The Effects of Partial Drug Testing on Drug-Use Behavior and Self-Disclosure Validity

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OVERVIEW

This study analyzed the effects of random, partial urine testing on drug-use behavior and self-disclosure validity in a high-risk, drug-abusing probation population. The purpose of the study was to find out if a change from complete to partial testing led probationers to use drugs more frequently or communicate less openly with their probation officers.

Many practitioners who deal with substance abusers believe urine testing has a deterrent effect on drug use. Several studies have also concluded that testing deters drug use. However, none of these studies were designed to permit researchers to separate deterrent effects due to urine collection from those due to testing and feedback. This study tested the widely held assumption that testing and feedback must always follow urine collection in order to deter drug use and enhance self-disclosure validity.

The study analyzed a group of high-risk probationers in St. Clair County, Illinois, during March and April of 1992. The probationers were participants in the St. Clair County Intensive Drug Abuser Program (IDAP). Important features of this program are close supervision, frequent drug testing, and an emphasis on drug-free lifestyles.

For purposes of this study, participants in the St. Clair IDAP were assigned to either a control group or an experimental group. During March 1992, all study participants provided urine specimens and all of the specimens collected were tested for drugs. Test results were officially recorded and reported back to probationers. During April, this same procedure was followed for members of the control group. Members of the experimental group were informed that their specimens had one chance in three of being tested.

The study found that testing a one-third random sample of collected specimens, rather than all collected specimens, did not lead to increased drug use or to a reduction in self-disclosure validity over a one-month period. The absence of statistically significant effects was also evident when other potential influences, such as the probationer's race, age, probation officer, or offense, were examined.

These findings suggest two different possibilities. The first is that specimen collection, testing, and feedback may not have deterrent effects. The second is that specimen collection without testing and feedback may still deter drug use. In either case, the conventional assumption that testing and feedback deter drug use is called into question.

An important secondary finding of the study is that probationers do not appear to view drug testing as a game of chance. Members of the experimental group overwhelmingly indicated that they believed all of their specimens would be officially tested, even though they were told repeatedly that the chance of testing was one in three. While over half the probationers indicated that testing influenced their decision to use drugs, those in the experimental group did not use drugs more frequently when the odds of official testing were reduced.

These findings are important for both the administration and practice of community supervision for two reasons. First, if drug testing strategies affect drug use and self-disclosure validity, the choice of a strategy will influence the overall effectiveness of an intervention program. Second, the choice of a drug-testing strategy directly affects program cost. From a policy perspective, this study suggests that it may be possible to redesign drug-testing strategies in Illinois so as to decrease costs without reducing effectiveness.

In 1991, Robert Martinez, director of the Office of National Drug Control Policy, suggested that the federal government should require use of up to 10 percent of its criminal justice block grants for developing and maintaining mandatory urine testing programs. For the State of Illinois, the required expenditure for urine testing programs would be $2 million, which is 20 times the current level. If this requirement is implemented, funding for some other initiatives will have to be cut back or eliminated.

According to a 1991 report by the Administrative Office of the Illinois Courts, the state's probation departments spend approximately $70,000 each year to conduct 40,000 urine tests. Another $20,000 is probably spent each year for tests performed by related segments of the Illinois criminal justice system. It may be possible to eliminate one-third or more of these expenditures each year by randomly testing only a portion of the specimens collected. Programs could continue collecting the same number of specimens as they do now, but switch from complete to partial testing and feedback. Another alternative would be for programs to continue performing the same number of tests, but collect specimens from a broader group of offenders.

BACKGROUND

Testing Criminal Populations for Drugs

Mandatory drug testing has been a prominent feature of many criminal justice programs for over a decade. Many programs have attempted to expand the scope and frequency of drug testing in response to statistics showing the prevalence of drug use among criminal populations. For example, a 1991 National Institute of Justice study found that at least 75 percent of arrestees and 50 percent of probationers test positive for illicit drugs.

Continued use of drugs while under court-mandated supervision (such as probation or pretrial release) is generally viewed as blatant disregard for the rule of the law as well as a potential threat to public safety. For these reasons, the court and its officers use drug testing to monitor drug use.

Many criminal justice agencies also use testing because of its potential deterrent effects. From an enforcement perspective, the logic is straightforward: Since drug use is illegal, people who know they will be tested for drugs are likely to refrain from usage in order to avoid further sanction.

Latessa (1991), Collins (1989), and Carver (1986) found evidence that some part of the urine testing process leads to a reduction in drug use. All three researchers attributed this effect to testing and feedback. However, none of their studies were designed to separate the effects of testing and feedback from those of providing a urine specimen. This is an important distinction. If testing and feedback deter drug use, then drug use must be detected and the results communicated to the offender. If the requirement to provide a urine specimen for potential testing produces the effect, then urine collection alone may produce a sufficient perception of vulnerability to deter continued drug use. In light of increasing costs, tighter budgets, and growing caseloads, a significant amount of time and expense could be saved or redirected by reducing the number of tests performed on collected specimens.

Extent of Substance Abuse

Estimates of the prevalence of substance abuse within probation populations vary. In 1990, the courts ordered 35 percent of Illinois probationers (felony, misdemeanor, and specialized caseloads) to participate in, or be evaluated for, drug or alcohol treatment.

A 1990 survey of probation officers by the Administrative Office of the Illinois Courts yielded a higher estimate of drug dependency. The probation officers estimated that 38 percent of probationers were in need of treatment for drug and/or alcohol abuse, and another 20 percent were in need of dependency evaluation. The probation officers may have observed more drug abuse than the sentencing judges as a result of their more extensive contact with individual offenders. However, researchers have found that even probation officers tend to underestimate the prevalence of drug abuse because they lack the time and training necessary to diagnose this disorder.

The Bureau of Justice Statistics (BJS) conducted a three-year study of probationers in the United States between 1986 and 1989. In a 1992 report on the study, the BJS reported that 53 percent of felony probationers had a substance abuse problem. Of these, the courts ordered only 58 percent to receive testing or treatment.

Because similar data have not been collected at the state level for the Illinois probation population, it may be useful to extrapolate from the national BJS findings. To do this, we must assume that Illinois courts order treatment for probationers with approximately the same degree of drug dependency as probationers ordered to receive treatment nationwide. Recall that the courts order 35 percent of Illinois probationers to receive testing or treatment. If treatment is imposed on 58 percent of those who have a substance abuse problem, it follows that approximately 60 percent of all felony probationers in Illinois (35 percent/58 percent) have a substance abuse problem.

This estimate seems reasonable in lieu of empirical data for Illinois. It is also consistent with the findings of the survey of probation officers cited earlier. Even if only half of Illinois probationers are substance abusers, this is still a large percentage of the probation population. In St. Clair County, which has an average felony probation caseload of over 1,100 cases, this implies that 550 probationers are likely to be substance abusers. The extent of substance abuse among probationers suggests that specific strategies should be developed to target drug-dependent offenders.

Drug Testing as a Monitoring Technique

The courts have provided administrators of community-based supervision programs with substantial legal authority to impose drug testing and to use testing as a means of

enforcing court orders. Research has shown that testing is an effective means of monitoring drug use. However, little empirical evidence is available regarding optimal testing frequency.

Most drugs are fully metabolized and excreted within 24 to 48 hours. Some, however, pass through the body more slowly or rapidly. Cannabis, for example, remains detectable for up to three weeks. In order to detect all drug use, it would probably be necessary to test probationers on a daily basis. However, daily testing would be prohibitively expensive and would require an excessive amount of staff and program time. Rather than attempting to detect all drug use, most programs simply try to detect persistent abusers, who are believed to present the greatest threat to the community.[1] Administrators argue that persistent abusers are unable to abstain long enough to avoid testing positive. Program administrators generally balance cost and detection certainty considerations when determining how frequently to test probationers.

Deterrent Effects of Drug Testing

Collins (1989) found evidence to support the hypothesis that testing, coupled with mandatory inpatient and outpatient treatment for those testing positive, reduces drug use by 77 percent in probationer and parolee populations after one year. Carver (1986) found that drug testing without treatment reduces both drug use and criminal behavior.

Latessa (1991) found strong evidence that positive urine tests from Ohio probationers declined "markedly" after one positive sample. He concluded that, while there were a number of possible explanations for the decline, the evidence was compelling that probationers were deterred from drug use by testing.

Link Between Substance Abuse and Criminal Behavior

Researchers differ as to whether continued drug use by offenders is a predictor of criminal behavior, and, therefore, represents a potential threat to the community. There is

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1. Community safety concerns are often linked to substance abuse. However, research by Gottfredson and others suggests that the connection between drug use and criminal behavior may not be as direct as was once believed. Drug abuse is far more prevalent in the general (non-criminal) population than once believed, and many people who abuse drugs never become involved in other types of criminal activity. Considering the high percentage of arrestees who test positive for drugs (about 75 percent of all felony arrestees in Chicago), it is tempting to conclude that substance abuse leads to other types of criminal behavior. However, while criminals often are drug abusers, those who use drugs do not necessarily present a greater threat to community safety than those who do not.

some evidence indicating that drug use and criminal behavior are not related. Britt, Gottfredson, and Goldkamp (1992) examined pretrial misconduct in Pima and Maricopa County, Arizona, and found that the drug tested group had a slight reduction in pretrial rearrest, but no difference in failure to appear in Pima County. In Maricopa County, there were no differences in pretrial misconduct in the first sample, but the tested group had the higher rate of pretrial misconduct in the second sample. Goldkamp, Gottfredson, and Weiland (1990) found that positive urinalysis outcomes did not predict failure to appear in court in Dade County, Florida.

On the other hand, a study of Manhattan offenders by Smith, Wish, and Jarjoura (1989) found that positive test outcomes were a useful predictor of both failure to appear in court and of rearrest. In a Washington, D.C. study, Toborg, Yezer, and Bellassai (1987) initially concluded that testing was not a predictor of misconduct. However, the researchers reversed their conclusion when they later refined the study to control for the rate at which individuals appeared for testing. Visher (1988) agreed that positive test outcomes are positively correlated with criminal misconduct.

Deterrent Effects of Test Feedback

Some research to date has suggested that drug testing and feedback deter drug use. This is consistent with the reasoning that probationers whose drug use is detected will curtail their usage when positive test results are reported back to them and they are threatened with further sanctions. According to this reasoning, without feedback, probationers who are using drugs will believe they have avoided detection, and may increase their usage.

Prior to the present study, researchers had not attempted to separate any deterrent effects of testing and feedback from those of specimen collection. However, the present study found that probationer drug use was the same when specimen collection was followed by either complete or partial testing and feedback. This would seem to indicate that providing a urine specimen creates a sufficient feeling of vulnerability to affect drug-use behavior.

Self-Disclosed Information

A primary objective of self-disclosure reporting is to obtain information useful for measuring one or more aspects of a particular phenomenon. To satisfy this objective, self-disclosed information must be internally consistent (reliable) and accurate (valid).

Most research on self-disclosure reporting has found it to be an inexpensive and relatively easy means of gathering data that might not otherwise be available. In general, this research has shown that self-disclosed information and independent, objective data are relatively consistent.

Research on the validity of self-reported drug-use data compared addicts' reported drug use, arrest records, and demographic data to objective data from a variety of sources, such as hospitals, law enforcement agencies, urinalysis, and reports of significant others (Ball 1967, Cottrell and O'Donnell 1967, Robbins and Murphy 1967, Stephans 1972, Amsel et al. 1976, Maddux and Desmond 1975, Bonito et al. 1976).

Ball, for example, used structured interviews to gather data from 59 narcotic addicts, and then compared this information to data from hospitals, the FBI, and urine tests conducted immediately after the interviews. The goal was to determine the extent to which people engaged in illegal behavior conceal or deny the behavior (Ball 1967, 650). Ball found that the addicts' self-disclosed information was extremely accurate.

Other researchers have found that the accuracy of self-disclosed information varies depending on the social desirability of the behavior being reported. Cahalan (1968) found that disclosure distortion varied by age, race, sex, and socioeconomic status. Women were less likely than men to exaggerate their voting record, Community Chest contributions, and possession of a driver's license. Younger respondents were more likely than older respondents to over-report socially desirable behavior. Contributions were more likely to be over-reported by people with lesser means.

In contrast, Collins et al. (1982) found that people generally attempt to accurately report information on their criminal histories, regardless of their personal situations and beliefs. The researchers also found that when criminal histories were reported inaccurately, the inaccuracies were correlated with factors such as the length of the recall period, type of criminal activity, and the data collection methodology.

Harrell (1985) and Nurco (1985) encourage the use of self-disclosed data in studies of criminal activity and illicit drug use. They identify the following six strategies for improving the validity of self-disclosed information:

1. Assure confidentiality.

2. Develop rapport with interviewees by ensuring that interviewers are empathetic and skillful, and by actively involving subjects in the task by appealing to their sense of altruism or by presenting general study objectives.

3. Check records as a means of concurrent verification of information provided by subjects.

4. Perform urine testing as another concurrent check.

5. Concentrate on recent events, when possible.

6. Use general questions.

Views of Probation Officers

At the conclusion of the study period, but before the results of the study were announced, the principal investigator interviewed the IDAP probation officers to find out their views on partial testing. All four believed the study would find that the reduction in testing had lead to an increase in illicit drug use. The officers thought probationers in the experimental group would have been inclined to "play the odds." Given a reduced risk of detection, the officers felt certain that the probationers increased their drug use.

The probation officers believed that testing and feedback, rather than specimen collection, produced the most significant deterrent effects. All of the officers said that not being able to provide feedback to probationers on test results seriously interfered with their ability to help the probationers make progress towards a drug-free lifestyle. Three of the four officers said that lack of test feedback encouraged probationers to use drugs.

One of the four officers was not certain if drug testing and self-disclosure validity were connected. The other three said they believed partial testing led to a reduction in the validity of self-disclosed information.

The officers were asked if partial testing should be permanently implemented if it did not produce a statistically significant increase in drug use. Two of the officers said the study

would not result in those findings; they were certain that the experimental group would have used drugs more frequently than the control group.

The officers were asked what changes they would make if they had the opportunity to redesign the drug-testing program. Three of the officers suggested changes that would result in a substantial reduction in urine testing. However, none of the officers suggested random partial testing as an alternative.

ST. CLAIR COUNTY IDAP

Description

The St. Clair County Intensive Drug Abuser Program (IDAP) is one of several intensive supervision programs in Illinois. These programs serve as an alternative to incarceration for many offenders who would otherwise be imprisoned. A detailed evaluation of the St. Clair Intensive Drug Abuser Program is provided in Appendix A of this report.

Intensive supervision offers several benefits to offenders and the community. First, it is far more cost-effective than incarceration. In Illinois, incarcerating an offender costs 4.5 times as much as intensive supervision. Second, with intensive monitoring, community safety need not be compromised. Third, participants often can function as productive members of the community. Clearly, this would be difficult or impossible if those offenders were incarcerated.

Intensive supervision programs are generally designed for non-violent offenders. Probation officers assigned to these programs tend to carry relatively small caseloads of 50 or fewer probationers. Regular probation caseloads generally consist of 125 or more probationers.

Virtually all probationers assigned to the St. Clair County IDAP have been diagnosed as requiring inpatient treatment for substance abuse. However, the average wait for inpatient treatment in St. Clair County is seven months. For these probationers, IDAP functions as an immediate alternative to regular probation and potential future inpatient treatment. The program targets offenders with serious substance abuse problems and monitors them more carefully than the general probation population.

Three probation officers and one supervisor are assigned to the St. Clair County intensive drug abuser program. The supervisor manages program operation and is responsible for urine testing. The three officers are permitted to carry caseloads of 35 to 50 probationers, so the maximum capacity of the program is 150 participants. IDAP is the largest intensive supervision program for drug abusers in Illinois.

The probation department determines which offenders are eligible for IDAP and makes acceptance recommendations to the court. Program eligibility is based on the offender's criminal and drug use history and information obtained during interviews with the

offender and his or her spouse or living partner. Offenders whom the court approves for IDAP participation generally are assigned consecutively to the three IDAP probation officers. However, two or more probationers are sometimes consecutively assigned to the same probation officer to maintain workload parity when an officer's caseload has declined due to attrition.

IDAP places a strong emphasis on drug testing. Tests are performed on a fixed schedule and are relatively frequent, especially during the early stages of the program. IDAP is a three-phase, nine-month program, with each phase lasting for three months. During Phase I, probationers are required to provide a urine specimen each week. Probationers who exhibit compliance and have negative drug test outcomes in Phase I progress to Phase II. During Phase II, urine specimens are collected every other week. Probationers who progress to Phase III generally are only required to provide specimens once a month.

Rearrest Rates

The rearrest rate is nearly four times higher for IDAP participants than for regular probationers. For IDAP probationers, the monthly arrest rate is 2.6 percent. This is significantly higher than the regular probation arrest rate of 0.7 percent per month, but lower than the intensive probation supervision (IPS) arrest rate of 3 percent. Ironically, the positive urinalysis outcome rate is highest for regular probationers.

Cost-Effectiveness

Assessing the cost-effectiveness of community supervision programs is a somewhat counter-intuitive process, because the more expensive programs tend to have higher rearrest rates. Offenders who pose a greater risk to community safety require higher levels of supervision, resulting in higher program costs.

If cost-effectiveness is defined as an efficient investment in community safety, it appears that the intensive drug supervision program is an effective community release strategy. Using the costs associated with regular probation and intensive probation supervision (IPS) as benchmarks, the actual annual cost per offender year for IDAP is well below what would be expected for a program targeting offenders who pose a significant risk to community safety.

One way to compare various supervision alternatives is to evaluate their cost-effectiveness from the standpoint of community risk. To do this, the annual rearrest rate for each category of offenders can serve as a measure of the risk they pose to community safety. The cost of supervising regular probationers is $500 per offender year, and their rearrest rate is 8.4 percent. At the opposite end of the community supervision spectrum, the cost of supervising IPS probationers is $3,800 per offender year, and the rearrest rate is 36 percent. IDAP probationers fall near the upper end of the community risk continuum, with a rearrest rate of 31.2 percent. Yet IDAP is also a relatively inexpensive alternative to IPS, costing about $1,500 per offender year. Using a linear model in which every 8.4 percentage point increase in risk to community safety would cost $500, IDAP would be expected to cost $1,857 per offender year. The program's actual cost of $1,500 is well below that figure.

Another approach is to consider the cost of ensuring community safety using an exponential growth model, where expected costs increase faster than growth in relative community risk. In many ways, this is a more realistic model, especially since both incarceration and IPS cost far more than regular probation from a relative risk standpoint. (Incarceration costs approximately $16,000 per offender year and the rearrest rate is 40 percent.) Using an exponential growth model, IDAP would be expected to cost about $3,000 per offender year, given its 31.2 percent rearrest rate. Yet IDAP actually costs half that much, at $1,500 per offender year. This is another indication that IDAP is cost-effective.

While it seems unreasonable to suggest that IDAP officers could carry standard caseloads of 125 probationers, it might be possible to restructure supervision requirements so that they could oversee 75 probationers. However, if caseloads are increased, it will be necessary to closely monitor recidivism so that any unfavorable trends can be quickly detected.

Overall Evaluation

Because at least half of all probationers are probably substance abusers, programs such as IDAP appear essential. The St. Clair County IDAP seems to be cost-effective and also has a lower rearrest rate than intensive probation supervision. In the future,

policymakers and administrators may wish to expand the size of the program to assist more offenders. At the same time, it may be possible to reduce the program's per capita costs by refining drug testing schedules and, possibly, increasing caseloads.

STUDY DESIGN AND METHODOLOGY

Overview

All of the active probationers in the St. Clair County Intensive Drug Abuser Program (IDAP) throughout March and April 1992 were included in this study. To examine the effects of specimen collection on drug-use behavior, specimens were collected at the same rate from members of an experimental group and a control group. Only one-third of the experimental group's test results were officially recorded and reported back to them. All of the control group's test results were recorded and reported.

For purposes of the study, all of the specimens were tested. The study used a double-blind random procedure to select one-third of the experimental (or "treatment") group's test results for recording in the official files. Neither the probation officer who collected the urine specimens nor the supervisor who tested them was able to influence the selection process. Test results not selected for official recording were never made available to the probation officer nor to other department personnel for any purpose. These results remained confidential and were used solely by the principal investigator to determine drug-use patterns and verify self-disclosure data.

Study participants were carefully and repeatedly informed of the odds that their specimens would be officially tested for illicit drugs. On-site urine testing by fluorescence polarization immunoassay (FPIA) used Abbott ADx technology to screen for the presence of three types of illicit drugs and derivatives: cocaine, cannabis, and opiates.

Participants completed a self-disclosure survey each time they provided a urine specimen. In addition, participants were interviewed at the conclusion of the study regarding their perceptions of the relationships among drug testing, drug use and self-disclosure.

The study included 63 probationers, who participated throughout the entire two-month study period.

Hypotheses and Supplementary Questions

The study tested two hypotheses:

1. Given that urine specimens are collected from probationers for possible testing, illicit drug use will increase as the probability of actually testing those specimens declines and probationers are informed that there is a reduced chance that specimens will be tested.

2. Self-disclosure validity will decline when probationers are informed that there is a reduced chance that urine specimens will be tested.

The study also examined the following related questions:

1. Are positive urinalysis outcome rates influenced by the probationer's race, sex, age, or type of offense?

2. Are positive urinalysis outcome rates influenced by the probation officer to whom the probationer is assigned?

3. Are self-disclosure outcomes influenced by the probationer's race, sex, age, and type of offense?

4. Are self-disclosure outcomes influenced by the probation officer to whom the probationer is assigned?

5. Did probation officers carry an expectation that drug testing affects drug-use behavior and self-disclosure validity?

The primary hypothesis was constructed to test the conventional assumption that drug testing deters drug-use behavior. If the hypothesis was supported, the experimental ("treatment") group should have had a higher incidence of drug use, since there was only one chance in three that each of their specimens would be officially tested. The secondary hypothesis was constructed to test the conventional assumption that drug testing influences self-disclosure validity. If the hypothesis was supported, the experimental group should have had a lower self-disclosure validity rate.

Control and Treatment Groups

As noted earlier, all of the probationers in the St. Clair County intensive drug abuser program (IDAP) during March and April 1992 were included in the study. As of late February 1992, over 120 active and inactive probationers were assigned to IDAP.

All inactive probationers (those with outstanding arrest warrants and those in residential treatment) and those who left the program before May 1992 were excluded from the study.

For purposes of the study, probationers were stratified by probation officer and IDAP phase and then randomly assigned to the control or treatment group (see figures 1 and 2). This stratification was necessary to control for effects of individual probation officers and the fact that drug-testing frequency decreased during successive phases of the program. The control and treatment groups were nearly identical on every dimension: race, sex, offense severity, and age.

The caseload was dynamic throughout the study. Seven probationers entered the program in March and six left. In April, nine entered and seven left. Probationers newly assigned to the program after March 1st and prior to April 1st were randomly assigned to either the control or treatment group. Probationers who entered IDAP after April 1st were not included in the study, because it was no longer possible to acquire baseline (March) data for them for comparison purposes. A total of 63 probationers were active IDAP participants during both months. Only these 63 probationers were included in the study.

Figure 1. Stratification of Study Participants

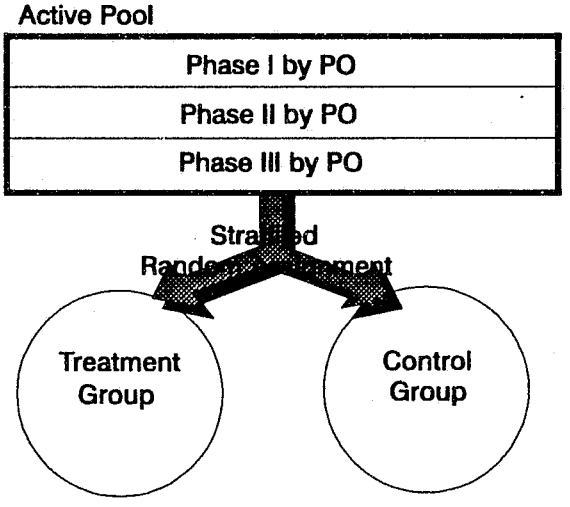

Figure 2. Caseload Distribution by Group, Probation Officer, and Phase

	Phase I		Phase II		Phase III	
	#	%	#	%	#	%
Probation Officer 1						
Group						
Control	1	5.0	2	10.0	8	40.0
Treatment	2	10.0	1	5.0	6	30.0
Total	3	15.0	3	15.0	14	70.0
Probation Officer 2						
Group						
Control	3	15.0	2	10.0	5	25.0
Treatment	4	20.0	2	10.0	4	20.0
Total	7	35.0	4	20.0	9	45.0
Probation Officer 3						
Group						
Control	2	8.7	3	13.0	6	26.1
Treatment	3	13.0	2	8.7	7	30.4
Total	5	21.7	5	21.7	13	56.5
Total						
Group						
Control	6	9.5	7	11.1	19	30.1
Treatment	9	14.3	5	7.9	17	27.0
Total	15	23.8	12	19.0	36	57.1

During March, all urine specimens were officially tested and all results were reported back to probationers. During April, specimens provided by members of the treatment group had a 33.3 percent chance of being officially tested, recorded, and reported. Members of the control group continued to have all of their test results recorded and reported. All study participants were repeatedly informed of the odds that their specimens would be officially tested. (Participants were not told that specimens were being unofficially tested for the purposes of the study, since this had no bearing on their official records.) Participants

reported having fully understood the odds that their specimens would be officially tested. However, a significant percentage of treatment group members did not believe the stated odds.

Characteristics of Study Participants

Of the 63 probationers who participated in the study, 32 were assigned to the control group, while 31 were assigned to the treatment group. Only two races were represented in the study, black and white. The control and treatment groups were similar in terms of sex and race (see Figure 3). There was no statistically significant relationship between race and group assignment.

Figure 3. Participant Characteristics: Sex, Race by Group Assignment

Group	Sex				Race			
	Male		Female		Black		White	
	#	%	#	%	#	%	#	%
Control	27	84.4	5	15.6	23	71.9	9	28.1
Treatment	28	90.3	3	9.7	25	80.6	6	19.4
Total	55	87.3	8	12.7	48	76.2	15	23.8

Most of the study participants were men (87.3 percent). Over the course of the study, women accounted for 15.6 percent of the control group and 9.7 percent of the treatment group. The difference in the percentage of women in the two groups was not statistically significant.

Study participants ranged in age from 19.1 to 47.4 years. The average age was 29.7 years. The majority (52.4 percent) were between 25 and 34 years of age, inclusive. Those under 25 accounted for 27 percent of the group, while 20.6 percent were over the age of 34. The age range of control group members was 19.1 to 47.4 years. Treatment group members ranged in age from 19.6 to 42.6 years. There was no statistically significant difference in age between the two groups.

Study participants were sentenced to probation for three categories of offenses: violent, property, and drug-related. Not surprisingly, a majority (39, or 61.9 percent) of the IDAP study participants had been convicted of drug-related crimes. Ten, or 15.9 percent, had been convicted of violent crimes; the most serious of these was a reckless homicide. The balance (14, or 22.2 percent) of the study participants were property offenders. There was no statistically significant relationship between offense type and group assignment. Overall, the typical study participant was a 30-year-old black male sentenced to the intensive drug abuser program for possession or distribution of a controlled substance.

Specimen Collection Frequency

Nearly half (46.1 percent) of the 63 probationers provided urine specimens once or twice in March (the baseline month) and 50.8 percent provided specimens once or twice in April (the follow-up month), as shown in Figure 4. A relatively high proportion of probationers were expected to provide only one or two urine specimens each month, because 76 percent of the probationers who completed the study were assigned to Phase II or III of the program. During these phases, a test was usually required every two to three weeks.

Figure 4. Participant Drug-Testing Frequency by Month

Number of Times Tested	March 1992 (Baseline)		April 1992 (Follow-up)	
	Number of Probationers	Percent of Probationers	Number of Probationers	Percent of Probationers
1	18	28.6	17	27.0
2	11	17.5	15	23.8
3	15	23.8	13	20.6
4	11	17.5	15	23.8
5	8	12.7	3	4.8
Total	63	100.0	63	100.0

However, factors other than phase assignment affected how frequently tests were performed. Probation officers required many Phase III probationers to provide weekly specimens. In addition, probationers occasionally missed their appointments or rescheduled them to avoid legitimate conflicts.

Urine testing frequency was relatively similar for both the control and treatment groups (see Figure 5). There were no statistically significant differences in testing frequency between the two groups, although 16 control group members were tested 4 times in April, compared to only 9 members of the treatment group.

Figure 5. Participant Drug-Testing Frequency by Group Assignment

Number of Times Tested	Control				Treatment			
	March		April		March		April	
	#	%	#	%	#	%	#	%
1	8	25.0	7	21.9	10	32.3	10	32.3
2	5	15.6	9	28.1	6	19.4	6	19.4
3	8	25.0	8	25.0	7	22.6	5	22.6
4	6	18.8	16	18.8	5	16.1	9	29.0
5	5	15.6	2	6.3	3	9.7	1	3.2
Total	32	100.0	32	100.0	31	100.0	31	100.0

Tests Performed

During the two-month study, a total of 330 urine specimens were collected and tested for the presence of three types of drugs. The supervising probation officer used fluorescence polarization immunoassay (FPIA) technology to perform the tests. Each specimen was tested for cocaine (in any form), cannabis, and opiates (such as heroin). In March, 169 specimens were tested: 91 from the control group and 78 from the treatment group. In April, 161 specimens were tested: 83 from the control group and 78 from the treatment group.

Disputed Results

In 20 instances, probationers claimed that the drug test produced a false positive. These probationers signed waivers indicating they had not used the drugs detected in their specimens. While false positives can occur, they are statistically rare. The St. Clair County Probation Department performs on-site testing using Abbott ADx fluorescence polarization immunoassay (FPIA) technology. Confirming positive outcomes with a more sensitive test, such as gas chromatography/mass spectrometry (GC/MS), is normally considered to be prohibitively expensive.

The St. Clair County Probation Department places the burden of proof on the probationer who wishes to challenge a test outcome. The probationer can have a positive outcome nullified in one of two ways. One approach is for the probationer to obtain a signed statement from a licensed physician indicating that a prescribed medication or over-the-counter drug may have produced the positive outcome. If the medication is known to be capable of producing a positive outcome, the test result is nullified. The probationer may also submit the specimen in question to an independent lab for GC/MS analysis. Unless the lab finds that the original test outcome was incorrect, the probationer must pay the laboratory's testing fee.

During the study, none of the probationers who claimed to have received a false positive attempted to disprove the test results. In the four years that the St. Clair County Probation Department has used ADx technology, no test outcomes have been reversed by GC/MS testing. However, to re-validate the ADx procedure, the probation department submitted 23 challenged specimens to an independent lab for GC/MS testing at the end of April 1992. A significant number of these specimens were from the study participants. The lab determined that all of the positive outcomes were valid. While not all of the outcomes challenged by study participants were retested using GC/MS, the data presented in this study assume that all ADx outcomes were valid.

Self-Disclosure Surveys

Study participants completed a self-disclosure survey each time they provided a urine specimen. The surveys were self-administered in the reception area of the probation office. A staff member was available to answer any questions. Study participants were required to

complete the survey in its entirety before meeting with the probation officer and were not permitted to change their responses once the meeting with the officer began. The form contained 10 questions, three of which asked for information about specific types of drugs used, including alcohol. If a participant acknowledged using a drug, the survey asked the person to indicate if he or she had used the drug once, or more than once. The survey focused on the illicit drugs in most frequent use in Illinois at the time and those routinely included in federal Drug Use Forecasting studies.

Copies of the formal data collection instrument developed for self-disclosure reporting are included in Appendices B and C. The survey instrument was carefully reviewed by probation department staff and pretested prior to implementation. Five forms (one for each potential face-to-face meeting) were preprinted for each probationer each month. The forms were color-coded to distinguish between control and treatment group participants.

The survey asked the probationer to fill in the current date and estimate the number of weeks that had elapsed since the last specimen was provided. These questions were intended to help orient the probationer prior to answering drug-use questions.

The questions of greatest substantive interest were numbers 3, 4, and 5. Question 3 asked which types of drugs the probationer had used, if any, since the previous visit. Question 4 asked for information about the types of drugs family and friends had used in the probationer's presence since the last visit. Question 5 asked if the probationer had any reason to believe that the specimen he or she was about to provide would test positive for any of the drugs of interest. (The latter was used to test self-disclosure validity.) Questions 3 through 5, modeled after Drug Use Forecasting self-disclosure surveys, required the probationer to specify "yes" or "no" regarding use of 13 types of drugs.

Five additional questions solicited the probationer's perceptions regarding his or her need for substance abuse treatment, prior positive outcomes, the legal consequences of continued drug use, whether or not he or she believed the previous specimen tested positive, and whether or not all survey questions had been answered correctly.

Structured follow-up interviews focused on probationer and probation officer perceptions of drug testing and self-disclosure. Copies of the interview questions are included in Appendices D, E, and F.

Role of Probation Officers

The principal investigator thoroughly trained the IDAP probation officers and program supervisor in experimental procedures before the study began. Frequent meetings between the principal investigator and the program officials throughout the two-month period helped ensure that the study was correctly implemented at each stage. Probation officers had an extremely important role. They were responsible for providing probationers with the required instructions, collecting and correctly labeling urine specimens, and reviewing self-disclosure surveys for completeness. All urine specimens and self-disclosure information were collected at the probation facility in Belleville at meetings between the probationer and the probation officer. The following procedure was used throughout the study:

1. Upon arriving in the probation department's reception area, the probationer completed the self-disclosure survey before meeting with his or her probation officer. The first page of the self-disclosure survey included a personalized notice to the probationer of the odds that his or her urine specimen would be officially tested.

2. After completing the self-disclosure survey, the probationer met with the probation officer to discuss all routine topics, including drug use, employment, education, treatment, family, and anything else considered important by either person.

3. If the probationer's last urine specimen was officially tested and recorded, the probation officer advised the probationer of the test results. If the probationer was assigned to the treatment group and his or her last specimen was not officially tested, the probationer was advised that the specimen had not been selected for testing and no test results would be recorded in the official file.

4. If the probationer's specimen was officially tested and the test results were positive for any drugs, the probation officer asked the probationer if he or she had used those drugs. If the probationer denied using the drugs, he or she signed a waiver, which the probation officer then placed in the official file.

5. The probation officer collected the urine specimen and completed the necessary chain of custody forms. The officer also attached a preprinted, color-coded label to the specimen container. These labels were stored in the probationer's file and were used to correctly identify each specimen and distinguish between specimens provided by members of the treatment or control groups.

6. Before concluding the meeting, the probation officer and the probationer signed the self-disclosure survey form.

7. The probation officer set the next appointment date and time, and the meeting was concluded.

EFFECTS ON DRUG USE

Test Results

There was no statistically significant difference between March and April in the number of probationers who tested positive within either group. In addition, there was no statistically significant difference in the number of positive tests between the two groups in either month. These findings imply that partial testing did not lead to an increase in drug use among members of the treatment group.

Aggregate test outcomes were developed for each of the 63 study participants by totaling each probationer's positive (=1) and negative (=0) test outcomes. Since a probationer who was tested twice (for example, once in March and once in April) was undersampled compared to a participant who was tested 10 times (for example, five times in March and five times in April), aggregate outcomes were weighted to produce comparable outcome scores. Figure 6 presents a statistical analysis of the weighted test outcomes of the control and treatment groups.

Figure 6. Weighted Test Outcomes by Group

	Group	N	Mean	Standard Deviation	t	Statistically Significant?
Positive Urine Specimen Test Outcomes	Control	32	.10	.13	0.14	no
	Treatment	31	.10	.17		

Study participants who abused drugs in March continued to abuse drugs in April. The overall average positive outcome rate for the two groups combined was 12 percent. Examining group outcomes for the combined two-month period, there were 57 positive outcomes for the control group out of 522 individual tests in March and April, producing a positive outcome rate of 10.9 percent. There were 62 positive outcomes out of 468 tests in March and April for the treatment group, producing a positive outcome rate of 13.2 percent. Nearly all of the difference in positive outcomes between the treatment and control groups occurred

during March, before partial testing was implemented. In addition, the larger number of positive outcomes within the treatment group was primarily due to a single "outlier." One member of the treatment group tested positive for all three types of drugs on three occasions and for two drugs on a fourth test date, for a total of 11 positive outcomes. The difference in positive outcome rates between the control and treatment groups was not statistically significant.

A large number of study participants (26) tested negative for all three types of drugs throughout the two-month study period (see Positive Outcomes = 0 on Figure 7). The negative outcome rate for treatment group participants was 55 percent in March and 61 percent in April. The negative outcome rate for the control group was 56 percent in March and 50 percent in April. There was no statistically significant difference in the number of control group participants who tested positive in March versus April.

Figure 7. Positive Drug Test Outcomes by Group and Month

Positive Outcomes	Control				Treatment			
	March		April		March		April	
	#	%	#	%	#	%	#	%
0	18	56.3	16	50.0	17	54.8	19	61.3
1	6	18.8	8	25.0	7	22.6	7	22.6
2	2	6.3	5	15.6	2	6.5	-	-
3	5	15.6	2	6.3	3	9.7	-	-
4	1	3.1	1	3.1	1	3.2	5	16.1
11	-	-	-	-	1	3.2	-	-
Total	32	100.0	32	100.0	31	100.0	31	100.0

A total of 330 specimens were tested for the presence of cocaine, cannabis, and opiates during the two-month study period. Each of the 330 specimens was tested three times (once for each type of drug), so a total of 990 separate drug tests were performed.

The most frequently detected drug was cocaine (see Figure 8). Of the 330 specimens, 86 (26.1 percent) tested positive for cocaine. By comparison, 26 specimens (7.9 percent)

tested positive for cannabis, and 7 (2.1 percent) tested positive for opiates. There were no statistically significant differences between the control and treatment groups' use of any of the drugs detected.

Figure 8. Drugs Detected by Group and Month

Drug	Control				Treatment			
	March		April		March		April	
	#	%	#	%	#	%	#	%
Cocaine	27	29.7	20	24.1	20	25.6	19	24.4
Cannabis	2	2.2	8	9.6	11	14.1	5	6.4
Opiates	-	-	-	-	4	5.1	3	3.8
Number of Specimens Tested	91		83		78		78	

To evaluate the effects of repeated exposure to partial testing, the drug-use behavior of treatment group members was analyzed. Sixteen probationers who had been exposed to partial testing once or twice were compared to 15 probationers who had been exposed to partial testing more than twice. There were no statistically significant differences in drug test outcomes between the two groups (see Figure 9).

Figure 9. Effects of Repeated Exposure to Partial Testing

	# of Tests	N	Mean	Standard Deviation	t	Statistically Significant?
Positive Urine Specimen Test Outcomes	1,2	16	.07	.18	-.90	no
	3,4,5	15	.13	.15		

Self-Reported Effects

While overall drug-use patterns remained constant for both the treatment and control groups during the study period, probationers reported a variety of reactions to drug testing.

Only half the probationers in a subsample of 39 study participants said that the requirement to submit to drug testing influenced their drug-use behavior (see Figure 10). If these probationers' stated beliefs coincided with their actual behavior, then half were *not* influenced by the testing requirement.

An even larger percentage of the probationers in the subsample indicated that knowing they definitely would be tested did not affect their drug-use behavior. Sixty-eight percent of the control group and 62 percent of the treatment group respondents said that knowing ahead of time that a specimen would be tested would not affect their drug use.

Of 18 probationers who indicated drug testing does not influence their decision to use drugs, 17 also indicated that advance knowledge of test certainty does not influence their decision to use drugs. Of 20 probationers who indicated drug testing *does* influence their decision to use drugs, 60 percent indicated that advance knowledge of test certainty also would influence their decision to use drugs. There was no statistically significant difference between responses of control versus treatment group members to these questions.

Study participants who tested positive for drug use at least once were more likely than those who had never tested positive to report that drug testing and advance knowledge of test certainty both influence their decision to use drugs. Those who had never tested positive for drug use did not respond consistently to these two questions.

Figure 10. Self-Reported Effects of Testing on Drug-Use Behavior

Question	Group	N	Mean*	Standard Deviation	t	Statistically Significant?
Does testing in general influence your drug-use decisions?	Control	25	.52	.51	0.12	no
	Treatment	14	.50	.52		
Does advance test knowledge influence your drug-use decisions?	Control	25	.32	.48	-0.39	no
	Treatment	13	.38	.51		

* 0 = no, 1 = yes

Effects of Race, Age, and Offense

Race, age, offense, and probation officer assignment did not have a statistically significant effect on drug use or self-disclosure validity. Gender was dropped as a factor within the analysis because there were not enough female participants in the study to derive meaningful results.

The finding that race, age, offense, and probation officer assignment do not produce significant differences in drug-test outcomes or in self-disclosure validity indicates that the study's findings can be generalized across drug-abusing probation subgroups.

Effects of Earlier Study

Several participants in this study were included in an earlier, similar study. Potentially, some intervention carry-over could have occurred. Between November 1st, 1991, and January 31st, 1992, a less rigorous version of the partial-testing experiment was conducted. Unlike the present study, all treatment group participants were assigned to the same probation officer. The study was abandoned after three months for the following reasons:

1. Probationers were not being randomly assigned to the treatment and control groups.
2. Systematic, geographic assignment bias appeared to be occurring.
3. Assignment bias made outcome interpretation difficult.
4. There was no simple way to control for the influence of the probation officer.

Once the initial study was terminated, a month was allowed to elapse (February 1992) to give probationers a chance to reacclimate to having all collected specimens tested for drugs. Some of the probationers from the first study continued as active IDAP participants the following month. Twenty of those probationers were included in the present study; half were assigned to the treatment group and half were assigned to the control group.

There is no evidence that intervention carry-over occurred. All of the probationers who participated in the first study were assigned to the same probation officer. They did not change to different probation officers during the second study. Any carry-over should have

been detected as a higher order interaction between the probation officer and the treatment (partial testing), but there were no effects of this type.

EFFECTS ON VALIDITY OF SELF-DISCLOSED INFORMATION

Study participants completed self-disclosure surveys each time they provided a urine specimen. The drug they most frequently reported using was alcohol (see Figure 11). None of the probationers who participated in this study had been court-ordered to restrict alcohol use.

Figure 11. Self-Disclosed Responses to Drug-Use Questions

	Have you used this drug since your last drop?		Have significant others used this drug since your last drop?		Do you expect today's specimen to be positive for this drug?	
	# Yes	%*	# Yes	%*	# Yes	%*
Alcohol	109	33.0	122	37.0	75	22.7
Barbiturates	1	0.3	-	-	-	-
Black Tar Heroin	1	0.3	1	0.3	1	0.3
Cocaine	16	4.8	12	3.6	15	4.5
Crack	8	2.4	17	5.2	7	2.1
Opiates	-	-	-	-	-	-
LSD	-	-	1	0.3	-	-
Marijuana	16	4.8	20	6.1	14	4.2
PCP	-	-	-	-	-	-
Quaaludes	-	-	-	-	-	-
Speed	1	0.3	1	0.3	-	-
Street Methadone	-	-	-	-	-	-
Tranquilizer	-	-	-	-	1	0.3
Other	4	1.2	-	-	3	0.9

* Percentage of 330 self-disclosure surveys in which probationers answered "yes" regarding use of this drug.

One-third of the surveys reported alcohol use since the previous visit. A larger percentage (37 percent) indicated that friends or family had used alcohol in the probationer's

presence since the last visit. Twenty-three percent of the 330 responses indicated the probationer expected to test positive for alcohol. This suggests fairly recent alcohol use, possibly just before visiting the probation office.

Five of the drugs listed on the survey would have been detected by the drug tests if they were present in probationers' specimens. Black tar heroin would have been detected as an opiate, while crack would have been detected by the cocaine test. Tests were not performed for alcohol.

In over half (56.4 percent) of the survey responses, participants indicated they needed drug treatment. More than one-third (39 percent) believed they would go to jail if they tested positive. All but three (0.9 percent) indicated they had accurately responded to all of the questions.

Consistency with Test Results

Self-disclosure reporting was consistent with drug test outcomes at least once in March and once in April for each study participant. That is, no probationer's self-disclosed information was completely inconsistent with all test outcomes. This is probably because none of the study participants consistently tested positive for all three types of drugs. For each probationer, three tests were performed on a maximum of five specimens per month. The maximum number of valid responses any probationer could have provided was 15 per month.

There were no statistically significant differences in self-disclosure validity between the control and treatment groups. The mean valid self-disclosure rate declined slightly for both groups during April, indicating that there was a slight decline in truthfulness. Overall, the control group provided valid information about drug use 91.9 percent of the time in March and 90.6 percent of the time in April. The valid self-disclosure rate for the treatment group was slightly lower, at 89.9 percent in March and 89.8 percent in April. The difference between March and April self-disclosure scores was not statistically significant when examined by group. This finding suggests that specimen testing and feedback are not essential to self-disclosure validity. Figure 12 presents a statistical analysis of weighted self-disclosure validity outcomes for the control and treatment groups during April.

Figure 12. Self-Disclosure Validity by Group

	Group	N	Mean*	Standard Deviation	t	Statistically Significant?
Weighted Self-Disclosure Outcomes	Control	32	.91	.13	0.20	no
	Treatment	31	.90	.17		

* 0 = invalid, 1 = valid

Self-disclosure validity was somewhat lower among study participants who tested positive for any drug at least once during the two-month period. In the control group, their valid self-disclosure rate was 87.1 percent in March and 84.9 percent in April. In the treatment group, their validity rate was 81.6 percent in March and 82.4 percent in April. There was no statistically significant difference in validity rates between these members of the control and treatment groups in March or in April.

Each probationers' self-disclosed drug use information was also compared against his or her test results. Not surprisingly, those who tested negative accurately reported not using drugs 99.7 percent of the time. On the other hand, those who tested positive accurately reported using drugs just 23.5 percent of the time.

At a more detailed level, the valid self-disclosure rate for cocaine use was 31.9 percent among all control group members, compared to 7.7 percent for the treatment group. For cannabis, the pattern was reversed, with 10 percent of the control group and 56.3 percent of the treatment group validly disclosing usage. None of the opiate users (all of whom happened to be in the treatment group) validly disclosed usage. Overall, control group members whose specimens tested positive accurately disclosed the specific drug they used 28.1 percent of the time. Members of the treatment group accurately disclosed the specific drug used and detected in their specimen 19.4 percent of the time. These differences between the control and treatment groups in self-disclosure validity for specific drugs appear to be statistical anomalies.

A follow-up survey asked a subset of study participants if they would be more or less inclined to tell the probation officer about their drug use if they could be certain that their urine specimens would not be tested. Nearly half (48 percent) of the control group and

71 percent of the treatment group respondents reported that this certainty would have no effect on their communication with the probation officer. From the perspective of many probationers, self-disclosure validity is not influenced by partial testing.

Belief in Likelihood of Testing

Full disclosure of the testing strategy to study participants was essential to avoid any misunderstandings that would invalidate the study's findings. For example, treatment group probationers who used drugs might have believed they were avoiding detection if they had not been told that only some of their specimens were being officially tested. Failing to adequately inform probationers about the testing strategy could have had unintended, undesirable effects. The results would have been virtually impossible to interpret, particularly since the study focused on probationers' responses to a reduction in test certainty.

A subsample of participants (39 probationers) were asked if they both understood and believed the testing odds that had been presented to them (see Figure 13). All but one of the 25 control group respondents reported understanding that all of their specimens would be tested for drugs. Similarly, all but one of the 14 treatment group respondents reported understanding that there was only one chance in three that a specimen would be tested. There were no statistically significant differences between the two groups' understandings of the testing odds.

Figure 13. Self-Disclosed Beliefs Regarding Testing Odds

		Did you understand the stated odds of being tested?		Did you believe the stated odds of being tested?	
Group	N	# Yes	% Yes	# Yes	% Yes
Control	25	24	96	23	92
Treatment	14	13	93	3	21

All but two of the control group respondents reported believing that all of their urine specimens would be tested. However, only three (21 percent) of the treatment group respondents reported believing there was just one chance in three that a specimen would be tested.

The difference in expectations between respondents from the control versus the treatment group was statistically significant. Figure 14 presents a statistical analysis of the differences between control and treatment group members' beliefs.

Figure 14. Variance in Beliefs Regarding Likelihood of Testing

Question	Group	N	Mean*	Standard Deviation	t	Statistically Significant?
Did you understand the stated odds of being tested?	Control	25	.96	.20	0.42	no
	Treatment	14	.93	.27		
Did you believe the stated odds of being tested?	Control	25	.92	.28	6.28	yes (<.01)
	Treatment	14	.21	.43		

* 0 = no, 1 = yes

It is possible that the participants from the treatment group interpreted the question about their testing expectations to mean, "Do you really believe anyone would bother to collect a specimen without actually testing it for the presence of drugs?" Perhaps these probationers did not trust their probation officer or the criminal justice system enough to accept the testing odds that were presented to them. This is a reasonable possibility, because probationers are repeatedly and explicitly told that their behavior is being monitored and that any failure to comply with the requirements of their probation will result in serious consequences.

Control group participants believed their 100 percent testing odds. This may suggest that probationer expectations regarding criminal justice procedures are partly a function of direct, personal experience and may be somewhat resistant to change. The majority of the study participants were accustomed to having all of their specimens tested and having the results reported back to them. They may have become conditioned within the probation environment to expect test certainty. More than one month may have been needed for treatment group participants to become accustomed to the new testing strategy and confident that the stated testing odds were real.

Conditioning may help explain why control group members believed the stated testing odds while members of the treatment group did not. However, it will be necessary to conduct a lengthier study to determine whether probationers ever fully adjust to random partial testing strategies, regardless of how long they are exposed to such a strategy.

Another study might also examine whether probationers equate specimen collection with specimen testing. It may be that specimen collection alone--without any feedback--creates a sufficient feeling of vulnerability to deter drug use. The fact that a specimen can serve as objective, court-admissible evidence that a probationer is using drugs might cause such a deterrent effect. If this proves to be the case, simply collecting specimens would be sufficient to deter probationers from using drugs.

Belief in Likelihood of Sanctions

If the probationers in this study had believed further sanctions for use of illegal drugs were unlikely when all of their specimens were being tested, then lowering the odds of testing to one chance in three probably would not have had a measurable effect on their drug-use behavior or self-disclosure validity.

Participants in the St. Clair County IDAP were extremely unlikely to be incarcerated as the result of a single positive drug test. Probationers were only removed from IDAP after repeatedly testing positive. The program's general rule was that probationers would not face incarceration until they tested positive on at least five different occasions. Of course, this guideline was not communicated to program participants. One probationer tested positive 11 times during the two-month study period, yet was permitted to remain in the program.

While study participants had a relatively low risk of being incarcerated for testing positive, they tended to believe that they had a strong likelihood of incarceration. When asked what they thought would happen if they tested positive for drug use, 38.8 percent of the study participants thought they would go to jail or prison. Another 8.8 percent believed they would be returned to court for re-sentencing (possibly to jail or prison). In other words, almost half believed they would be severely sanctioned if they tested positive. Less than 1 percent indicated that "not much" would happen as the result of a positive drug test. Among those who expressed an opinion other than "don't know," virtually all of the study participants (98 percent) believed they would be sanctioned further if they tested positive.

One reason for this belief may have been that IDAP participants are repeatedly advised of the legal consequences of drug use. They are told by the court at the time of sentencing that they will be tested for drug use. They are also told they will risk incarceration if they violate any portion of the court order (such as an order to abstain from drug use). The "don't use drugs" message is further reinforced by probation officers. At no time are probationers told that they will be allowed to have three, four, or five positive test outcomes before being considered in violation of probation. Nevertheless, offenders learn from their own and other probationers' experience that a positive test does not necessarily lead to incarceration. What they do not know is if the next positive test will be the one that results in their incarceration.

IMPLICATIONS

Acceptability of Partial Testing

The findings of this study have several implications for drug testing. The primary implication is that it is not necessary to test all collected specimens. For the probationers who participated in this study, specimen collection strongly implied specimen testing, even when only one-third of the specimens collected were actually tested. The study suggests that random partial testing may be as effective as complete testing.

Implementing partial testing could lead to significant savings in staff time and program expense. Compared to complete testing, partial testing would require fewer chemicals, less storage space, and less staff time for performing tests. These resources could be reallocated to other program areas or (partial) drug testing could be extended to a larger population of offenders.

Another implication of this study is that testing may not be a particularly effective deterrent to drug use. Only half of a subsample of 39 study participants indicated that drug testing affected their drug-use behavior. If anything in the specimen collection, testing, and feedback process deters drug use, it is likely that the threat of a test is at least partially responsible for the effect. As long as the threat of testing is real and specimens are actually collected to establish a perception of vulnerability, complete testing and feedback do not appear to be essential.

Directions for Future Research

This study suggests some new alternatives to existing drug-testing strategies. However, many questions still remain. For example, is there a point at which testing and feedback are essential, or are testing and feedback largely unrelated to drug use and self-disclosure? If drug testing does not significantly affect drug use and self-disclosure validity, testing strategies could be designed to simply monitor the prevalence of drug use. In many instances, existing programs could be scaled back to take advantage of statistical sampling techniques.

On the other hand, if the drug-testing process has a meaningful deterrent effect, is the effect attributable to testing and feedback, to specimen collection, or to some other factor?

This study seems to indicate that partial testing may not lead to an increase in drug use or a decrease in self-disclosure validity. However, the study was not designed to determine which factors, if any, are responsible for deterrent effects. Further research should be conducted to clarify the precise nature of these relationships.

It may also be useful to reexamine and compare self-disclosure validity for various specific types of drugs. This study found evidence that the validity of self-disclosed information varied depending on the drug used and whether the probationer was a member of the control or treatment group. Members of the treatment group were less likely than control group members to disclose cocaine use and far more likely to disclose cannabis use. No attempt was made to interpret this finding, since it is difficult to determine what this pattern could mean within the design of this study.

Research on the effects of partial testing on probationer drug-use behavior over a longer time period would also be useful. To the extent that conditioning influences drug-use behavior and self-disclosure validity, one month of exposure to partial testing may not have been sufficient to elicit behavior changes. While treatment group members were unwilling to "play the odds" during this study, it is possible that they simply did not have enough time to become accustomed to the new procedure. After more experience with partial testing, probationers who indicate their behavior is influenced by drug testing might take more chances.

It seems likely that there is some minimum percentage of specimens that must be tested if partial testing is to remain as effective as complete testing. This study did not attempt to determine that percentage.

The sample size studied was relatively good, but could be improved. The St. Clair County program was the largest in Illinois, and the opportunity to study all of the active program participants added strength to the findings. However, it would be useful to replicate this study on a larger scale so that additional analyses requiring larger sample sizes could be performed.

Future research could also expand on the scope of this study by adding a second and, possibly, a third experimental group. Like the treatment group in this study, the first experimental group could undergo partial testing. The second group could be required to provide specimens and informed that their specimens would never be officially tested. The third

experimental group could undergo partial testing without feedback. A control group probably would not be necessary, but could be useful to contrast experimental outcomes with on-going program outcomes.

This study helped discern the responses of a probation population to involuntary drug testing. Their responses raise new questions, however. For example, why do probationers generally comply with proscriptions to abstain from drug use when it is evident that they will not be penalized for violations? What is it that persuades probationers that they risk further sanctions when, in fact, they do not? Do probationers really believe that providing a urine specimen is equivalent to a drug test? These questions should also be explored in future research.

APPENDIX A:
EVALUATION OF ST. CLAIR COUNTY IDAP

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This appendix evaluates St. Clair County's Intensive Drug Abuser Program during the program's second year of operation, from May 1991 through April 1992.

EVALUATION OF ST. CLAIR COUNTY IDAP
MAY 1991–APRIL 1992

Introduction

The St. Clair County Intensive Drug Abuser Program began its second year of operation on May 1, 1991. In an effort to assess program impact, the Authority's Drug Information and Analysis Center developed an evaluation strategy to accompany the program's second year of funding. The evaluation was designed with input from the St. Clair County Probation Department and the Administrative Office of the Illinois Courts. This is the final descriptive analysis, encompassing all four quarters of the program's second year: May 1, 1991, through April 30, 1992.

St. Clair County Intensive Drug Abuser Program Description

The St. Clair County Intensive Drug Abuser Program (IDAP) is one of a number of intensive supervision strategies in Illinois. Intensive supervision programs are generally designed for high-risk offenders--those who pose a threat to themselves and/or to the community. Probation officers assigned to these programs tend to carry relatively small caseloads of 50 or fewer probationers.

Three probation officers and one supervisor are assigned to IDAP, making it the largest intensive supervision drug program in Illinois. Program eligibility is determined through an examination of the offender's criminal and drug-use history, an interview with the probationer, and interviews with significant others. When the probation department finds an offender eligible for intensive drug abuse supervision, it makes an acceptance recommendation to the court. If approved for program participation by the court, individuals are assigned in sequence to one of three caseloads for a period of nine months. The nine-month period has three phases, each of which is three months in duration. Once an individual is assigned to a probation officer, that person is then placed in an appropriate phase of the program (Phase I, II, or III), as determined by the probation officer's assessment of the severity of the offender's drug abuse. Each phase progressively reduces mandatory urine testing and supervision intensity.

Incoming Program Participants

A total of 44 individuals were in IDAP as of May 1, 1991, and an additional 148 individuals were assigned to the program during the 12-month period between May 1, 1991, and April 30, 1992 (see Figure A-1). The program has accepted an average of 12 new participants each month.

Figure A-1
Number of Probationers in IDAP
May 1, 1991–April 30, 1992

1991	
May	9
June	16
July	21
August	26
September	18
October	25
November	4
December	5
1992	
January	4
February	4
March	7
April	9
Totals	
Subtotal New	148
Pre-May Level	44
Program Total	192

Not all 192 individuals are currently in the program, of course. Some have completed the program, while others have violated the conditions of probation and have been removed.

Current Program Level

Three probation officers and one supervisor are assigned to IDAP. The supervisor has management responsibility for program operation and urine testing. Program design calls for a minimum of 35 probationers per supervising probation officer, which suggests that the minimum number of participants would be (35 x 3 =) 105 probationers. Nevertheless, while 35 probationers per caseload is a stated minimum, both management and staff seem to view this as the optimal caseload size.

At the end of April 1992, there were 95 individuals in the program, 10 percent below the stated minimum and 37 percent below the stated maximum of 150 probationers. This amounts to an average of 32 individuals per probation officer. Figure A-2 provides an overview of each caseload during the 1991-92 program cycle.

Figure A-2
IDAP Caseload Summary by Supervising Probation Officer
May 1, 1991–April 30, 1992

	Officer #1	Officer #2	Officer #3	Total
Initial Caseload	14	14	16	44
New Cases Assigned	53	46	49	148
Successful Completions	11	9	6	26
Unsuccessful Completions	25	22	24	71
Net Caseload April 30	31	29	35	95

Of the 192 probationers entering the program since its inception, 97 (51 percent) have been terminated. As shown in Figure A-3, there have been more unsuccessful (71) than successful (26) terminations during the past twelve months, but that is not unusual for a high-risk group under intensive supervision. The large number of unsuccessful completions is due in part to the high number of absconders. Of the 71 unsuccessful completions, 25 (35 percent) absconded.

Figure A-3
IDAP Completions by Phase
May 1, 1991-April 30, 1992

	Successful	Unsuccessful	Total
Phase I	5 (14%)	32 (86%)	37 (100%)
Phase II	3 (27%)	8 (73%)	11 (100%)
Phase III	18 (37%)	31 (63%)	49 (100%)
Total	26 (27%)	71 (73%)	97 (100%)

As of April 30, 1992, 22 percent of the program participants were in Phase I, 14 percent were in Phase II, and 64 percent were in Phase III (see Figure A-4).

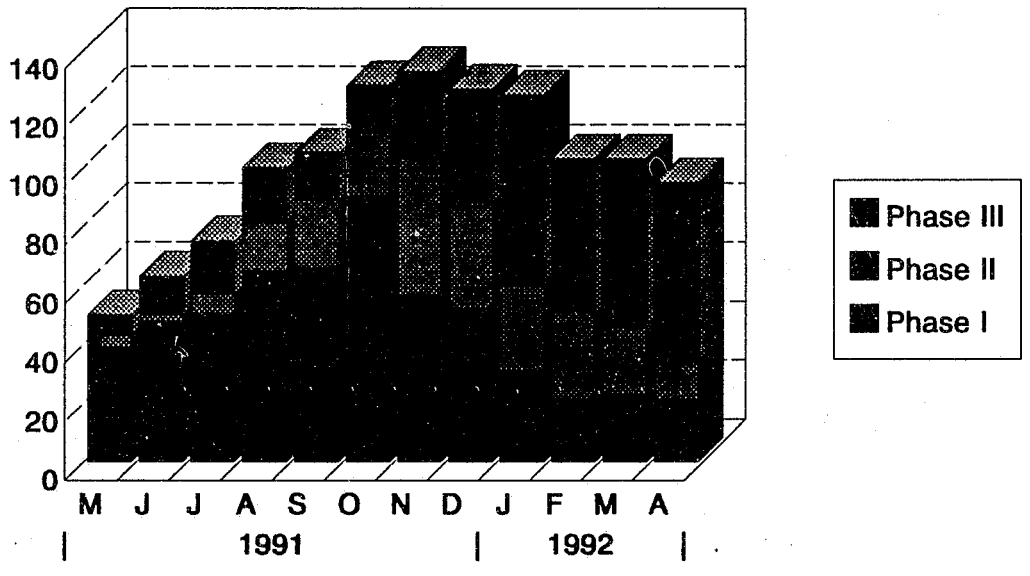
Figure A-4
Active Caseload Distribution by Phase
As of April 30, 1992

	Phase I	Phase II	Phase III	Total
Officer #1	6 (29%)	4 (31%)	21 (34%)	31 (33%)
Officer #2	11 (52%)	3 (23%)	15 (25%)	29 (30%)
Officer #3	4 (19%)	6 (46%)	25 (41%)	35 (37%)
Total	21 (22%)	13 (14%)	61 (64%)	95 (100%)

Figure A-5 shows the number of cases in each phase for each month of the program. The overall number of cases increased steadily between May and December 1991. This was partly due to an accumulation of inactive cases (bench warrant cases and those placed in residential treatment). In January and February 1992, most inactive cases were administratively terminated from the program. As the number of admissions declined in 1992, caseloads matured, resulting in a progressive concentration of Phase III cases.

Phase Distributions

Figure A-5



Multiple Program Testing

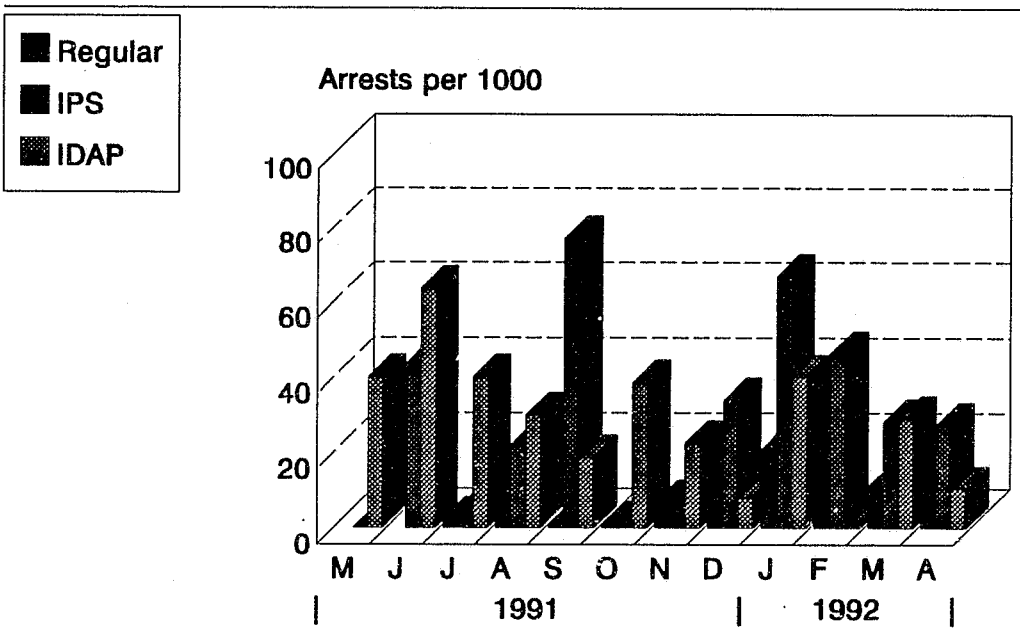
In an effort to put IDAP into perspective as one of several types of probation programs, this section compares arrest rates, test outcomes and costs for IDAP, IPS and regular probation.

Arrests

There were 32 IDAP arrests, 20 IPS arrests and 136 regular probation arrests during the 12-month period. Rearrest rates for the year were 2.6 percent of the average monthly IDAP population, 3 percent of the average monthly IPS population, and 0.7 percent of the average monthly regular probation population. Using an equivalent rate per 1,000 offenders, Figure A-6 shows the monthly arrest rate for each program.

Arrest Rate

Figure A-6



Urinalysis

A key feature of the IDAP program is frequent mandatory urine testing. Individuals in Phase I are tested each week. Those in Phase II are tested bi-weekly. Those in Phase III are tested monthly. Additional tests are performed whenever the probation officer determines they are necessary. During the nine-month program, each IDAP probationer is tested for drug use approximately 21 times.

Figure A-7 summarizes urinalysis test results for IDAP, IPS and regular probationers from May 1991 through April 1992. The data are the number of negative and positive outcomes for each individual. For instance, in May 1991, a total of 96 IDAP probationers were tested for illegal drug use. Of the 96 probationers tested, 63 were drug-free, while 33 probationers tested positive for one or more drugs. Even though monthly test results vary slightly, the overall positive and negative rates of each group are almost identical. Regular probationers had the highest overall positive outcome rate (34 percent).

Figure A-7
Probationer Test Outcomes
May 1, 1991–April 30, 1992

	# of IDAP Probationers Tested			# of IPS Probationers Tested			# of Regular Probationers Tested		
	Neg	Pos	Total Tested	Neg	Pos	Total Tested	Neg	Pos	Total Tested
1991									
May	63	33	96	14	10	24	184	122	306
June	90	37	127	28	9	37	224	121	345
July	112	42	154	17	5	22	238	104	342
August	122	51	173	23	4	27	208	87	295
September	153	51	204	12	3	15	272	99	371
October	201	78	279	14	12	26	299	126	425
November	139	53	192	15	3	18	226	107	333
December	116	59	175	15	9	24	237	124	361
1992									
January	114	47	161	15	4	19	187	82	269
February	82	72	154	16	4	20	193	136	329
March	94	51	145	15	14	29	189	136	325
April	100	56	156	20	11	31	208	132	340
Total	1,386	630	2,016	204	88	292	2,665	1,376	4,041
Overall Percentages	69%	31%	100%	70%	30%	100%	66%	34%	100%

Figures A-8, A-9 and A-10 list the types of drugs for which IDAP, IPS and regular probationers tested positive during the period from May 1991 through April 1992. To illustrate, 96 three-drug IDAP panels were tested in May 1991. Cocaine was detected in 21 percent of those tests and cannabis in 19 percent.

Figure A-8
IDAP Probationers
Positive Urinalysis Test Results
May 1991–April 1992

	N	Cocaine	Cannabis	Amphetamine	Opiates	Total
1991						
May	96	20 (21%)	18 (19%)	-	-	38 (40%)
June	127	26 (20%)	11 (9%)	-	1 (1%)	38 (30%)
July	154	33 (21%)	7 (5%)	2 (1%)	-	42 (27%)
Aug	173	43 (25%)	6 (3%)	-	6 (3%)	55 (31%)
Sept	204	46 (23%)	8 (4%)	-	-	54 (27%)
Oct	279	60 (22%)	17 (6%)	-	5 (2%)	82 (30%)
Nov	192	40 (21%)	14 (7%)	3 (2%)	-	57 (30%)
Dec	175	46 (26%)	12 (7%)	1 (1%)	7 (4%)	66 (38%)
1992						
Jan	161	31 (19%)	13 (8%)	-	4 (2%)	48 (29%)
Feb	154	54 (24%)	36 (16%)	-	5 (2%)	95 (42%)
March	145	44 (30%)	13 (9%)	-	3 (2%)	60 (41%)
April	156	42 (27%)	16 (10%)	-	5 (3%)	63 (40%)
Total	2,016	485 (24%)	171 (9%)	6 (<1%)	36 (2%)	698 (35%)

The data in Figure A-7 differ from those in Figures A-8, A-9 and A-10 because different data sets were used to create each of the figures. Figure A-7 provides information on the number of *individuals* testing positive for illegal drugs, counting each probationer once each time he or she was tested. Figures A-8, A-9 and A-10 provide information on the *specific drugs* for which tests were performed. In some instances, probationers tested positive for more than one drug. That is why 34 percent of the regular probationers tested positive for any drug, yet 37 percent of all regular probationers' tests were positive.

Figure A-9
IPS Probationers
Positive Urinalysis Test Results
May 1991–April 1992

	N	Cocaine	Cannabis	Amphetamine	Opiates	Total
1991						
May	24	8 (33%)	5 (21%)	-	-	13 (54%)
June	37	8 (22%)	3 (8%)	-	-	11 (30%)
July	22	5 (23%)	-	-	-	5 (23%)
Aug	27	2 (7%)	2 (7%)	-	-	4 (14%)
Sept	15	1 (7%)	2 (13%)	-	-	3 (20%)
Oct	26	8 (31%)	4 (15%)	-	1 (4%)	13 (50%)
Nov	18	2 (8%)	7 (28%)	-	-	9 (36%)
Dec	24	7 (29%)	3 (13%)	-	1 (4%)	11 (46%)
1992						
Jan	19	2 (11%)	2 (11%)	-	-	4 (22%)
Feb	20	2 (10%)	3 (15%)	-	-	5 (25%)
March	29	7 (24%)	8 (28%)	-	1 (3%)	16 (55%)
April	31	3 (10%)	7 (23%)	-	1 (3%)	11 (36%)
Total	292	55 (19%)	46 (16%)	-	4 (1%)	105 (36%)

Cannabis use by IPS probationers was about twice that of IDAP probationers and roughly equal to that of regular probationers. The 698 positive urinalysis outcomes for IDAP represent 35 percent of the 2,016 tests performed between May of 1991 and April of 1992. The 105 positive urinalysis outcomes for IPS represent 36 percent of the 292 tests performed. The 1,494 positive outcomes for regular probationers represent 37 percent of the 4,041 tests performed.

Figure A-10
Regular Probationers
Positive Urinalysis Test Results
May 1991-April 1992

	N	Cocaine	Cannabis	Amphetamine	Opiates	Total
1991						
May	306	67 (22%)	74 (24%)	1 (<1%)	-	142 (46%)
June	345	75 (22%)	60 (17%)	-	3 (1%)	138 (40%)
July	342	76 (22%)	36 (11%)	4 (1%)	-	116 (34%)
Aug	295	71 (24%)	16 (5%)	-	8 (3%)	95 (32%)
Sept	371	83 (22%)	20 (5%)	1 (<1%)	-	104 (27%)
Oct	425	99 (23%)	28 (7%)	-	7 (2%)	134 (32%)
Nov	333	78 (23%)	34 (10%)	5 (2%)		117 (35%)
Dec	361	89 (25%)	39 (11%)	1 (<1%)	10 (3%)	139 (39%)
1992						
Jan	269	51 (19%)	29 (11%)	-	5 (2%)	85 (32%)
Feb	329	86 (26%)	60 (18%)	-	6 (2%)	152 (46%)
March	325	89 (27%)	64 (20%)	-	7 (2%)	160 (49%)
April	340	71 (21%)	63 (19%)	-	8 (2%)	142 (42%)
Total	4041	935 (23%)	523 (13%)	12 (<1%)	54 (1%)	1494 (37%)

Note: One regular probationer tested positive for barbiturates, which are not tabulated in this figure.

Program Costs

The expense involved in operating a probation program of any type is an important consideration because cost tends to be crucial to continuation/replication decisions.

For purposes of this evaluation, the costs examined were limited to those that might be considered somewhat discretionary. For example, the number of cases assigned to each officer has a significant effect on the number of probation officers needed to supervise a fixed number of probationers, and, therefore, on the cost of the program. A probation department that has 150 probationers in need of supervision and that limits officer caseloads to 50 probationers will require three probation officers. That three-officer program will cost

three times as much as a program in which officers are assigned caseloads of 150 probationers (although community safety may become an issue under such circumstances). Similarly, mileage and urinalysis costs are discretionary, since it is presumably possible to design programs that do not require home visits or urinalysis.

This is not to suggest that there is one "best" way to design probation supervision strategies, or that cost should be the first consideration. On the contrary, specialized programs designed around risk factors peculiar to caseload characteristics have proven valuable in Illinois and elsewhere. However, from an administrative point of view, program design choices exist. Examining the costs associated with particular designs can be worthwhile.

Figure A-11 provides an analysis of discretionary costs for regular probation, IPS, and IDAP based on data provided by the St. Clair County Probation Department. The per capita costs for regular probation are, as expected, substantially lower than those for either of the other two programs.

Figure A-11
Discretionary Cost Summary
May 1, 1991–April 30, 1992

	IDAP	IPS	Active Regular Probation	Total
Salary/Fringes--Officers	$ 80,896	$149,881	$329,012	$559,789
Mileage--Officers	980	9,235	2,502	12,717
Urinalysis Testing	18,900	2,894	18,077	39,871
Administration/Support	51,311	50,606	141,975	243,892
Total Discretionary	$152,087	$212,616	$491,566	$856,269
Average Caseload	101	56	982	1,139
Per Capita Costs (12 months)	$ 1,506	$ 3,797	$ 501	$ 752

On an annualized basis, discretionary expenses are estimated to be $1,506 for each IDAP probationer slot, $3,797 for each IPS probationer slot, and $501 for each regular probationer slot. Since IDAP is a nine-month program, the annualized cost estimate for this program is for 1.3 probationers during each 12-month period.

In contrast to the costs associated with the intensive supervision options (IDAP or IPS) and regular probation, the Authority estimates that it costs $16,176 to incarcerate an offender for one year in an Illinois state prison facility. Although many of those sentenced to prison do not meet the criteria for intensive community supervision, the contrast is striking in those instances in which intensive supervision is a viable option. For the $16,176 that it would cost to incarcerate one offender for one year, it would be possible to supervise 14 IDAP probationers, 4 IPS probationers, or 32 regular probationers.

Summary

There were 44 probationers in IDAP in May 1991. During the 12 months that followed, 148 probationers entered the program. As of April 30th, 1992, 97 cases had been terminated, while 95 probationers remained in the program. Of those terminated, 26 probationers (27 percent) completed all three phases satisfactorily. The remaining 71 terminations occurred prior to program completion (due to rearrest, technical violation, or program transfer). The relatively low completion rate is not unexpected, because those selected for IDAP are clearly at serious risk of violation. Nevertheless, it would have cost approximately .75 x (26 x $16,176) = $315,432 to house those 26 probationers in a state prison for nine months. Intensive probation cost .75 x (26 x $1,506) = $29,367, saving $286,065. If the entire $152,000 in discretionary costs for the program were deducted from estimated state prison costs, there still would have been a net savings of more than $150,000.

Of the two intensive supervision programs examined (IDAP and IPS), IDAP had a somewhat lower rearrest rate, at 2.6 percent, than did IPS, at 3 percent. Regular probationers had a substantially lower rearrest rate (0.7 percent) than participants in either of the other two programs, which is not unexpected.

IDAP had an overall positive urinalysis outcome rate of 35 percent (for all drugs), while IPS had a 36 percent positive outcome rate. Regular probationers had the highest overall positive outcome rate, at 37 percent.

Overall, IDAP appears to be working well. The rearrest rate is in line with that of the intensive supervision program (IPS) in St. Clair County. While a relatively small number of probationers actually complete the program, there are solid indications that it is a cost-effective alternative to incarceration.

APPENDIX B:
CONTROL GROUP SELF-DISCLOSURE FORM

Control Group Self-Disclosure Form

Please Complete This 4-Page Form Before Meeting With Your Probation Officer

NAME: S. Anonymous
DOB: 07/02/44
R/S: BM
CF#: 92CF324
SSN: 331-44-3213
PROBATION OFFICER: A. Confidential
GROUP ASSIGNED: **Control**

This is a reminder, ***Mr. Anonymous***, as you answer the questions on the following pages, that the urine specimen collected from you today *will be tested* for the presence of drugs.

Please answer each of the following questions as accurately as possible. There are no right or wrong answers. This will take just a few minutes. When finished, return the completed form to your Probation Officer **before leaving the office**. The information you provide will become part of your record, and will be used to help you and your Probation Officer structure your treatment plan.

PLEASE COMPLETE EVERY QUESTION

1. Today's date: ___ / ___ / ___

2. How long ago was your last urine drop? **(check one)**

___ about one week ___ about two weeks ___ more than two weeks

SELF USE

3. Have you used any of the following since your last urine drop? **(check the line under "no" or "yes" for each drug)**

	NO	YES	IF YES, HOW OFTEN? (check one)	
Alcohol	___	___	___ Once	___ More Than Once
Barbiturates (downers)	___	___	___ Once	___ More Than Once
Black Tar Heroin	___	___	___ Once	___ More Than Once
Cocaine	___	___	___ Once	___ More Than Once
Crack	___	___	___ Once	___ More Than Once
Heroin, Opiates	___	___	___ Once	___ More Than Once
LSD	___	___	___ Once	___ More Than Once
Marijuana	___	___	___ Once	___ More Than Once
PCP (Angel Dust)	___	___	___ Once	___ More Than Once
Quaaludes	___	___	___ Once	___ More Than Once
Speed/Crystal/Amphetamine	___	___	___ Once	___ More Than Once
Street Methadone	___	___	___ Once	___ More Than Once
Tranquilizers	___	___	___ Once	___ More Than Once
Other _____	___	___	___ Once	___ More Than Once

FRIENDS AND FAMILY

4. Have any of your male or female friends and family (people you are close to) used any of the following drugs in your presence since your last urine drop? **(check the line under "no" or "yes" for each drug)**

	NO	**YES**	**IF YES, HOW OFTEN? (check one)**	
Alcohol	___	___	___ Once	___ More Than Once
Barbiturates (downers)	___	___	___ Once	___ More Than Once
Black Tar Heroin	___	___	___ Once	___ More Than Once
Cocaine	___	___	___ Once	___ More Than Once
Crack	___	___	___ Once	___ More Than Once
Heroin, Opiates	___	___	___ Once	___ More Than Once
LSD	___	___	___ Once	___ More Than Once
Marijuana	___	___	___ Once	___ More Than Once
PCP (Angel Dust)	___	___	___ Once	___ More Than Once
Quaaludes	___	___	___ Once	___ More Than Once
Speed/Crystal/Amphetamine	___	___	___ Once	___ More Than Once
Street Methadone	___	___	___ Once	___ More Than Once
Tranquilizers	___	___	___ Once	___ More Than Once
Other _____	___	___	___ Once	___ More Than Once

TODAY'S URINE SPECIMEN

5. Do you have any reason to believe today's urine specimen may test positive for any of the following? **(check the line under "no" or "yes" for each drug)**

	NO	YES
Alcohol	___	___
Barbiturates (downers)	___	___
Black Tar Heroin	___	___
Cocaine	___	___
Crack	___	___
Heroin, Opiates	___	___
LSD	___	___
Marijuana	___	___
PCP (Angel Dust)	___	___
Quaaludes	___	___
Speed/Crystal/Amphetamine	___	___
Street Methadone	___	___
Tranquilizers	___	___
Other _____	___	___

6. Do you believe you need help with substance abuse? **(check one)**

___ no ___ yes

7. Prior to today, did your probation officer ever tell you that you tested positive for one or more illegal drugs? **(check one)**

___ no ___ yes

8. If today's urine specimen turns out to be positive for illegal drugs what do you believe will happen? **(check one)**

___ go to jail or prison ___ go back to court

___ not much ___ don't know

___ other (specify): _____

9. How do you think your last urine test turned out? **(check one)**

___ positive ___ negative

10. Have you answered each of the above questions accurately? **(check one)**

___ no ___ yes

RETURN COMPLETED FORM TO PROBATION OFFICER

Probationer Signature: _____

Probation Officer Signature: _____

APPENDIX C:
TREATMENT GROUP SELF-DISCLOSURE FORM

Treatment Group Self-Disclosure Form

Please Complete This 4-Page Form Before Meeting With Your Probation Officer

NAME: T. Anonymous
DOB: 12/10/53
R/S: BM
CF#: 92CF667
SSN: 366-62-6787
PROBATION OFFICER: B. Confidential
GROUP ASSIGNED: **Treatment**

This is a reminder, ***Mr. Anonymous***, as you answer the questions on the following pages, that there is *a one in three chance* that the urine specimen collected from you today will be tested for the presence of drugs.

Please answer each of the following questions as accurately as possible. There are no right or wrong answers. This will take just a few minutes. When finished, return the completed form to your Probation Officer **before leaving the office**. The information you provide will become part of your record, and will be used to help you and your Probation Officer structure your treatment plan.

PLEASE COMPLETE EVERY QUESTION

1. Today's date: ___ / ___ / ___

2. How long ago was your last urine drop? **(check one)**

___ about one week ___ about two weeks ___ more than two weeks

SELF USE

3. Have you used any of the following since your last urine drop? **(check the line under "no" or "yes" for each drug)**

	NO	YES	IF YES, HOW OFTEN? (check one)	
Alcohol	___	___	___ Once	___ More Than Once
Barbiturates (downers)	___	___	___ Once	___ More Than Once
Black Tar Heroin	___	___	___ Once	___ More Than Once
Cocaine	___	___	___ Once	___ More Than Once
Crack	___	___	___ Once	___ More Than Once
Heroin, Opiates	___	___	___ Once	___ More Than Once
LSD	___	___	___ Once	___ More Than Once
Marijuana	___	___	___ Once	___ More Than Once
PCP (Angel Dust)	___	___	___ Once	___ More Than Once
Quaaludes	___	___	___ Once	___ More Than Once
Speed/Crystal/Amphetamine	___	___	___ Once	___ More Than Once
Street Methadone	___	___	___ Once	___ More Than Once
Tranquilizers	___	___	___ Once	___ More Than Once
Other _____	___	___	___ Once	___ More Than Once

FRIENDS AND FAMILY

4. Have any of your male or female friends and family (people you are close to) used any of the following drugs in your presence since your last urine drop? **(check the line under "no" or "yes" for each drug)**

	NO	**YES**	**IF YES, HOW OFTEN? (check one)**	
Alcohol	___	___	___ Once	___ More Than Once
Barbiturates (downers)	___	___	___ Once	___ More Than Once
Black Tar Heroin	___	___	___ Once	___ More Than Once
Cocaine	___	___	___ Once	___ More Than Once
Crack	___	___	___ Once	___ More Than Once
Heroin, Opiates	___	___	___ Once	___ More Than Once
LSD	___	___	___ Once	___ More Than Once
Marijuana	___	___	___ Once	___ More Than Once
PCP (Angel Dust)	___	___	___ Once	___ More Than Once
Quaaludes	___	___	___ Once	___ More Than Once
Speed/Crystal/Amphetamine	___	___	___ Once	___ More Than Once
Street Methadone	___	___	___ Once	___ More Than Once
Tranquilizers	___	___	___ Once	___ More Than Once
Other _____	___	___	___ Once	___ More Than Once

TODAY'S URINE SPECIMEN

5. Do you have any reason to believe today's urine specimen may test positive for any of the following? **(check the line under "no" or "yes" for each drug)**

	NO	YES
Alcohol	___	___
Barbiturates (downers)	___	___
Black Tar Heroin	___	___
Cocaine	___	___
Crack	___	___
Heroin, Opiates	___	___
LSD	___	___
Marijuana	___	___
PCP (Angel Dust)	___	___
Quaaludes	___	___
Speed/Crystal/Amphetamine	___	___
Street Methadone	___	___
Tranquilizers	___	___
Other _____	___	___

6. Do you believe you need help with substance abuse? **(check one)**

___ no ___ yes

7. Prior to today, did your probation officer ever tell you that you tested positive for one or more illegal drugs? **(check one)**

___ no ___ yes

8. If today's urine specimen turns out to be positive for illegal drugs what do you believe will happen? **(check one)**

___ go to jail or prison ___ go back to court

___ not much ___ don't know

___ other (specify): _____

9. How do you think your last urine test turned out? **(check one)**

___ positive ___ negative

10. Have you answered each of the above questions accurately? **(check one)**

___ no ___ yes

RETURN COMPLETED FORM TO PROBATION OFFICER

Probationer Signature: _____

Probation Officer Signature: _____

APPENDIX D:
PROBATION OFFICER FOLLOW-UP QUESTIONS
FOR CONTROL GROUP PROBATIONERS

Please Note: The questions on this form are intended to be read to each probationer by the Probation Officer, who will then provide all identifying information and check the probationer's response to each question. Please do not ask the probationer to personally read and respond to the questions.

Probationer Last Name: _____ CF Number: ___ CF _____
Interviewer (PO): _____ Date: ____ / ____ / ____

Opening Comment (please read to probationer):

During the month of April there was a 100 percent chance that your urine specimens would be officially tested for the presence of drugs. You may recall reading that there was a 100 percent chance of an official test each time you completed the yellow survey form.

I would like to ask you a few questions about what it means to have each urine specimen tested. This will take just a couple of minutes. Your responses will not go into your file. The only purpose of these questions is to help us evaluate this program.

1. Did you understand that your urine specimens would all be tested? (___ yes, ___ no)

2. Did you believe that your urine specimens would all be tested? (___ yes, ___ no)

3. In general, does the requirement to provide a urine specimen influence your decision to use alcohol or drugs? (___ yes, ___ no)

4. If you knew in advance that your urine specimen might not be tested would that influence your decision to use alcohol or drugs? (___ yes, ___ no)

5. Does the requirement to provide a urine specimen influence what you decide to tell me about your drug use? (___ yes, ___ no)

6. If you could be certain that we would not test your urine specimens would you be more inclined or less inclined to tell me about your drug use? (___ more, ___ less, ___ same)

7. Would you like to tell me anything about the survey you have been filling out or about our urine specimen testing program? (write comments on other side if necessary)

APPENDIX E:
PROBATION OFFICER FOLLOW-UP QUESTIONS
FOR TREATMENT GROUP PROBATIONERS

Please Note: The questions on this form are intended to be read to each probationer by the Probation Officer, who will then provide all identifying information and check the probationer's response to each question. Please do not ask the probationer to personally read and respond to the questions.

Probationer Last Name: _____ CF Number: ___ CF _____
Interviewer (PO): _____ Date: ____ / ____ / ____

Opening Comment (please read to probationer):

During the month of April there was just a one in three chance that your urine specimens would be officially tested for the presence of drugs. You may recall reading that there was just a one in three chance of an official test each time you completed the blue survey form. Normally every specimen is tested.

I would like to ask you a few questions about what it means to have just a one in three chance of having one of your urine specimens tested. This will take just a couple of minutes. Your responses will not go into your file. The only purpose of these questions is to help us evaluate this program.

1. Did you understand that your urine specimens might not be tested? (___ yes, ___ no)

2. Did you believe that your urine specimens might not be tested? (___ yes, ___ no)

3. In general, does the requirement to provide a urine specimen influence your decision to use alcohol or drugs? (___ yes, ___ no)

4. If you knew in advance that your urine specimen might not be tested would that influence your decision to use alcohol or drugs? (___ yes, ___ no)

5. Does the requirement to provide a urine specimen influence what you decide to tell me about your drug use? (___ yes, ___ no)

6. If you could be certain that we would not test your urine specimens would you be more inclined or less inclined to tell me about your drug use? (___ more, ___ less, ___ same)

7. Would you like to tell me anything about the survey you have been filling out or about our urine specimen testing program? (write comments on other side if necessary)

APPENDIX F:
PROBATION OFFICER INTERVIEW QUESTIONS

1) One of the things we were curious about in this study was finding out if probationers would use drugs more frequently if we told them that some of their urine drops would not be tested. In general, what do you believe the data will show?

2) We also wanted to know if a reduction in urine testing would change what the probationer tells you. That is, would they be less honest with you, thinking perhaps that you would be less likely to find out that they had been dishonest. Do you believe a reduction in urine testing changes what a probationer tells you?

3) Did your probationers know for the most part that they were part of an experimental study?

4) Did the experiment change anyone's behavior in your perception?

5) What do you think probationers thought about the blue and yellow self-disclosure forms?

6) In general, do your probationers take your comments at face value? That is, do they generally believe that you tell it like it is?

7) If it turns out that this study shows that it is not necessary to test all urine specimens, do you believe it would be a good idea to consider implementing it on a permanent basis?

8) Does urine testing help you do your job as a probation officer?

9) If you were asked to design a urine testing program from scratch, what, if anything, would you do differently?

10) Do you have any observations about this study or about the program that you would like to leave with me?

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