

DRUG TESTING AND RECIDIVISM OF HOUSTON FELONY PROBATIONERS

by

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## ABSTRACT

Previous evaluations of the relationship between drug testing and criminal behavior have yielded mixed results. Furthermore, these examinations have been confined to pretrial defendants. The present study focused on the impact of drug testing on recidivism rates among felony probationers in a large, southwestern, urban community (Houston, Texas). The findings indicated that successful probationers were tested and seen by officers a significantly greater number of times than unsuccessful probationers. In addition, drug and non-drug offenders had similar law violation rates, but drug offenders committed a higher number of technical violations. As expected, evidence of drug abuse was related to probation failure. Finally, the effect of drug offenders' participation in treatment varied according to their characteristics. Probation success was enhanced for drug offenders with characteristics predictive of failure, whereas those with the attributes of success did not appear to benefit.

## INTRODUCTION

The relationship between narcotics addiction and criminal behavior has been clearly established. Graham (1987) stated that "California prison and jail inmates who were addicted to heroine reported committing 15 times as many thefts as non-drug users" (p. 2). Auglin and Speckart (1988) reported a similar relationship between narcotics use and arrest among those convicted of burglary and drug possession. The pervasiveness of drug use among offenders was also confirmed in a national survey which showed that from 54 to 90 percent of male arrestees used such drugs as cocaine, PCP, heroine, marijuana, or amphetamines (U.S. Department of Justice, 1989).

Heretofore, the most notable response of the criminal justice community to the problem of drug abuse among offenders has been the introduction of drug testing. Jurisdictions including Washington, D.C., New York City, and Houston implemented comprehensive pretrial and probation drug testing procedures in the mid 1980's (Belenko & Mara-Drita, 1988; Toborg, Bellasori, Yezer, & Trost, 1989; Wheeler & Rudolph, 1990). The extent to which drug testing reduces pretrial misconduct and recidivism has yet to be thoroughly determined. In addition, the relationship between drug testing and misconduct beyond the pretrial phase has not been thoroughly investigated. The purpose of this report is to review these issues and present preliminary data on the relationship between drug testing and

recidivism past the pretrial phase using the data of felony probationers supervised by the Harris County Community Supervision and Corrections Department in Houston, Texas.

### The Impact of Drug Testing on Criminal Behavior: A Review

A review of five studies of pretrial drug testing provides varied conclusions. A summary of the major results of these studies are presented in Table 1.

Washington, D.C. A drug testing experiment with significant implications for the pre-screening and supervision of pretrial release defendants was conducted by Toborg and associates in 1989. The study sample consisted of 3,000 defendants randomly assigned to one of three groups between June of 1984 and January of 1985: a surveillance group, in which offenders were tested for drugs each week, a treatment group, in which offenders were referred to a drug abuse treatment agency, and a control group, in which offenders were released without urine testing or treatment. The results showed that those who were members of the surveillance group (and did not drop out) had the lowest rearrest rate (16%). This compared to a rearrest rate of 20% for both the treatment and control groups. The defendants with the highest arrest rate (32%) were those who dropped out of the surveillance group.

A similar pattern was found in the failure-to-appear (FTA) rates. The surveillance group had the lowest FTA rate of the three groups (17%), followed by the control group (19%), the treatment group (20%), and those members of the surveillance group who dropped out (33%). Toborg et al. (1989) suggested that the

surveillance program operated as an effective “signaling” mechanism of defendant pretrial behavior. They stated that “participation in the urine testing [surveillance] program signals that the defendant’s behavior poses a lower risk of pretrial misconduct (p.15).

New York City - a. To determine the effects of drug testing on pretrial misconduct, Belenko and Mara-Drita (1988) focused on the failure to appear rates of 2645 felony and misdemeanor defendants processed through Manhattan Central Booking between April and October of 1984. They found that drug testing did not add any significant predictive power to the information already available to judges (e.g., community ties, prior record, charge). In conclusion they stated:

. . . the results raise serious questions about the efficacy of mass drug screening of arrestees in order to identify defendants at risk for FTA. The multivariate analyses show that while it is difficult to reliably predict whether an individual defendant will FTA using information currently available to the arraigning judge, adding the drug tests results does not improve upon this prediction.(p. 2)

New York City - b. Using an undefined subset of the Belenko and Mara-Drita data set, Smith, Wish, and Jarjora. (1989) examined the relationship of drug testing to both failure-to-appear and rearrest. Their analyses showed that defendants who tested positive for one of four drugs (heroin, cocaine,. PCP, methadone) had

a higher FTA rate (38.6% vs. 28.2%) and rearrest rate (**19.8% vs. 33.8%**) than those who did not. They used a basic probit model for determining the association between drug test results and pretrial failure conditional on defendants being “at risk” for failure. Their findings showed “that the number of drugs a defendant tests positive for is significantly -associated with the probability of FTA...” and “...the probability that a defendant will be arrested prior to case disposition...” (pp.113-115). The authors concluded:

Results of this analysis show that in Manhattan drug tests do provide information that is associated with pretrial misconduct over and above the information typically available to judges. Drug test results might therefore be a useful source of information for a judge to consider along with other information when determining whom to release or detain and in setting conditions on those released (p. 124).

Examination of these data, however, show that the coefficient from the Censored Probit Models for FTA with respect to the number of positive drug tests is low (.109) compared to other traditional indicators such as prior FTAs (.386), employment (-.248), violent offense (-.391), recommendation for release (-.600), and qualified recommendation (-.444).

The examination of rearrest rates showed comparable results. The probability estimate for number of positive drug tests (.120)



was lower than the variables prior arrest (.473), **unemployed** (-.251), in school (-.198), prior FTAs (.212), prior felony conviction (.287), and several other variables. When drug specific tests were considered, the researchers reported a significant probability estimate (.320) of rearrest for defendants testing positive for PCP. It is important to note, however, that only 12% of the study population fall into this category.

Dade County, Florida. Goldkemp, Gottfredson, and Weiland (1988) employed predictive and classification analyses to examine the extent to which drug tests increased judges' ability to predict pretrial misconduct. The study sample consisted of 2019 felony defendants subjected to voluntary testing prior to the bail stage. They found that when factors such as criminal history were introduced, positive drug tests were not significantly related to failure to appear or rearrest. The authors reported:

Because the empirical finding of a slightly improved predictive effect for drug test results does not appear to translate into a clear advantage in developing risk classifications based on the Dade County felony data, it is likely that the issue of the utility of drug testing at the bail stage must be resolved from other perspectives than merely its relative predictive power (p. 48)

Table 1Summary of Research Studies of Relationship Between Drug Testing and Criminal Behavior.

Author	Jurisdiction and Year of Sample	Court Appearance	Significantly related to: Rearrest	Recidivism
Toborg, et al.	Washington, D.C. 1984-1985	<b>yes</b>	<b>yes</b>	- -
Belenko & Mara-Drita	New York City (a) 1984	no	- -	- -
Smith, et al.	New York City (b) 1984	<b>yes</b>	<b>yes</b>	- -
Goldkemp, et al.	Dade County, FL 1987	no	no	- -
Wheeler & Rudolph	Harris County, TX 1986-1988	- -	- -	no

Houston, Texas. A study was conducted in Harris County, Texas, comparing the success of probationers subjected to drug testing under pretrial and probation supervision to probationers who received drug testing only while on probation (Wheeler & Rudolph, 1990). The study sample consisted of 96 defendants who were granted pretrial release (PTR) and 355 surety bond defendants sentenced to probation during 1986, 1987, and 1988. Probationers receiving PTR submitted to regular drug testing, whereas probationers receiving surety bonds were not tested for drugs prior to probation.

As a whole, the law and technical violation rates of the two groups were not significantly different. Only one percent difference in law violation rates was observed between the pretrial drug tested group (18.7%) and the non-pretrial drug tested group (17.8%). Additionally, offenders subjected to drug testing during pretrial and probation supervision showed a lower technical violation rate (12.5%) than those tested only during probation (18.0%). No appreciable differences appeared between the groups when type of charge was taken into account. Twenty-six percent of drug offenders in the PTR drug test group had their probation revoked, whereas 23.8% of drug offenders in the surety bond, untested group had their probation revoked.

It is clear that earlier studies have been somewhat inconclusive. Also, although previous analyses have investigated the relationship between drug testing and misconduct, many of these investigations have terminated at the pretrial stage. In that a

number of jurisdictions may continue drug testing throughout the probation period, the importance of examining the relationship between drug testing and conduct during probation is apparent. There are several questions remaining largely unanswered which guided this research. First, what information predicts whether a probationer has a drug charge as an instant offense? Second, what information available at intake best predicts success on probation? Third, do contacts with probation officers, enrollment in a drug program, and drug testing itself influence success on probation? Fourth, does drug use contribute to failure on probation? Finally, are probationers who show evidence of drug use and undergo treatment more likely to succeed on probation than their non-treatment counterparts?

#### METHODOLOGY

This empirical investigation was conducted in an effort to determine the relationship between drug testing and the events occurring during probation supervision. Data from the Harris County Community Supervision and Corrections Department (H.C.C.S.C.D.) were used for this purpose.

Drug Testing Procedure. Harris County criminal judges initiated drug testing as a condition of probation for selected offenders in 1980. Presently, H.C.C.S.C.D. submits between 2500 and 3000 samples per month to the County Medical Examiner's Office. Between twelve and seventeen percent of the samples are found to be positive for some prohibited substance. The County Medical

Examiner's Office utilizes the following testing for screening and confirmation:

1. Screening-Enzyme Immunoassay detection utilizing SYVA reagent technology
2. First Level Confirmation-Thin Layer Chromatography (TLC)
3. Second Level Confirmation-Gas Chromatography/Mass Spectroscopy (GUMS)

All samples which screen positive must be confirmed at the first and second level.

Sample. The data set consisted of every other felony probationer processed through the Harris County Criminal District Courts between May 12 and July 17 of 1989. The total number of cases collected was 658, although not all information was available for all probationers. Cases were tracked by the Research Division of the H.C.C.S.C.D. for at least 11 months. The demographic characteristics of the total sample appear in table 2.

With regard to the total sample, seventy-seven percent were male, and forty-four percent were black, 34% white, and 22% Hispanic. The average age of the probationers in the total sample was 28.4 years. In terms of offense, 36% were charged with delivery or possession of drugs, 36% with theft, 13% with miscellaneous offenses (e.g., arson, gambling), 9% with crimes against a person, and 7% with felony DWI. Based on the offense for which a probationer was given probation, subjects were classified into one of four charge categories: person (e.g., assault, rape, kidnapping), theft (e.g., auto theft, burglary, robbery), drug (e.g., drug

possession, sale of drugs, DWI/DUID), or other (e.g., arson, driving without a license, trespassing). Drug offenders comprised the largest percentage of the sample (43.0%, 283) followed by theft offenders (41.6%, 274), person offenders (8.7%, 57) and other offenders (6.7%, 44). The majority of the probation sample is currently on probation (62.2%). Twelve probationers (1.9%) successfully terminated during the study period, and the remaining probationers have MRPs pending (4.7%) absconded (7.6%) terminated unsuccessfully (0.8%), transferred (1.1%), recidivated due to law (12.4%) or technical violations (8.7%), or died (0.6%).

Table 2

Demographic Characteristics of Probationer Study Sample.

Variable	N	%
<b>Sex</b>		
Male	509	77.4
Female	149	22.6
<b>Race</b>		
White	221	33.6
Black	289	44.0
Hispanic	141	21.5
Other	7	0.9
<b>Charge</b>		
Person	57	8.7
Theft	274	41.6
Drug	283	43.0
Other	44	6.7

Table 3. (cont'd)

Variable	N	%
<b>Outcome</b>		
Under supervision	<b>400</b>	<b>62.2</b>
Successful termination	12	1.9
Transfer	<b>7</b>	1.1
Unsuccessful termination	<b>5</b>	<b>0.8</b>
Law violation revocation	<b>80</b>	<b>12.4</b>
Technical violation revocation	<b>56</b>	<b>8.7</b>
Absconder	<b>49</b>	<b>7.6</b>
MRP pending	<b>30</b>	<b>4.7</b>
Death	<b>4</b>	<b>0.6</b>
<b>Age</b>		
Mean age =	28.4 years	

The majority of the analyses were performed by comparing successful to unsuccessful probationers according to offense status (drug vs non-drug offender). Therefore, the demographic information found in Tables 3 and 4 is presented in this way.

The data showed that successful probationers tended to be older, Black, male, theft offenders. The successful group was similar to the overall population with one exception: the overall population tended to have a slightly higher percentage of drug offenders than the successful group. The group of unsuccessful

probationers was younger than the successful probationers (M=26.0 years vs. M=29.3 years) and had a higher percentage of drug offenders (47.3%, N=88). Unsuccessful probationers were tested for drug use a substantially fewer number of times (M=0.81) than successful probationers (M=1.62). The findings were similar for drug vs. non-drug offenders. Drug offenders tended to be male and Black with a mean age of 29.2 years. Non-drug offenders were predominantly male and Black, as well, but with a slightly lower mean age of 27.6 years. With regard to drug testing frequency, drug offenders were tested more often than non-drug offenders (M=1.77 vs. M=1.09).

## Table

### Demographic Characteristics of Study Sample: Successful vs. Unsuccessful Probationers.

Variable	Successful		Unsuccessful	
	N	%	N	%
Sex				
Male	341	74.8	155	83.3
Female	115	25.2	31	16.7
Race				
White	156	34.2	55	29.7
Black	183	40.1	102	55.1
Hispanic	112	24.6	26	14.1
Other	5	1.1	2	1.1



Table 3 (cont'd)

Variable	Successful		Unsuccessful	
	N	%	N	%
<b>C h a r g e</b>				
Person	44	9.6	11	5.9
Theft	191	41.9	77	41.4
Drug	188	41.2	88	47.3
Other	33	7.3	10	5.4
<b>Age</b>				
Mean age	29.3 years		26.0 years	
<b>Drug testing</b>				
0 tests	165	36.3	106	57.0
1-2 tests	189	41.6	62	33.3
3-4 tests	62	13.7	14	7.5
5 or more tests	38	8.4	4	2.2
Mean number	1.61 tests		0.82 tests	

Table 4.

Demographic Characteristics of Study Sample: Drug vs. Non-Drug Offenders.

Variable	Drug Offenders		Non-Drug Offenders	
	N	%	N	%
Sex				
Male	221	78.1	288	76.6
Female	62	21.9	88	23.4
Race				
White	86	30.4	135	36.0
Black	142	50.2	147	39.2
Hispanic	55	19.4	86	22.9
Other	--	--	7	1.9
Charge				
Person			57	15.2
Theft			275	73.1
Drug	283	100.0	--	--
Other			44	11.7
Age				
Mean age	29.2	years	27.6	years
Drug testing				
0 tests	104	37.8	168	45.9
1-2 tests	97	35.3	154	42.1
3-4 tests	44	16.0	32	9.7
5 or more tests	30	10.9	12	3.3
Mean number	1.77	tests	1.09	tests

Independent Variables. The discriminant and regression analyses included the following independent variables: offense, age, sex, race, number of prior felony convictions, number of prior misdemeanor convictions, previous drug offense status, treatment status, classification risk and needs scores, number of positive drug tests, number of contacts with probation officer, types of drugs for which probationer tested positive, and number of drug tests administered. Previous drug offense status had one of two values, either yes or no. Treatment status refers to whether or not the probationer was currently enrolled or had participated in either a drug or alcohol abuse program. The risk and needs scores determined at intake were used in the analyses. Number of contacts with probation officer refers to the number of *face-to-face* contacts a probationer had during the course of his or her probation. The remaining variables are self-explanatory.

Dependent Variable. Probationers could have one of ten specific outcomes: under supervision, under supervision with a law violation, successful termination, transfer, unsuccessful termination, law violation revocation, technical violation revocation, absconder status, MRP pending, or death. For the purpose of analysis, outcome was defined as “successful” or “unsuccessful”. Failure on probation was defined as a law violation during the probation supervision period, probation revocation due to law or technical violations, MRP pending, absconder status, or unsuccessful termination. Conversely, successful probation was defined as successful termination and current probation supervision with or

without technical violations. In that many otherwise “successful” probationers commit technical violations such as fee delinquency, probationers who were still on probation (without a motion-to-revoke probation pending) were not classified as “failures” although they may have committed technical violations. Transfer cases and deaths were excluded from the analyses.

## RESULTS

Prediction of Drug Offender Status. Discriminant analysis was used to identify variables that predict whether a probationer had a drug charge as an instant offense. Ten predictors were included in the analysis: age, sex, race, prior felony convictions, prior misdemeanor convictions, prior drug abuse status, present drug abuse status, present alcohol abuse status, classification risk score, and classification needs score.

The results of the two-group stepwise procedure showed that five variables were statistically significant predictors of whether a probationer was a drug offender. The variables retained by the stepwise function were present *drug abuse status*, *age*, *prior felony convictions*, and the *classification risk* and *needs scores*. These variables yielded a significant discriminant function (Wilks' Lambda= 0.67,  $p < .0001$ ).

Frequency analysis showed that, not surprisingly, 66.4% of drug offenders ( $n=152$ ) reported using drugs and only 18.6% of non-drug offenders ( $n=61$ ) reported using drugs. Using the Student-Newman Keuls test, analysis showed that the mean age of drug

offenders (M=29.2, n=283) is significantly higher than that of non-drug offenders (M=27.6, n=375;  $p<.05$ ). Drug offenders also tend to have a significantly greater number of prior felony convictions (M=0.2, n=268) than non-drug offenders (M=0.1, n=363;  $p<.001$ ). Interestingly, the drug offenders tended to have significantly higher needs scores (M=12.9, n=228 vs. M=8.2, n=328) but lower risk scores (M=8.2, n=228 vs. M=8.7, n=328) than the non-drug offenders. In summary, the drug offender sample seems to be comprised of older probationers with prior felony convictions, lower risk and higher needs scores, and a current problem with drug use.

Prediction of Success vs. Failure. Discriminant analysis was used to identify intake variables that predict probation outcome. Eleven predictors were included in the analysis: age, sex, race, charge, prior felony convictions, prior misdemeanor convictions, prior drug abuse status, present drug abuse status, present alcohol abuse status, classification risk score, and classification needs score.

The results of the two-group stepwise procedure showed that four variables were statistically significant predictors of whether a probationer succeeded or failed on probation. The variables retained by the stepwise function were *present drug abuse status*, *age*, *prior felony convictions*, and the *classification risk score*. These variables yielded a significant discriminant function (Wilks' Lambda= 0.93,  $p<.0001$ ).

Frequency analysis showed that 57.3% of probationers (n=75) who failed on probation used drugs, compared to 32.4% of

probationers (**n=138**) who succeeded on probation. Using the Student-Newman Keuls test, analysis showed that the mean age of successful probationers (M=29.3, n=456) is significantly higher than that of unsuccessful probationers (M=26.0, n=185;  $p<.001$ ). Successful probationers also tended to have a significantly lower number of prior felony convictions (M=0.1, n=178) than unsuccessful probationers (M=0.2, n=452;  $p<.05$ ). Finally, probationers who failed had significantly higher risk scores (M=10.0, n=130) than their successful counterparts (M=7.9, n=426;  $p<.001$ ). In summary, probationers who fail tend to be younger drug **users who have higher** risk scores and a greater number of prior felony convictions than successful probationers.

Influence of Probation Events on Outcome. A **regression** analysis was used to determine the main effects and interactions of three probation events on probation outcome. The events were number of contacts with the probation officer, number of drug tests given, and whether or not the probationer was enrolled in a treatment program. These variables are events that happen at a direct result of the probation sentence and were analyzed separately from the variables available at intake for this reason. Results of the analysis showed significant main effects for *number of drug tests* ( $F=12.70$ ,  $p<.001$ ) and *number of contacts with probation officer* ( $F=124.70$ ,  $p<.0001$ ) and a significant interaction between number of tests and number of contacts ( $F=14.65$ ,  $p<.0001$ ). There was no main effect for enrollment in drug program on probation outcome (see Table 5).

Table 5.

Regression Analysis of Relationship of Drug Testing, Contacts, and Treatment to Probation Outcome.

Source	d f	F
Number of drug tests	1	12.70*
Number of contacts	1	124.70**
Drug program participation	1	2.78
Interaction: number of tests and number of contacts	1	14.65**

\* p is less than .001

R-squared = 0.1978

\*\* p is less than .0001

N = 635

Using the Student-Newman Keuls test, analysis of the variable number of tests showed that successful probationers (M=1.61, n=455) were tested a significantly greater number of times than unsuccessful probationers (M=0.82, n=186;  $p < .0001$ ). Not surprisingly, successful probationers also saw their probation

officers significantly more often ( $M=9.24$   $n=455$ ) than did their unsuccessful counterparts ( $M=4.84$ ,  $n=186$ ;  $p<.0001$ ). The significant interaction between number of contacts and number of drug tests was expected because drug testing takes place as a part of a probationer's monthly reporting. Therefore, the greater number of contacts a probationer has with his or her officer, the more likely it is that he or she will be tested frequently. Although the effect did not reach standard levels of significance, it is valuable to note that a greater percentage of successful probationers participated in drug programs (24.7%,  $n=112$ ) than unsuccessful probationers (18.8%,  $n=35$ ).

Relationship Between Drug Use and Outcome. In order to evaluate whether probationers with a drug charge as an instant offense were more likely to fail on probation than their non-drug offender counterparts, the frequency of law and technical violations among drug and non drug offenders were analyzed. The distribution of these data limited the interpretation to a descriptive level.

Overall, a higher percentage of non-drug offenders have remained law and technical violation free. Over 28% of non-drug offenders have not committed a technical violation, compared to 20.9% of drug offenders (see Table 6). Although the difference is not nearly as pronounced, 78.1% of non-drug offenders have remained law violation free, while this is true for 76.9% of drug offenders (see Table 7).

There are seven technical violations a probationer can commit: fee delinquency, failure to secure employment, failure to support



dependents, positive urine tests, failure to report, absconding, and “other” (e.g., failure to participate in a treatment program). Drug offenders committed a substantially higher percentage of all but one technical violation, failure to support dependents. Non-drug offenders committed fewer technical violations overall. Table 6 contains the information regarding frequency of technical violations for drug vs. non-drug offenders.

Table 6.

Frequency of Technical Violations for Drug vs. Non-Drug **Offenders.**

Violation type	% committed	
	Drug offender (N=278)	Non-drug offender (N=366)
None	20.9%	28.2%
Fee delinquency	62.5%	56.8%
Failure to secure employment	10.2%	5.6%
Failure to support dependents	0.7%	1.1%
Positive urinalysis	20.1%	6.9%

Table 6. (cont'd)

Violation type	% committed	
	Drug offender (N=278)	Non-drug offender (N=366)
Failure to report	51.9%	45.7%
Absconder	10.6%	5.3%
Other	29.7%	20.2%

There are four types of law violations probationers can commit: DWI, theft or burglary, possession or sale of drugs, and “other” (e.g., assault). Not surprisingly, drug offenders committed a higher percentage of drug violations whereas non-drug offenders (composed primarily of theft offenders) committed a higher percentage of theft or burglary violations. Table 7 contains the information regarding frequency of law violations for drug vs. non-drug offenders.

Table 7.Frequency of Law Violations for Drug vs. Non-Drug Offenders.

Violation type	% committed	
	Drug offender (N=278)	Non-drug offender (N- 366)
None	76.9%	<b>78. 1%</b>
DWI	2.9%	<b>3. 3%</b>
Theft/Burg lary	<b>6. 5%</b>	<b>11. 2%</b>
Drug sale or possession	<b>7. 6%</b>	<b>2. 7%</b>
Other	6.1%	<b>4. 7%</b>

In summary, it seems that although non-drug offenders are more likely to remain free of technical violations than drug offenders, they are no more likely to remain free of law violations while on probation. Also, offenders tend to commit law violations similar to that for which they received probation: drug offenders

commit drug violations and non-drug offenders commit theft or burglary violations.

Relationship Between Positive Drug Tests and Outcome. Fifty-eight percent of the total sample was tested for drugs on at least one occasion. Of this group, 25 percent had at least one positive drug test. Frequency analyses showed that 37.6 percent of probationers who tested positively failed probation, compared to 16.3 percent of those who had no positive drug tests (see Table 8). In addition, the highest success rate (51.1%) was found among probationers who were tested for drugs at least **once, but did not** show evidence of drug use. The highest failure rate (56.9%) was found among probationers who were not tested at all for drug use. These differences yielded a significant chi-square (chi-square=6.9,  $p<.05$ ). This finding suggests that drug testing may function as a deterrence to criminal behavior.

Table 8.

Relationship Between Positive Drug Tests and Outcome.

Positive Drug Tests	Success (N=455)	Failure (N=186)
No testing done	165 (36.3%) 60.8%	106 (56.9%) 39.2%
0 positive tests	232 (51.1%) 83.7%	(24.3%) 16.3%
1 or more positive tests	58 (12.6%) 62.4%	35 (18.8%) 37.6%

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Chi-square=6.920,  $p < .05$

Outcome of Treated vs. Untreated Drug Users. One rationale for classification and drug testing of probationers is to identify rehabilitation needs. Therefore, an analysis of the relationship between treatment program participation and success on probation for drug offenders was conducted.

The results showed that 32.1 percent of the total number of drug offenders failed probation. Contrary to what was expected, a higher probation success rate was found among drug offenders who did *not* participate in a treatment program (57.0%) than among those who did participate (43.0%). However, it is encouraging that a higher number of probationers who failed were not participating in an alcohol or drug treatment program (73.9%) compared to those who were participating (26.1%). These differences were statistically significant (chi-square=7.2,  $p < .01$ ) and the data are presented in Table 9.

Table 9.

Relationship Between Drug Treatment and Outcome: Drug Offenders Only.

Treatment Program	Success (N=186)	Failure (N=88)
Treatment participation	80 (43.0) 77.7%	23 (26.1%) 22.3%
No participation	106 (57.0%) 62.0%	(73.9%) 38.0%

Chi-square=7.251,  $p < .01$

## DISCUSSION AND POLICY IMPLICATIONS

The major weakness of these data is the non-random assignment of offenders to drug testing procedures. Ideally, each offender in this study should have had an equal chance of being tested for drug use. If this were the case and probationers who were frequently tested for drug consistently exhibited greater rates of success, a strong argument could be made for drug testing as an effective monitoring strategy. Unfortunately, the decision to test probationers in this sample was based on past social history and the instant offense. Therefore, interpretation of the data must take this factor into account.

Does Drug Testing Make a Difference? With the above qualification, the salient finding of this investigation was the effect of drug testing frequency on probation recidivism. Acknowledging that the frequency of drug testing was low for both successful ( $M=1.61$ ) and unsuccessful ( $M=0.82$ ) probationers, the difference was statistically significant. The difference in outcome may be explained by a self-selection bias in which probationers possessing the attributes of success better conform to the conditions of probation (e.g., reporting, paying fees, submitting to drug testing) than those who do not possess these attributes.

Although drug testing appeared to facilitate the rehabilitation process, it is important to note that probationers who failed drug tests were still more likely to fail probation. Probationers who tested positive for drug use had over twice the failure rate than

those who did not exhibit drug use (38% vs. 16%). These results are consistent with the study of Toborg et al. (1989) which showed that defendants who continued to participate in a drug surveillance program had the lowest rearrest rate. The present analysis also confirms the findings of Smith et al (1989) in which positive drug test results were associated with higher rearrest rates. These findings support a case for timely intervention on behalf of probationers with drug use problems. Given that probation failure frequently occurs within the early stages of supervision, the delay of interventions may contribute to negative outcomes. It also suggests that the frequency of drug testing may be reduced for those who test negatively over a six to ten month period and participate in drug treatment programs.

Does Participation in Treatment Contribute to the Success of Drug offenders? Surprisingly, our data showed that, among drug offenders, the highest success rate was found for those probationers who did *not* participate in a treatment program. This seems to suggest that if a drug offender has the attributes of success (e.g., older, low classification risk score, few prior felony convictions), participation in a treatment program may not make much of a difference. Contrary to this, the data also showed that of the drug offenders who failed on probation, 73.9 percent were not enrolled in programs and 23.1 percent were in programs. This may suggest that participation may increase the likelihood of success for probationers who may be prone to failure (younger, higher risk score, prior felony convictions). This finding underscores the need for



improvements in the classification procedures to avoid indiscriminate or wholesale assignment of drug offenders to treatment programs, regardless of actual risk to public safety or need for treatment.

At this juncture policymakers must recognize that drug offenders have unique programmatic needs. A greater effort must be made to identify offenders with a higher probability of failing due to their tendency to return to drug abuse. This cycle cannot be broken without addressing the rehabilitation needs of the abuser.

Drug Testing: Sanction vs. Treatment. This brings us to the purpose of drug testing offenders at both the pretrial and sentencing stage. Mandatory random drug testing of criminal offenders in the absence of bona fide treatment programs constitutes punishment. If the primary objective of drug testing is to identify high risk individuals for pretrial release and probation, the inevitable consequence will be a restrictive bail and sentencing policy. If the purpose of drug testing is to help the offender break through his or her denial of illicit drug use and match him or her with appropriate treatment resources, this procedure is a rehabilitative mechanism.

Due to society's extremely negative reaction to illegal drug use and the failure to provide adequate treatment programs, drug testing has emerged as an additional sanction against the offender. Until policymakers move beyond the mere *establishment* of drug detection programs, many offenders with these problems may continue to recidivate and regress to illicit drug use. This possibility demonstrates the crucial need for more objective research to

determine the most appropriate interventions for offenders with drug histories.

## AUTHORS' NOTE

†Although the studies by Smith et al. (1989) and Belenko and Mara-Drita (1988) purport to use the same data set, there appears to be a serious discrepancy in the number of cases used for analysis (1967 vs. 2645). This discrepancy is unacknowledged by Smith et al., and may contribute to their contradictory findings.

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