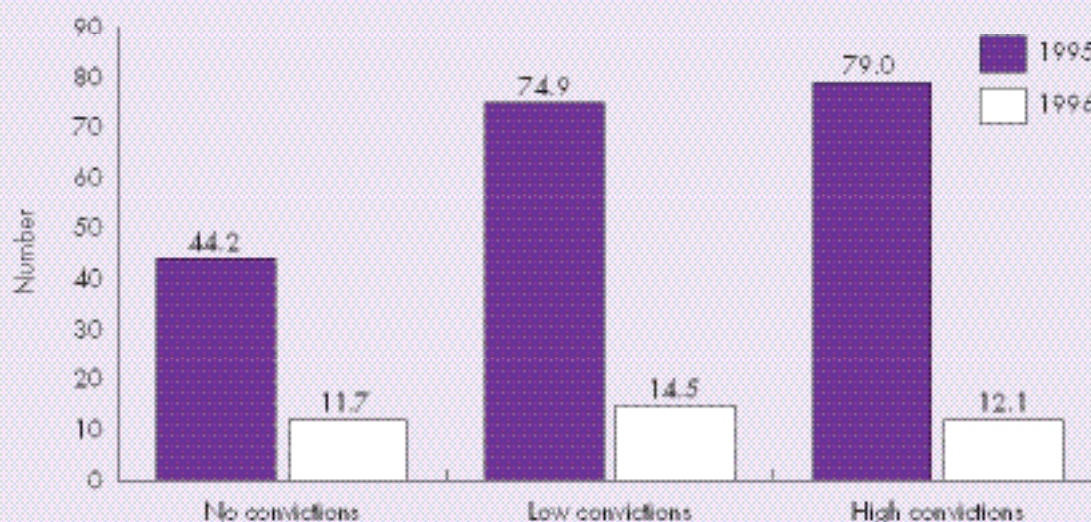
In a further analysis of the association between recorded convictions and self-reported offending, changes in the number of reported acquisitive crime offences at intake and at one year were investigated for the three conviction subgroups (see page 4). The results showed that self-reported offending reduced significantly between intake and one-year follow-up, for all three of the conviction groups (Figure 4). The number of reported offences before intake was higher among those who had convictions recorded than among those without convictions. Levels of reported crimes were similar for all groups at one-year follow-up (i.e. the greatest reductions in reported offending were among those with previously recorded convictions).

This supports the overall finding that levels of crime had fallen after treatment. More importantly, the results showing reductions in convictions after treatment provide a replication of the previously reported findings for reductions in self-reported offending behaviour (Gossop et al., 2000; Gossop et al., 2001).

Implications for future research

In interpreting these findings, it is necessary to take account of the nature of the study sample and the context within which treatment was provided. The NTORS design does not permit reductions in problem behaviour to be attributed directly to the impact of treatment factors. However, prospective longitudinal studies of this sort are the most appropriate means of investigating treatment outcomes after treatment in existing services and under day-to-day clinical circumstances. Since the NTORS sample comprised drug dependent patients presenting to clinical treatment services, it is not clear to what extent the findings can be generalised to drug misusers who enter treatment via the criminal justice system, or to treatment interventions provided within such settings, or to the current configuration of expanded treatment services available within the community. Further research is needed to answer this question.

Figure 4 Changes in self-reported acquisitive crime at one year follow-up



Methodological note

Most of the analyses discussed here are based on the full NTORS sample (n=1,075). The full sample includes the convicted clients having OI records and the NTORS clients that have no convictions and who, by definition, were not matched with the OI database. However, associations between convictions and clinical data are based on follow-up interviews conducted at one, two and four to five years after treatment entry. The sample for the one year follow-up comprised 753 clients (70% of baseline cohort). Smaller samples were selected for participation at the two and four to five year follow-up points. Clients were eligible for two and four to five year follow-up if they had been previously followed-up at six months or one year (n=894; 83% of the intake sample). A random stratified sample of 650 patients was then selected. Interviews were conducted with 572 clients at two years (88% for the eligible sample) and 496 clients at four to five years (76% of the eligible sample).

The characteristics of clients matched and not matched to the OI were compared across a range of variables, but few statistically significant differences were found. The non-matched group included more women, more frequent crack cocaine users but less frequent heroin users. There was no difference in levels of self-reported offending.

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