

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this ~~copyrighted~~ material has been granted by
Public Domain/NIJ

U.S. Department of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the ~~copyright~~ owner.

**NARCOTICS ADDICTION: RELATED CRIMINAL CAREERS,
SOCIAL AND ECONOMIC COSTS***

Elizabeth Piper Deschenes

M. Douglas Anglin

and

George Speckart

UCLA Drug Abuse Research Group
Neuropsychiatric Institute
1100 Glendon Avenue, Suite 763
Los Angeles, CA 90024-3511

August 1988

* Preparation of this article was supported by grant no. 86-IJ-CX-0069 from the National Institute of Justice. Further support was ~~obtained from the~~ National Institute on Drug Abuse, grant no. DA04268, and State of California contract no. D-0001-8 from the Department of Alcohol and Drug Programs. The authors would like to thank George Huba for his comments on an earlier draft. Address correspondence to M. Douglas Anglin, UCLA Drug Abuse Research Group, 1100 Glendon Avenue, Suite 763, Los Angeles, California 90024-3511.

ABSTRACT

A sample of 279 male heroin addicts admitted to methadone maintenance programs in Southern California, interviewed between 1978 and 1980, reported high rates of drug trafficking and over 250,000 property crime-days, which resulted in 6,251 arrests. Analyses indicate that offense rates and related social and economic costs were at their highest during periods of addiction. The aggregate cost to society, including criminal justice system and drug treatment intervention, is conservatively estimated at \$85 million, averaging \$20,000 per subject per year. These findings provide an empirical basis against which to evaluate the cost-effectiveness of alternative interventions.

INTRODUCTION

Despite the current media focus on the epidemic use of cocaine and crack, the problem of heroin addiction remains an important social policy issue. With more than an estimated 500,000 addicts in the United States (Kozel and Adams 1986:190), heroin still presents a persistent problem. Society has been concerned about addiction for decades, and despite the many intervention strategies that have been devised, addict lifestyles and social responses to the problem have changed little over the last twenty years. Renewed interest in finding solutions to the problem of heroin-related crime has emerged because of the strong relationship between narcotics use and crime (Gandossy et al. 1980; Gropper 1985; Chaiken, J. and Chaiken, M., 1982; Anglin and Speckart, 1988), the current levels of prison overcrowding and the high proportion of arrestees and inmates who report serious substance abuse histories (Petersilia et al., 1978; Wish et al., 1984; Innes, 1988).

An important priority in the effort to control narcotics-related crime is the formulation of effective policies. Policy formulation requires the consolidation of what we know about the nature and extent of criminality by narcotics addicts. In addition, we need to assess the effectiveness of various intervention strategies designed to control the related criminality. The costs associated with addiction and its related behaviors must be weighed against the costs and benefits of alternative intervention strategies such as treatment programs and criminal justice system (CJS) approaches.

An accurate estimation of the impact of narcotics addiction on society requires several sources of information. First, we need extensive knowledge about the long term patterns and consequences of narcotics use. Second, we require information about the associated patterns of criminality, especially onset and desistance conditions. Finally, it is necessary to consider the

costs of both uncontrolled addiction and the various interventions to control narcotics addiction and its related criminality.

One way to assess the total cost to society is to structure the analyses around the concepts of the narcotics addiction career and criminal career. Using this analytical approach, the nature and extent of narcotics addiction and criminality can be examined in relation to key critical events or parameters of the addiction career. Critical phases in an addiction career include initial narcotics use, first daily narcotics use (the beginning of addicted use), entry into and discharge from treatment, and cessation of addicted, or daily, use. Similarly, criminal career stages or critical events include age at onset of criminal activity, frequency and seriousness of crimes, criminal justice system interventions, and career length (time from first to last arrest). By examining how critical events in the addiction career interrelate with critical events in the criminal career, it may be possible to gain some insight into the impact of addiction on criminal activity.

This article presents an overview of the natural history of narcotics addiction among a sample of Chicano and white methadone maintenance patients. It summarizes the extent of criminal behavior over a 15-year period, and assesses the social costs of criminality and narcotics addiction. To provide a context for the results, a brief literature review follows.

LITERATURE REVIEW

As highlighted in the following sections, previous research on narcotics use and crime has shown: (1) a persistent relationship between narcotics use and property crime, (2) related changes in criminality associated with changes in levels of narcotics use, and (3) drug treatment programs, including methadone maintenance (MM), therapeutic communities (TC), and the California

Civil Addict Program (CAP), can be effective in reducing both narcotics use and crime. The cumulative findings from these studies have contributed to defining both the complexity of addiction and crime issues and to suggesting effective intervention approaches.

NARCOTICS USE AND CRIME

Evidence for a causal relationship between level of narcotics use and the amount of property crime committed consists of two types. First, studies have shown that addiction to heroin is followed by an increase in criminality (DeFleur et al., 1969; Biernacki, 1973; Stephens and Ellis, 1975; Nurco and DuPont, 1977; Ball et al., 1981; Weissman, 1982; Anglin and Speckart, 1986, 1988). Second, other research on narcotics use and crime has demonstrated the high rates of property crime committed by heroin addicts during periods of addiction (McGlothlin et al., 1977ab; Ball et al., 1980; Ball et al., 1981; Nurco and Shaffer, 1982; Johnson et al., 1985; Anglin and Speckart, 1986, 1988; Speckart and Anglin, 1987).

There is sufficient evidence to support a corollary hypothesis that criminality decreases with decreased levels of narcotics use, even when these periods of decreased use are non-voluntary and linked to social interventions such as legal supervision or treatment. Nurco (1976) found that arrest records of narcotics addicts were lower during periods "off" narcotics than during "on" periods. McGlothlin et al. (1977a) and Anglin and Speckart (1988) report that the percent of time committing crimes, the number of crime days per month, and income from crime vary directly as a function of higher or lower narcotics use. Decreases in narcotics use have been attributed to both social interventions and natural factors such as "maturing out" (Winick, 1962; McGlothlin and Anglin, 1981b; Anglin et al., 1986).

The lifetime criminality of heroin addicts has been studied by Ball and associates (1981). As a reasonable approximation of *lambda*¹, they applied a quantitatively-based measure of criminality among narcotics addicts--"crime-days per year-at-risk." They found that 243 addicts accumulated 473,738 crime-days (including drug identified crimes) during an 11-year risk period, an average of 2,000 crime days per subject over 11 years, or 178 days per year at risk. Theft was the principal type of crime committed, followed by drug dealing. Ball et al. (1981) concluded that most addicts persist in high levels of criminality despite arrests and incarcerations. The continuity and persistency in addicts' criminal behavior while addicted has been noted in other research as well (Speckart and Anglin, 1985, 1987).

DRUG ABUSE TREATMENT AND THE CRIMINAL JUSTICE SYSTEM RESPONSE

Treatment, especially methadone maintenance, has been shown to be generally effective in reducing narcotics use and in decreasing criminal behavior by narcotics addicts (McGlothlin and Anglin, 1981a; Anglin et al., 1982; Anglin and McGlothlin, 1984). Studies of the consequences of terminating public funding for certain MM programs provide further evidence of the effectiveness of methadone maintenance in reducing drug use and criminal behavior (Anglin et al., 1982; McGlothlin and Anglin, 1979). Within 24 months after closure of the programs, 54% of the terminated subjects became readdicted and 73% were rearrested (McGlothlin and Anglin, 1981a).

One set of programs that received special attention in an evaluation of drug treatment programs under the Treatment Outcome Prospective Study (TOPS) was the Treatment Alternatives to Street Crime (TASC). TASC was designed to

¹ Lambda is a term commonly used in the criminology literature for the crime rate (expressed as total number of crimes committed) per year at risk. See, for example, Blumstein, Cohen, and Nagin, 1978.

divert clients from the criminal justice system into community-based drug treatment. Referrals were most commonly made to outpatient drug-free or residential drug-free programs, and less often to methadone maintenance programs (Collins et al., 1986). Analyses indicated a decrease in the number of serious offenses committed by addicts in drug-free or residential programs (Collins et al., 1982). Reporting on methadone maintenance programs, Research Triangle Institute researchers (Hubbard et al., 1983) showed that during the first 6 months in treatment compared to pretreatment levels, a significant reduction in drug use and criminal behavior occurred.

Research conducted by Sells and Simpson (1976, 1980) and Simpson and Sells (1982) on the Drug Abuse Reporting Program (DARP) also provide evidence that methadone maintenance, therapeutic communities and outpatient drug-free programs, but not detoxification programs, produce significant improvements in narcotics use, criminal activity, and other behavior. Furthermore, longer treatment periods were positively related to better outcomes.

A rigorous evaluation of the California Civil Addict Program (CAP), a program operated by the Department of Corrections, concluded that intensive supervision with urine testing was effective in reducing daily narcotics use and criminal behavior (McGlothlin et al., 1977a). In fact, when compared to other types of legal supervision, outpatient status (OPS) supervision with urine testing was shown to be more effective than either supervision with testing or supervision without testing in reducing daily narcotics use, drug dealing, and the commission of property crime.

Another study of methadone maintenance patients examined the interaction of criminal justice system supervision with community-based treatment (Anglin et al., 1981). Anglin and his colleagues concluded that "the addition of legal supervision produces only marginal improvement [in behavior] over that

which would have resulted from the maintenance alone" (p. 168). However, the authors found that legal supervision did decrease the duration of addiction "runs" (consecutive months addicted) both before and after treatment entry. Also, the authors cautioned that legal supervision is an important motivator of treatment entry, without which the use of methadone maintenance to produce the desired changes would not have occurred.

SOCIAL AND ECONOMIC COSTS

The social costs of non-drug crime attributable to drug abuse have been estimated by several researchers (McGlothlin and Tabbush, 1972; A.D. Little, 1975; Lemkau et al., 1975; Fujii, 1975; Rufener et al., 1976a, 1976b; Harwood et al., 1984; and Johnson et al., 1985). These studies have provided valuable assessments of the costs of drug use and related crime and have established a framework for comparative research. However, the compilation of these various studies into an integrated picture of social costs is hindered by the dissimilar methodologies employed. Most have concentrated on samples representing limited geographic areas or time periods. Choice of areas for which costs were determined also varied, making comparison of findings difficult.

An example of a comprehensive economic analysis of drug abuse is found in the Research Triangle Institute's reports for 1977 and 1980 on the economic costs of crime as related to mental illness and drug and alcohol abuse (Cruze et al., 1981; Harwood et al., 1984). These reports used data from multiple sources, including national surveys on drug abuse and crime, mortality statistics, and labor and employment statistics. Quantifiable costs included health consequences (health treatment, mortality, morbidity, property destruction, criminal justice response, victim's time, crime career, incarceration) and other costs (transfers of income via social welfare

programs, amount/value of substances illicitly consumed, crimes committed by number by type and by value of property transferred).

According to these reports, the estimated cost of drug abuse in 1980 was almost \$47 billion (Harwood et al., 1984). Treatment alone accounted for \$1.2 billion and costs attributable to reduced productivity amounted to \$25.7 billion. The authors state:

The involvement of drug abuse in crime carries extensive economic costs. Crime careers (drug trafficking, property crime, and various consensual offenses) motivated by drug addiction were estimated to cost society \$8.7 billion [in 1980] because addicts pursued socially non-productive careers. Additional costs were public and private criminal justice expenses (\$5.9 billion), lost employment of crime victims (\$845 million) and the ultimate incarceration of convicted criminals (\$1.5 billion). These costs do not include the value of illicit drugs consumed, estimated by various sources at between \$9 and \$74 billion annually (Harwood et al., 1984: 5).

No specific findings were reported on what proportion of the total cost was due to narcotics addiction.

Using data from TOPS, Harwood et al. (1988) conducted a cost-benefit analysis of the effectiveness of drug abuse treatment for heroin addiction. Components of the social cost of drug-related crime included victim costs, criminal justice system costs, and crime/career productivity costs. Costs per victim were estimated based on the 1979 National Victimization Survey. Police expenditures were used to estimate costs per arrest. Crime productivity costs were derived from expected legitimate earnings from the Bureau of Labor Statistics. Costs were calculated for the year prior to treatment and compared to the year after treatment. Overall, Harwood et al. (1988) found that before treatment admission, crime-related costs were an average of \$15,262 per client and were reduced slightly, to \$14,089 per year, after treatment (pg. 219). The greatest savings in costs to society appear to be in illegal income and drug expenditures. In addition, there was a 20 percent

reduction in costs to law-abiding citizens during the year following treatment. Residential treatment appeared to produce the greatest reduction in costs, followed by outpatient methadone maintenance.

Tabbush (1986) conducted a similar analysis estimating the cost effectiveness of publicly funded drug abuse treatment and prevention programs in California. This analysis included social costs (drug-related crime and crime enforcement activities, as well as publicly borne medical costs due to drug morbidity) and private costs (labor productivity, and reduced life span). In performing the benefit-cost analysis, Tabbush calculated the ratio between the reduction in social costs comparing treated and untreated drug addicts and the costs for one year of treatment. Findings indicated that treatment produces (1) reductions in the cost of incarceration because some of those admitted to drug programs would have been incarcerated, (2) reductions in enforcement costs from fewer arrests of treatment participants, (3) reductions in drug use, and (4) an increase in employment. Residential drug-free treatment for heroin addicts produced the highest benefit-cost ratio (26.3). The benefit-cost ratio for outpatient drug-free was also fairly high (24.7). Detoxification programs produced ratios of 9.7 for residential and 7.4 for outpatient. The benefit-cost ratio for methadone maintenance was 13.8.

Some specific problems have been associated with several of these cost-benefit analyses, (see for example, Gillespie, 1978 and Harwood et al., 1988). First, there is a problem of double-counting of costs in terms of the income used to purchase drugs (the value of the property stolen in many cases) and the amount for drug expenditures. Second, the social losses from harm to victims are difficult to estimate. In addition, the interrelationship among the factors used in computing social costs produces both conceptual and

methodological difficulties in disentangling the costs of one factor from another.

Quite a different perspective on the social and economic costs of addiction is provided by a study of 210 heroin addicts in New York (Johnson et al., 1985) which focused on the economics of crime by heroin abusers. Using a snowball sampling technique, Johnson and his colleagues interviewed addicts on the streets of New York. Based on the self-reported data, the investigators computed the economic costs of drug abuse in terms of three major items: the retail value of nondrug crimes, drug-business crimes, and lifestyle factors. The results suggest that heroin addicts are:

...highly productive in producing goods and services that are valuable to the underground economy that directly contribute to the licit economy. The average heroin abuser generated economic consequences of almost \$34,000 per year, of which \$14,000 was the value of money and goods taken during nondrug crimes. Another \$15,000, however, was newly created economic value for the heroin-distribution business. The other \$5,000 was income received from transfer payments, private contributions, and tax evasion (Johnson et al., 1985:184).

In addition, the typical heroin abuser generated over \$20,000 annually in the underground economy related to heroin distribution which is the most important consequence of the heroin-abuser lifestyle. Policies that undermine this business are needed (Johnson et al., 1985:185).

The present study provides additional empirical information on the social and economic costs of addiction by focusing on lifetime addiction and criminality and associated direct costs. The data provide a comparative baseline for further analyses of the cost-effectiveness of social strategies for controlling crime by narcotics addicts.

METHODS

SAMPLE

The sample was originally selected from 347 men first admitted to methadone maintenance programs in Los Angeles, San Bernardino, and Orange

Counties between the years 1971 and 1973. One-half of the sample was on civil commitment parole status at the time of admission. Of this sample, 297 Chicano and white men (85.6% of the original sample) were interviewed during the years 1978 to 1979, an average of 6.6 years after admission. Blacks have been excluded from the present study because there were too few to permit ethnic comparisons. Thus, the final sample consisted of 279 Chicano and white men, who may not be fully representative of the overall population of admitted patients receiving methadone for the designated period.

INTERVIEW PROCEDURE

Data were obtained through retrospective interviews. The interview procedure was adapted in part from a schedule developed by Nurco et al. (1975) and has been described in detail elsewhere (McGlothlin et al., 1977a). Briefly, the procedure involved the pre-interview preparation of a schematic time sheet from documented information including criminal records from the California Department of Corrections, Department of Motor Vehicles, and treatment clinic medical files. The time sheets showed all known arrests and intervals of incarceration, legal supervision, and methadone treatment. This information was used by the interviewer as a memory aid to facilitate recall of past events. During the initial contact with the subject, the interviewer established the date of the first narcotics use on the time chart and then proceeded chronologically to the point when narcotics use changed from less than daily use to daily use (or vice versa), or when the respondent's legal status or treatment status changed. Data were then collected on narcotics use, employment, criminal behavior, and certain other variables for that interval. The interviewer repeated this process for the following intervals. A recorded interval was initiated by any change in legal status or level of

narcotics use, up to the date of the interview. Thus, each interval was homogeneous in terms of the level of narcotics use, legal status, and drug treatment participation. Each point in the subject's narcotics use history was measured in terms of these and other variables, from one year before the first use of narcotics until the time of the interview.

To improve the validity of the self-report data, subjects were informed early in the interview that a urine specimen would be requested after all forms had been completed. This request, with which 95% complied, reduced under-reporting of recent drug use and other antisocial behavior. Official arrest records provided an additional source of objective data against which to contrast self-report data.

MEASURES

The major variables in the present study include indicators of narcotics use, criminal activity, economic and employment status, drug program treatment interventions, and legal supervision modalities. All of the variables were converted to rates per month of non-incarcerated time.

Self-reported narcotics use indicators include the percentage of time using narcotics daily, weekly, or occasionally, and the percentage of time abstinent from narcotics use. Addiction is defined as daily narcotics use for a consecutive period of 30 days. Initial addiction is the first period of daily narcotics use. Termination of addiction is defined as that point when narcotics are no longer used daily, and when there is no return to daily use during any subsequent period until the time of interview². The time from initial addiction to termination of addiction is referred to as the addiction

² Note that this is not necessarily the actual termination of addiction, but the last reported daily use of narcotics before the interview. About 12 percent of the subjects reported using daily at the time of the interview.

career. Within this framework, the effects of significant events (such as initial addiction, entry into and discharge from legal supervision, incarceration, and termination of addiction) can be analyzed and evaluated with respect to their influence on the narcotics-crime relationship.

Crime indicators include both self-reported crime and official records of arrest, conviction, and sentences obtained from the California Department of Justice. Three distinct types of self-report crime indicators were obtained in the interview: percent of non-incarcerated time involved in property crime, number of days committing property crime, and dollar income from property crime. Each measure was calculated separately for the major types of property crime (e.g., robbery, burglary, theft, forgery, etc.) and for all property crime. All of these measures were converted to rates per month. For example, if the subject reported he was committing property crime during 6 months out of a total 12 months "at risk," the percentage of non-incarcerated time involved in property crime would be 50 percent. The number of days committing property crime per month "at risk" was truncated to 30, or one crime per day if the subject reported more than 30 crimes per month. Reported dollar values for crime were measured per month of non-incarcerated time.

Information was also coded from official arrest records which covered the time period from first recorded arrest to April 1978 (when the data were requested). In coding the arrest records, crimes were categorized as violent, robbery, property (burglary, theft, and forgery), drug sales, drug possession, other (minor and miscellaneous), and probation or parole violations.

Other self-report variables included percentage of time dealing drugs and income obtained from drug dealing. Percentages of time employed and on welfare were also included as measures of economic status. Income was defined

as the net dollars received from employment or welfare paid per week. The income variables have been converted into dollars per month for the present set of analyses.

Information on all criminal justice system interventions was also collected via self-reports and official records, including incarceration in the California Rehabilitation Center (CRC), jail or prison, legal supervision under probation or parole with or without urine testing, or Outpatient Status (OPS) from the California Civil Addict Program. Time spent in a methadone maintenance (MM) or therapeutic community (TC) treatment were also used as dependent variables in the analyses.

COST ESTIMATES

Cost estimates were based on the costs to society for drug-related crime, drug treatment and criminal justice system intervention. Estimates were derived from the aggregate data for self-reported property crime, income from property crime, months in drug treatment and months under legal supervision. This paper attempts to characterize the direct economic costs over the addiction and criminal careers of narcotic addict offenders and is not a cost-benefit analysis. The cost analysis is based on a simple model of multiplying a standard cost for each category by the aggregated amount of time or number of arrests. No adjustments have been made for inflation over time, even though the time span covered averages 13 years. This approach approximates the social costs of addiction while avoiding the various difficulties associated with estimating "real" costs that reflect all the relevant psychological and social factors. The estimates obtained are most meaningful in a comparative sense and are meant to provide a baseline against which the cost of intervention strategies can be contrasted. To this end, the specific figures used in our estimation are described in detail.

The social costs of arrests and treatment interventions have been estimated using information taken from Bjorklund (1979) and are appropriate for the time periods represented by these data³. Estimates for treatment costs are \$250 per month for publicly-supported methadone maintenance and \$690 per month for therapeutic communities⁴. Each arrest is estimated to cost \$2,040. Estimates for jail, the civil addict program, and prison are \$665, \$835, and \$920 per month, respectively. Probation without urine testing, probation with testing, civil addict parole, prison parole without testing, and parole with testing are \$25, \$50, \$165, \$125, and \$165 per month, respectively. To calculate aggregate dollar income from property crime a "fence factor" of three was used to convert the amount reported by the offender as the value of the property he fenced to an estimate of the actual dollar value⁵.

ANALYSES

Basic descriptive analyses were used to characterize the criminal and narcotics addiction careers of the heroin addicts in this study. Table 1 shows the background characteristics of the sample. Tables 2 and 3 present the annual arrest rates and mean number of total arrests per offender,

³ These costs are comparable to those used by Petersilia, Turner, and Peterson (1986) in studying the effects of probation and parole in California.

⁴ Costs for outpatient detoxification or other programs are not included in this analysis.

⁵ Although estimates vary as to the ratio of the actual value of goods to the reported income from subjects, we have chosen a conservative estimate of one-third the actual value. In a personal communication, Klockars (1988) suggested that a fence factor is product dependent and varies not only with the condition of the goods (new versus used), but also with the type and amount of goods that need to be brokered. He stated that one-third the actual value is an historic factor, not an economic one, and that a factor of one-fourth or one-fifth is more accurate. Although the government claims that police get 7 percent on the dollar in a sting operation, fences claim (according to Klockars) that most thieves get one-third the value.

respectively, as recorded in official records. Self-reported data for narcotics use, criminal behavior, and other behaviors were calculated as individual means and aggregate means. The individual level mean data provide a relative measure of the behavior of one individual. Aggregate level data provide a more realistic picture of the total amount of narcotics use and criminal behavior continued over a "lifetime" of addiction by a group of narcotics addicts.

The aggregate data were used to estimate social costs in Tables 6, 7, and 8. Cost per subject per year was calculated by multiplying the number of months (aggregate) by the cost per month, and dividing by the number of subjects. The derived mean rate is reported.

RESULTS

BACKGROUND

Background information (Table 1) shows that the majority of Chicano addicts (69%) were from poor or working class families, whereas over 65% of the white addicts studied were from the middle or upper classes. The majority of the addicts had completed 10 or 11 years of school, and were working in semi-skilled or unskilled jobs. Drug and criminal histories for these addicts were extensive. The mean age at first self-reported arrest was 14.6 years for Chicanos and 15.7 years for whites, indicating an early record of delinquency. The majority of Chicanos (68%) and a high percentage of whites (36%) had been gang members. Both Chicanos and whites reported, on the average, initial narcotics use at about age 18. Addiction occurred, on an average, about two years later, followed by admission into methadone maintenance at about age 32 for Chicanos and at about age 30 for whites. The addiction careers of this

sample span a period of about 13-14 years for Chicanos and 11-12 years for whites.

Insert Table 1 about here

The "lifetime" criminality up to the time of the interview is both extensive and chronic among these addict offenders (average age of 37 years). The first officially recorded adult arrest for both Chicanos and whites was at age 18 and the age at last recorded arrest before interview was 35 for Chicanos and 33 for whites. For Chicanos, the average number of arrests was 24 over a typical criminal career of 203 months (17 years), resulting in 11 convictions. Whites, on average, had fewer arrests and convictions, 21 and 10, over an average criminal career of 176 months (15 years). Arrests were most frequent for drug sales or drug possession, followed by other minor crimes for Chicanos and property crimes for whites. Over half all Chicanos and whites had more than one period of legal supervision, with an average of 1.8 and 1.7 such interventions respectively.

INDIVIDUAL OFFICIAL ARRESTS

Table 2 shows the mean number of arrests per addict per year and Table 3 the average total number of arrests per addict for each time period, before, during, and after the addiction career and for the total time. The first period (Before) is measured from 12 months before initial narcotics use to addiction or first daily use. The second period (During) spans the addiction career from first daily use to last daily use. The third period (After) goes from last daily use to the time of the interview.

As can be seen in Tables 2 and 3, the data on official arrests confirm findings from earlier research on self-reported arrests which have demonstrated much higher levels of property and drug crimes during the

addiction career. Table 2 shows the highest mean number of arrests per year (.7) was for drug possession during the addicted period. After last daily use, the overall arrest rate decreases to about one arrest every two years. Some change in relative arrest rates can be seen over the three periods. A higher mean number of arrests for minor crimes occurs before addiction, but a higher mean number of arrests for drug possession is seen after last daily use. Overall, the results appear to confirm earlier research which shows that although the majority of addicts began committing crimes before addiction, and that criminal behavior is highest during the addiction career, criminal activity continues to persist after last daily use.

Insert Table 2 about here

The pattern for the overall mean number of total arrests (Table 3) resembles that for arrest rates. The frequency of arrests is much higher during the addiction career than for the periods before or after addiction. (Note, however, that the amount of time spent addicted is also longer than during other periods.) The highest mean number of offenses during the addicted period is for drug possession, followed by minor crimes. Chicanos had a higher frequency of arrests for violent crimes than for drug sales, whereas the opposite pattern was found among whites. The highest number of arrests are for minor crimes. At an individual level, the highest number of arrests during the addiction career was 53 for Chicanos and 59 for whites.

Insert Table 3 about here

INDIVIDUAL SELF-REPORTED NARCOTICS USE, CRIMINAL BEHAVIOR, AND INTERVENTIONS

Self-reported narcotics use and criminal behavior for the same three time periods of non-incarcerated time, before, during and after addiction, are presented as both individual means and group aggregate data in Tables 4 and 5. As other studies found in comparing self-reports and official records, these data show much higher crime levels than do official records. According to Table 4, Chicanos report abstinence from narcotics use 60% of the time and whites report abstinence 67% of the time before addiction. During the addiction career, Chicanos reported daily use 67% of the time and whites 61% of the time, values approximately equal to their prior abstinence levels. Levels of drug use decrease following last daily use, but Chicanos report using narcotics occasionally over half of the time and whites slightly more than 40% of the time.

Insert Table 4 about here

The patterns of criminal behavior parallel those for narcotics use. Before first daily use and after last daily use (i.e., periods when heroin is not used at the addicted level), the percentage of time committing property crime was lower than during the addiction period. In particular, the percentage of time committing property crime was lower after last daily narcotics use than before first daily narcotics use (5% to 28% among Chicanos, 4% to 38% among whites). While addicted, both Chicanos and whites report committing property crime about 40% of the time, but Chicanos reported more crime days per year than whites, 100 and 88 respectively. The percent of time dealing drugs was highest during the addiction period (55% among Chicanos and 43% among whites).

The percent of time employed and dollar income from employment are higher during periods of non-addiction and lower during periods of addiction. On the other hand, percent of time on welfare and dollar income from welfare are highest after last daily narcotics use. These data suggest that although narcotics addicts may spend a greater percentage of time employed due to social interventions (e.g., in drug treatment under legal supervision) they may also become more dependent on the welfare system.

Insert Table 5 about here.

Drug treatment and criminal justice system interventions occur more frequently after the addiction stage than before. For example, only about 15% of non-incarcerated time was spent in methadone maintenance during the addiction career. However, Chicanos spend over 50% of non-incarcerated time after last daily use of narcotics in methadone maintenance, and whites spend just under 50%. Before addiction, neither Chicanos nor whites spent much time in prison or on probation or parole. During the addiction period, however, Chicanos spend a total of 61% of the time incarcerated, on probation or parole, or on CAP outpatient status; whites spent 66% of the time in these statuses.

AGGREGATE SELF-REPORTED NARCOTICS USE AND CRIMINAL BEHAVIOR

The aggregate self-reported data presented in Table 6 suggests that the amount of crime committed by these addicts far exceeds that reported in official arrest records. For example, before addiction Chicanos report

committing property crime on 10,131 days⁶, and whites on 6,584 days; the official arrests for property crime for this period are 61 and 60, respectively. During the entire time period observed there were 7,182 months during which 147,087 days involved crime for Chicanos, and 4,407 months during which 85,716 days involved crime for whites. In the same time period, only 674 and 576 arrests were reported, respectively.

Insert Table 6 about here

Income from property crime and drug dealing is quite substantial. While addicted, Chicanos report over \$11 million in property crime income and almost \$1.5 million in drug income; whites report \$9 million and over \$1.5 million, respectively. In comparison, employment income was only \$4.6 million for Chicanos and \$3.7 million for whites. The contrast between these figures emphasizes the disproportionately high cost of property crime to our society from narcotics addiction.

AGGREGATE SOCIAL COSTS OF ARRESTS, DRUG TREATMENT AND CJS INTERVENTIONS

Aggregate arrest statistics and social intervention costs computed from these figures, as presented in Tables 7A and 7B, demonstrate the high cost incurred by society. The fifth row shows the social costs of total arrests before, during and after the addiction stage⁷. As can be seen, Chicanos and whites were arrested for a total of 5,975 crimes (3,679 and 2,296 respectively) over a period of roughly 20 years.

⁶ Days committing crime represents a minimum figure; several crimes were often committed in a single day.

⁷ Arrests which occurred before the 12 months preceding first drug use or after the interview, approximately 276, were not included in the calculations.

Although not shown in Table 7, the highest contribution to these totals are drug-related arrests, e.g. possession or sales (1,279 and 763 respectively for Chicanos and whites). Minor crimes and property crimes are next highest, and, there are relatively few arrests for violent crimes or robbery. Among Chicanos, arrests for violent crimes are more common before addiction, but minor crimes are most frequent and contribute the highest cost per respondent per year. Among whites, minor crimes contribute the highest cost before addiction per addict per year. During addiction, drug possession arrests represent the highest cost among both Chicanos and whites. After addiction ceases, the highest costs is from drug possession for both Chicanos and whites.

Overall, the costs to the criminal justice system for processing arrests over the criminal career of these narcotics addicts exceeds \$7,505,160 for Chicanos and \$4,683,840 for whites. Expressed at an individual level, the cost averages \$3,063 for Chicanos and \$2,822 for whites per addict per year. The majority of these costs were incurred during the addiction period, namely \$6,270,960 (or 84% of the total) for Chicanos and \$3,882,120 (or 83%) for whites.

Insert Table 7 about here

Before addiction, there are no MM or TC costs for Chicanos. In comparison, costs are relatively high for MM while addicted (\$464) and increase dramatically after addiction ceases (up to almost \$2,000 per individual per year). The comparative cost for whites is \$22 for MM before addiction⁸ and nothing for TC, \$481 for MM during addiction and increases to

⁸ Whites may have been in treatment for "chipping" or occasional use.

\$1,706 for MM following last daily use. It is probable that these two treatment interventions contribute to the termination of addiction. Costs for TC also increase after addiction.

In comparison to costs for drug treatment and incarceration, the costs associated with probation or parole or OPS are lower. Prison costs are relatively high during the period after addiction and before the interview, since addicts were still being convicted for offenses that had resulted in their incarceration.

Among the various criminal justice system interventions, incarceration costs (CRC, jail and prison) are highest during addiction. Costs for probation, parole with testing, or OPS are also highest during addiction and taper off after addiction ceases. In all time periods, the aggregate costs for probation or parole with testing or OPS were lower than aggregate costs for prison, CRC, or jail.

The contribution of average costs for criminal justice system interventions during the total time period from one year prior to first use of narcotics to interview for Chicanos ranged from \$13 per addict per year for probation to \$1,222 for prison. For whites, costs ranged from \$15 for parole to \$1,203 for prison. The average cost for parole with testing was \$76 for Chicanos and \$82 for whites per addict per year. The average cost for probation with testing was \$28 for Chicanos and \$39 for whites.

The total social costs for the criminal justice system and drug treatment interventions of incarceration or legal supervision were higher during and after addiction than before addiction. For example, as shown in the last row of Table 7, the average cost per addict per year prior to addiction was \$616 among Chicanos and \$900 among whites. During addiction, Chicano addict offenders spent a cumulative total of 17,227 and whites spent

11,319 months in treatment or within the criminal justice system. The average cost was \$5,000 per addict per year. After addiction ceases, the average cost was between \$4,500 and \$5,000 per addict per year. Overall, regardless of the time period, the highest intervention costs are for incarceration. For Chicanos and whites this represents an average of \$4,000 per addict per year for CRC, jail or prison.

Insert Table 8 about here

Table 8 summarizes the social costs of addiction for the entire time reported by addicts from first narcotics use to interview.⁹ Crime income was highest for both Chicanos and whites during addiction when income is needed to support their habits. According to self-report estimates, this income was more than \$18,000 per addict year for Chicanos and \$21,000 for whites. The highest amount for criminal processing of these offenders also occurred during the addiction period, and averaged almost \$4,000 per addict year. Both costs were substantially lower before addiction and decrease more after addiction, perhaps due to successful intervention by the criminal justice system or treatment, and/or maturation. The social costs for crime control, drug treatment programs, and social welfare are high both during addiction and thereafter. Incarceration costs were higher during addiction, but treatment and supervision costs were higher after. Overall, the average social cost per addict per year was \$20,000 for both Chicanos and whites. Over the entire period of study (to the time of interview), the total costs attributable to

⁹Cost could be converted to 1989 values by using the Consumer Price Index to determine a multiplicative inflation factor.

this group of narcotic addict offenders were over \$50 million for Chicanos and \$33 million for whites.

DISCUSSION

Several limitations of this study have implications for interpreting the results. First, the sample is limited both geographically and chronologically, consequently, the generalizability of the findings may be questioned. However, there has been little demonstrated change in the addiction or criminal lifestyles of heroin addicts in the past 20 years. Although this study focused on heroin addicts in methadone maintenance treatment in California in the 1970s, the results should apply at a relative level to heroin addicts today.

Second, the actual costs of drug-related crime are likely to be underestimated since inflation factors were not applied to derive cost estimates. Nonetheless, the cost estimates do provide a conservative estimate of the social costs associated with narcotics addiction and related property crime.

With the exception of ethnicity, there are few differences in sample characteristics between the narcotic addict offenders in the present study and those studied in prior research in Baltimore and New York (Nurco et al., 1981; Nurco and Shaffer 1982; Ball et al., 1980). Offenders included in these studies also had extensive involvement with both the criminal justice and drug treatment systems. Furthermore, our results are consistent with those of earlier research studies which demonstrated that criminality is highest during periods of addiction and that decreased drug use is associated with decreased criminality.

Some findings merit closer attention. Compared to a study by Ball et al. (1980), the offenders in our study had more arrests during the 16-year

average addiction career (an average of 22.4) compared to an average of 12.1 in 15 years for the Ball sample, perhaps because the addicts in our study were arrested more often for drug sales and possession (an average of 7.4 for Chicanos and 5.8 for whites, compared to 3.7 for Ball et al.). Like the addicts in the Ball study, however, these addicts had relatively few arrests for violent crimes. The mean number of arrests for violent crimes was about 1.6 for Chicanos and 1.1 for whites in our study compared to 1.5 found by Ball and associates.

Our results are also comparable to data obtained by the Chaikens (forthcoming) for jail and prison inmates. However, the number of crime days per year committing burglary, robbery or theft, was lower in the present study than for the California inmates studied by the Chaikens. Comparing inmates from California, Michigan, and Texas, they found that California inmates committed more crimes overall during addiction than either of the other two groups.

In sum, the profile of the typical narcotic addict offender presented here is as predicted: a chronic addict who commits many crimes, probably to support his addiction. Given the demonstrated costs to society, maximum benefits should be obtained by reducing this cycle of addiction and associated high rates of crime. Future cost-benefit analyses should strive to compare the relative cost-benefits of three alternate interventions: incarceration, criminal justice system supervision, and methadone maintenance or other drug treatment.

Table 1. Characterization of the Sample in Terms of Background, Narcotics Use History, and Criminal History.

	<u>Chicano (N=160)</u>	<u>White (N=119)</u>
<u>Family Social-economic Status</u>		
Poor	51.3%	32.8%
Working class	18.1%	1.7%
Middle	29.4%	54.6%
Upper	1.3%	10.9%
<u>Mean school grade completed</u>	9.9	11.1
<u>Occupation</u>		
Professional	0.0%	4.2%
Sales/Services	6.3%	10.1%
Skilled	7.5%	26.9%
Semi-skilled	60.0%	48.7%
Unskilled, Never worked	25.6%	9.1%
<u>Mean age at interview</u>	38.1	36.6
<u>Drug Use History</u>		
Mean age at first narcotics use	18.0	18.6
Mean age at addiction	19.8	20.5
Mean age at MM admission	31.5	29.8
Mean age at last daily narcotics use	34.5	32.5
Mean career* length (in months)	121.0	98.0
<u>Criminal History</u>		
Gang member	67.5%	36.1%
Mean age at first self-reported arrest	14.6	15.7
Mean age at first official arrest	17.6	18.2
Mean age at last arrest (prior to 4/78)	34.9	32.9
Mean career** length (in months)	203.0	176.0
<u>Mean number of arrests</u>	23.9	20.4
<u>Mean number of convictions</u>	11.0	9.5
<u>Mean number of legal supervisions</u>	1.8	1.7

* first daily narcotics use to last daily narcotics use

** first recorded arrest as adult to last recorded arrest

Table 2. Mean number of official arrests per offender per year: Before, during and after addiction

Time Period	<u>Chicano (N=160)</u>				<u>White (N=119)</u>			
	Before preFDU	During FDU-LDU	After LDU-I ^a	Total	Before preFDU	During FDU-LDU	After LDU-I ^a	Total
Mean no. of months*	28	121	46	184	30	98	46	167
Mean no. of arrests								
Violent	0.11	0.07	0.03	0.07	0.06	0.05	0.06	0.05
Robbery	0.03	0.04	0.00	0.03	0.05	0.08	0.01	0.05
Burglary	0.13	0.29	0.06	0.22	0.09	0.42	0.16	0.30
Theft	0.02	0.13	0.05	0.10	0.07	0.19	0.04	0.12
Minor	0.41	0.47	0.19	0.41	0.37	0.38	0.09	0.31
Parole Violation	0.03	0.26	0.16	0.18	0.02	0.30	0.09	0.19
Drug Possession	0.14	0.70	0.14	0.50	0.19	0.69	0.16	0.46
Drug Sales	0.03	0.07	0.06	0.05	0.02	0.09	0.02	0.06
Miscellaneous	0.01	0.03	0.01	0.02	0.02	0.03	0.03	0.03
Forgery	0.01	0.02	0.00	0.01	0.00	0.04	0.01	0.03
Overall Mean	0.93	2.08	0.68	1.60	0.87	2.28	0.68	1.59

* Non-incarcerated time

^a In Tables 2 through 8, these terms refer to the following: preFDU = pre-first daily use of narcotics; FDU-LDU = first daily use of narcotics to last daily use; LDU-I = last daily use of narcotics to interview.

Table 3. Mean number of total official arrests per offender: Before, during and after addiction

Time Period	<u>Chicano (N=160)</u>				<u>White (N=119)</u>			
	Before preFDU	During FDU-LDU	After LDU-I	Total	Before preFDU	During FDU-LDU	After LDU-I	Total
Mean no. of months*	28	121	46	184	30	98	46	167
Mean no. of arrests								
Violent	0.21	0.66	0.10	0.94	0.10	0.32	0.11	0.51
Robbery	0.05	0.36	0.03	0.44	0.07	0.49	0.04	0.59
Burglary	0.25	2.48	0.29	2.94	0.29	2.84	0.31	3.40
Theft	0.06	1.21	0.12	1.36	0.13	1.20	0.10	1.41
Minor	0.96	4.72	0.69	6.19	0.64	2.94	0.34	3.87
Parole Violation	0.06	2.35	0.26	2.61	0.07	2.09	0.19	2.32
Drug Possession	0.27	6.40	0.79	7.27	0.33	4.92	0.48	5.66
Drug Sales	0.04	0.61	0.09	0.72	0.07	0.58	0.12	0.75
Miscellaneous	0.03	0.26	0.05	0.32	0.08	0.25	0.04	0.37
Forgery	0.02	0.16	0.02	0.19	0.02	0.35	0.04	0.40
Overall Mean	1.95	19.21	2.45	22.99	1.79	15.99	1.76	19.29

* Non-incarcerated time

Table 4. Individual Self-Reported Narcotics Use, Criminal History, Behavioral Measures: Before, During & After Addiction By Race

	<u>Chicano</u>			<u>White</u>		
	<u>Before pre FDU</u>	<u>During FDU-LDU</u>	<u>After LDU-I</u>	<u>Before pre FDU</u>	<u>During FDU-LDU</u>	<u>After LDU-I</u>
N	158	160	121	119	119	102
<u>Mean Number of Months*</u>	28	121	46	30	98	46
<u>Percent Time Narcotics Use/Month</u>						
Abstinent	60.1	13.4	46.9	67.3	17.6	58.5
Occasional**	3.7	2.7	21.9	6.7	4.8	18.9
Weekly***	36.2	16.9	31.2	26.0	16.2	22.6
Daily	0.0	67.0	0.0	0.0	61.4	0.0
<u>Number of Crime Days/Year</u>						
All Property Crime	33.6	99.6	7.2	25.2	87.6	4.8
Robbery	0.0	2.4	0.0	0.0	1.2	0.0
Burglary	10.8	37.2	1.2	2.4	34.8	1.2
Theft	21.6	61.2	4.8	16.8	45.6	3.6
Forgery	0.0	1.2	0.0	3.6	4.8	0.0
Other	2.4	2.4	1.2	3.6	7.2	0.0
<u>Percent Time Crime/Month</u>						
All Property Crime	28.0	39.7	4.9	21.6	38.2	4.0
Robbery	1.5	2.3	0.1	0.5	2.4	0.0
Burglary	13.9	21.0	1.9	7.0	21.6	1.3
Theft	19.3	28.2	3.8	16.1	18.9	1.8
Forgery	0.6	1.4	0.0	1.1	3.6	0.2
Other	1.3	1.5	0.2	1.9	3.7	0.0
<u>Crime Dollars/Month</u>						
All Property Crime	122	636	30	73	807	30
Robbery	5	23	14	1	46	1
Burglary	51	302	11	24	395	5
Theft	62	262	14	29	213	21
Forgery	3	16	0	7	62	1
Other	2	27	4	6	75	0
<u>Drug Dealing/Month</u>						
Percent time	29.5	54.8	15.1	36.0	42.6	8.4
Income	90	348	9	163	490	34
<u>Employment/Month</u>						
Percent time	58.2	42.3	70.5	56.7	45.2	65.7
Income	204	238	524	256	298	589
<u>Welfare/Month</u>						
Percent time	0.7	7.1	7.1	0.4	5.6	11.8
Income	4	90	90	4	69	142

* non-incarcerated time

** less than weekly

*** 1-6 times per week

Table 5. Individual Average Time Spent in Interventions: Before, During & After Addiction By Race

	<u>Chicano</u>			<u>White</u>		
	<u>Before</u> <u>pre FDU</u>	<u>During</u> <u>FDU-LDU</u>	<u>After</u> <u>LDU-I</u>	<u>Before</u> <u>pre FDU</u>	<u>During</u> <u>FDU-LDU</u>	<u>After</u> <u>LDU-I</u>
N	158	160	121	119	119	102
<u>Mean Number of Total Months</u>	33	176	49	35	144	50
<u>Interventions (Mean Number of months)</u>						
Therapeutic Community*	0.0	0.2	0.7	0.0	0.7	12.0
Methadone Maintenance*	0.0	18.0	25.9	0.0	15.6	22.4
CRC	0.0	19.0	1.0	0.3	17.6	1.4
Jail	0.4	16.5	6.0	0.3	12.5	5.4
Prison	0.6	11.8	6.0	0.4	9.8	5.8
Probation w/ Testing	0.2	8.4	3.2	0.1	8.9	6.3
Probation	1.3	9.5	1.8	1.5	10.5	1.9
Parole w/ Testing	0.2	7.2	5.3	0.1	6.2	3.6
Parole	0.2	3.7	0.0	0.4	2.2	0.1
OPS	0.0	30.8	10.8	0.4	26.6	8.2
<u>Interventions (Percent Time)</u>						
Therapeutic Community*	0.0	0.2	1.6	0.0	0.7	2.5
Methadone Maintenance*	0.0	14.8	56.3	0.1	15.9	48.7
CRC	0.0	10.8	2.1	0.8	12.2	2.8
Jail	1.2	9.4	12.3	0.9	8.7	10.7
Prison	1.7	6.7	12.2	1.0	6.8	11.5
Probation w/ Testing	0.5	4.8	6.6	0.4	6.2	12.5
Probation	4.0	5.4	3.6	4.3	7.3	3.8
Parole w/ Testing	0.7	4.1	10.9	0.2	4.3	7.1
Parole	0.6	2.1	0.0	1.0	1.5	0.2
OPS	0.0	17.5	22.0	1.0	18.5	16.4

* Non-incarcerated time

Table 6. Aggregate Self-Reported Narcotics Use, Criminal History and Behavioral Measures: Before, During & After Addiction by Race

	<u>Chicano</u>			<u>White</u>		
	<u>Before pre FDU</u>	<u>During FDU-LDU</u>	<u>After LDU-I</u>	<u>Before pre FDU</u>	<u>During FDU-LDU</u>	<u>After LDU-I</u>
<u>N</u>	158	160	102	119	119	102
<u>Number of months*</u>	4,424	19,350	5,625	3,598	11,671	4,650
<u>Number of months Narcotics Use</u>						
Abstinent	2,160	2,867	2,982	2,059	2,321	3,098
Occasional**	304	610	1,209	339	649	936
Weekly***	1,958	3,305	1,432	1,198	2,001	614
Daily	0	12,566	0	0	6,698	0
<u>Number of Crime Days</u>						
All Property Crime	10,131	147,087	3,318	6,584	85,716	897
Robbery	66	2,525	11	55	1,411	13
Burglary	2,917	49,482	887	441	29,523	226
Theft	6,753	95,080	1,702	3,519	47,315	555
Forgery	230	2,247	1	223	6,097	81
Other	490	4,574	510	2120	7,163	0
<u>Number of months</u>						
All Property Crime	1,212	7,182	223	634	4,407	96
Robbery	29	347	5	14	225	0
Burglary	541	3,447	120	160	2,297	40
Theft	891	5,213	149	494	2,372	53
Forgery	24	203	0	16	481	10
Other	43	308	16	74	424	0
<u>Crime Dollars</u>						
All Property Crime	403,200	11,290,725	164,500	220,900	9,085,200	49,400
Robbery	8,200	436,000	1,600	2,600	506,600	2,000
Burglary	168,000	4,925,600	68,100	70,400	4,116,200	15,800
Theft	198,700	5,011,600	55,500	92,200	2,655,600	24,300
Forgery	209	2,162	0	123	9,174	158
Other	68	5,909	292	252	6,534	0
<u>Drug Dealing</u>						
Number of months	1,236	10,418	641	908	4,668	327
Income	87,000	1,464,300	11,800	237,000	1,518,700	720,100
<u>Employment</u>						
Number of months	2,916	8,371	4,350	2,203	5,772	3,475
Income	1,007,490	4,671,950	3,195,760	1,019,100	3,796,040	3,096,430
<u>Welfare</u>						
Number of months	24	1,440	429	92	640	309
Income	3,500	413,200	115,300	26,600	181,000	90,700

* -incarcerated time
 ** less than weekly
 *** 1-6 times per week

Table 7A. SOCIAL COSTS OF ARRESTS AND INTERVENTIONS BY TIME PERIOD BY RACE

CHICANO		N=158			160			121			160		
Time Period	BEFORE	Aggregate	Cost	DURING	Aggregate	Cost	AFTER	Aggregate	Cost	TOTAL	Aggregate	Cost	
	pre FDU			FDU-LDU			LDU-I			TOTAL			
Mean No. of Months*	28	Total	Per	121	Total	Per	46	Total	Per	184	Total	Per	
Total Aggregate Months*	4,424	Cost	Subject	19,350	Cost	Subject	5,625	Cost	Subject	29,399	Cost	Subject	
Mean Years/Subject*	2.3	Per Year	Per Year	10.1	Per Year	Per Year	3.9	Per Year	Per Year	15.3	Per Year	Per Year	
Total No. of Arrests	308	\$628,320	\$1,704	3,074	\$6,270,960	\$3,889	297	\$605,880	\$1,293	3,679	\$7,505,160	\$3,063	
TYPE OF INTERVENTION	N				N				N				
Treatment													
Therapeutic Communities	0	\$0	\$0	41	\$28,358	\$18	40	\$27,667	\$59	81	\$56,025	\$23	
Methadone Maintenance	0	\$0	\$0	3,004	\$748,507	\$464	3,684	\$917,942	\$1,958	6,688	\$1,666,449	\$680	
CJS Incarceration													
CRC	0	\$0	\$0	2,921	\$2,434,157	\$1,510	193	\$160,833	\$343	3,114	\$2,594,990	\$1,059	
Jail	93	\$62,000	\$168	2,712	\$1,808,009	\$1,121	371	\$247,335	\$528	3,176	\$2,117,344	\$864	
Prison	164	\$150,334	\$408	2,353	\$2,156,925	\$1,338	749	\$686,586	\$1,465	3,266	\$2,993,844	\$1,222	
CJS Supervision													
Probation with Testing	21	\$1,033	\$3	979	\$48,137	\$30	399	\$19,619	\$42	1,399	\$68,789	\$28	
Probation	180	\$4,199	\$11	882	\$20,577	\$13	268	\$6,252	\$13	1,330	\$31,029	\$13	
Parole with testing	39	\$6,500	\$18	774	\$129,003	\$80	299	\$49,834	\$106	1,112	\$185,337	\$76	
Parole	24	\$3,000	\$8	507	\$63,375	\$39	0	\$0	\$0	531	\$66,375	\$27	
OPS	0	\$0	\$0	3,054	\$509,010	\$316	1,513	\$252,172	\$538	4,567	\$761,182	\$311	
TOTAL	521	\$227,066	\$616	17,227	\$7,946,058	\$4,928	7,516	\$2,368,239	\$5,052	25,264	\$10,541,364	\$4,303	

* Non-incarcerated time

Table 7B. SOCIAL COSTS OF ARRESTS AND INTERVENTIONS BY TIME PERIOD BY RACE

Time Period	N=119			119			102			119		
	BEFORE pre FDU	Aggregate Total	Cost Per Subject	DURING FDU-LDU	Aggregate Total	Cost Per Subject	AFTER LDU-I	Aggregate Total	Cost Per Subject	TOTAL	Aggregate Total	Cost Per Subject
Mean No. of Months*	30			98			46			167		
Total Aggregate Months*	3,598	Cost		11,671	Cost		4,650	Cost		19,919	Cost	
Mean Years/Subject*	2.3		Per Year	10.1		Per Year	3.9		Per Year	15.3		Per Year
Total No. of Arrests	213	\$434,520	\$1,449	1,903	\$3,882,120	\$3,992	180	\$367,200	\$948	2,296	\$4,683,840	\$2,822
TYPE OF INTERVENTION	N			N			N			N		
Treatment												
Therapeutic Communities	0	\$0	\$0	82	\$56,717	\$58	72	\$49,800	\$129	154	\$106,517	\$64
Methadone Maintenance	26	\$6,478	\$22	1,876	\$467,443	\$481	2,653	\$661,048	\$1,706	4,555	\$1,134,969	\$684
CJS Incarceration												
CRC	86	\$71,666	\$239	2,058	\$1,714,993	\$1,763	193	\$160,833	\$415	2,337	\$1,947,492	\$1,173
Jail	47	\$31,333	\$105	1,497	\$998,005	\$1,026	330	\$220,001	\$568	1,874	\$1,249,340	\$753
Prison	143	\$131,084	\$437	1,503	\$1,377,755	\$1,417	532	\$487,668	\$1,258	2,178	\$1,996,507	\$1,203
CJS Supervision												
Probation with Testing	17	\$836	\$3	703	\$34,567	\$36	602	\$29,600	\$76	1,322	\$65,003	\$39
Probation	206	\$4,806	\$16	864	\$20,157	\$21	196	\$4,573	\$12	1,266	\$29,536	\$18
Parole with testing	24	\$4,000	\$13	651	\$108,502	\$112	142	\$23,667	\$61	817	\$136,169	\$82
Parole	46	\$5,750	\$19	139	\$17,375	\$18	15	\$1,875	\$5	200	\$25,000	\$15
OPS	84	\$14,000	\$47	1,946	\$324,340	\$333	935	\$155,836	\$402	2,965	\$494,177	\$298
TOTAL	679	\$269,954	\$900	11,319	\$5,119,854	\$5,264	5,670	\$1,794,902	\$4,632	17,668	\$7,184,710	\$4,328

* Non-incarcerated time

Table 8. SUMMARY: SOCIAL COSTS OVER THE ADDICTION CAREER

CHICANO

Time Period	BEFORE			DURING			AFTER			TOTAL		
	pre FDU			FDU-LDU			LDU-I					
Aggregate Months*	4,424	Per		19,350	Per		5,625	Per		29,399	Per	
	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year
Percent time addicted	0			67			0					
Crime Income		\$1,198,577	\$3,007		\$30,255,671	\$18,763		\$372,692	\$795		\$31,736,940	\$12,954
Arrests	308	\$628,320	\$1,704	3,074	\$6,270,960	\$3,889	297	\$605,880	\$1,293	3,679	\$7,505,160	\$3,063
Treatment	0	\$0	\$0	3,045	\$776,865	\$482	3,724	\$945,609	\$2,017	6,769	\$1,722,474	\$703
Incarceration	257	\$212,334	\$576	7,986	\$6,399,090	\$3,968	1,313	\$1,094,753	\$2,335	9,556	\$7,706,178	\$3,145
Supervision	264	\$14,732	\$40	6,196	\$770,102	\$478	2,479	\$327,877	\$699	8,939	\$1,112,712	\$454
Welfare		\$3,500	\$9		\$413,200	\$256		\$115,300	\$246		\$532,000	\$217
TOTAL		\$1,967,463	\$5,337		\$44,885,889	\$27,836		\$3,462,111	\$7,386		\$50,354,224	\$20,553

WHITE

Time Period	BEFORE			DURING			AFTER			TOTAL		
	pre FDU			FDU-LDU			LDU-I					
Aggregate Months*	3,598	Per		11,671	Per		4,650	Per		19,919	Per	
	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year	N	Aggregate Cost	Subject Per Year
Percent time addicted	0			61			0					
Crime Income		\$490,775	\$1,637		\$20,837,708	\$21,425		\$122,458	\$316		\$21,450,941	\$12,923
Arrests	213	\$434,520	\$1,449	1,903	\$3,882,120	\$3,992	180	\$367,200	\$948	2,296	\$4,683,840	\$2,822
Treatment	26	\$6,478	\$22	1,958	\$524,160	\$539	2,725	\$710,848	\$1,834	4,709	\$1,241,487	\$748
Incarceration	276	\$234,084	\$781	5,058	\$4,090,753	\$4,206	1,055	\$868,502	\$2,241	6,389	\$5,193,339	\$3,129
Supervision	377	\$29,392	\$98	4,303	\$504,941	\$519	1,890	\$215,552	\$556	6,570	\$749,884	\$452
Welfare		\$26,600	\$89		\$181,000	\$186		\$90,700	\$234		\$298,300	\$180
TOTAL		\$1,221,849	\$4,075		\$30,020,682	\$30,867		\$2,375,260	\$6,130		\$33,617,791	\$20,253

* Non-incarcerated time