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AN EXPERIMENT TO ENHANCE THE REPORTING OF DRUG USE BY ARRESTEES

by

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## ABSTRACT

The validity of the reports of drug use obtained from interviews with arrestees is of great importance to the planners of the Arrestee Drug Abuse Monitoring (ADAM) program. Drug Use Forecasting (DUF) program results suggest that many arrestees underreport their recent drug use and that sites may vary considerably in their degree of underreporting. An experiment was undertaken to determine whether modifying some of the DUF data collection procedures might enhance self-reporting without adversely affecting study response rates. A 2x2 factorial design was used to assess the effects of two manipulations. The first experimental condition involved administering the standard DUF informed consent or an enhanced consent that told the arrestees more about the confidential nature of the research and the capabilities of the urinalyses. The second condition involved collecting the urine specimen before or after the interview was administered. A total of 2,009 arrestees in the Cleveland, Detroit and Houston DUF sites were approached to participate in the study and randomly assigned to one of the four experimental cells. Findings indicated that: 1) none of the experimental conditions affected the interview and urine response rates; 2) whether an arrestee received the standard or enhanced informed consent did not affect self-reports of drug use; 3) while some comparisons indicated that the urine first condition raised the rates of self-reporting, these differences were not found in more than one site. Recommendations are provided regarding the apparent robustness of arrestee cooperation rates, the advisability of using a succinct informed consent, and the potential usefulness of asking for the urine specimen before conducting the interview.

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## BACKGROUND AND DESIGN OF THE EXPERIMENT

Since the Drug Use Forecasting (DUF) program began in 1987, it has become evident that arrestees interviewed in booking facilities underreport their recent use of illicit drugs (Gray 1996; Mieczkowski 1990; Wish and Johnson 1986). In spite of the many attempts to convince arrestees that their responses are part of a confidential and anonymous research study and cannot affect their cases, DUF results have repeatedly shown that two to four times as many recent drug users are detected by the urinalysis tests than by the interview responses (Harrison et al., 1990).

Underreporting is an even greater potential problem for the DUF program because its extent varies by site. Table 1 shows the percentage of cocaine positive arrestees in all DUF sites in 1995 and 1996 who self-reported using that drug in the three days prior to interview. The percentages for males ranged from a high of 65% in Houston, to a low of 25% in San Antonio. For females the percentages ranged from 73% in Manhattan to 32% in San Antonio.

These considerable differences between DUF sites in the validity of self-reports of recent drug use have important implications for the research uses of the self-report information to be obtained in the National Institute of Justice's (NIJ) newly launched Arrestee Drug Abuse Monitoring (ADAM) program. If arrestees fail to report their drug use accurately and if the level of underreporting varies from site to site, then the usefulness of ADAM data for research purposes might be compromised. NIJ therefore asked the Center for Substance Abuse Research (CESAR) to conduct an experiment in three DUF sites to assess whether changes in the DUF consent procedures and the sequence of the interview and urine specimen collection would improve the validity of arrestees' self-reports of drug use in the DUF interview. The potential impact of these procedural changes on interview and urine specimen response rates was also assessed.

### EXPERIMENTAL CONDITIONS

The two conditions that were tested in the experiment were conceived in response to suggestions from NIJ staff and DUF project directors. Each is explained below.

#### Enhanced versus standard informed consent

The standard DUF protocol calls for a brief description of the purposes of the study and of the anonymous and confidential nature of the information obtained. It was hypothesized that a more extensive description of the study, its confidentiality safeguards, and the uses of the urinalyses would enhance respondents' self-reports of drug use. Standard and enhanced informed consent scripts were written for use by interviewers in soliciting participation of arrestees.

## Interview first versus urine specimen first

The standard DUF procedure is to interview the arrestee and then request a urine specimen. It was hypothesized that by asking for the urine specimen before conducting the interview, the arrestee might be more likely to provide accurate reports of recent drug use.

### RESEARCH DESIGN

The study used a 2x2 factorial design with respondents being randomly assigned to one of the four cells depicted below. Cell A represents the typical DUF protocol. Interviewers administer the standard consent and request the urine specimen after the interview has been completed. In Cell B researchers also administer the standard consent but ask for the specimen prior to conducting the interview. Cells C and D use the enhanced informed consent and ask for the specimen after or before the interview, respectively.

The factorial design enables us to compare the four cells separately, but also to combine pairs of cells to estimate the main effects of consent type (A+B vs. C+D) and of timing of specimen collection (A+C vs. B+D). A statistical power analysis indicated that a power of .80 to detect a 10% difference between cell A and the remaining three cells at the  $p = .05$  level required a sample size of 1,600 arrestees, 400 per cell.

FIGURE 1. EXPERIMENTAL CONDITIONS

		<u>Level of Informed Consent</u>	
		Standard	Enhanced
<u>Specimen Collection</u>	After Interview	A (Standard DUF)	C
	Before Interview	B	D

## METHOD

### PARTICIPATING SITES

Three DUF sites were selected to participate in the experiment. Sites were chosen to represent different interviewing conditions and to fit in with the experiment's data collection schedule. Sites already participating in a sampling experiment sponsored by NIJ were excluded. From the remaining pool, sites were selected in which the collection logistics preserved the experimental conditions as best as possible (minimized sample contamination) and the collection periods did not overlap with other sites selected for the experiment. From the three sites selected, the collection staff from Cleveland and Detroit were university based while Houston interviewers were medical staff affiliated with the Houston Police Department. Data were collected in Cleveland between July 8 and August 22; in Detroit from August 4 to September 27; and In Houston from October 17 to November 1, 1997.

### EXPERIMENTAL SCRIPTS

Four scripts were prepared representing the four experimental cells (See Appendix A). The scripts were constructed in conjunction with NIJ staff with input from DUF site staff. A separate script was available for each arrestee approached and automatically assigned the arrestee to one of the four cells. The scripts were constructed so that each guided the interviewer through the sequence of steps to be taken for the experimental condition assigned to the arrestee being interviewed. The experiment was designed so the only variability across the interviews was the manipulation of informed consent and sequence of requesting the urine specimen. All other procedures of a standard DUF collection, such as providing candy bars to arrestees participating in the study, were followed.

*I tried to delay their knowledge that they would be getting candy until after int. before urine*

### SITE PREPARATION

Data collection was divided into 2 phases. During the first phase of data collection arrestees were randomly assigned to cells A or C. Both of these cells required the collection of the specimen after the interview. After Phase I was completed interviewers began to fill cells B and D, where the urine specimen was collected before the interview. We believed that if all four cells had been assigned during the same time period, some of the arrestees might observe the timing of the specimen and this might affect the results.

Approximately 3-4 weeks prior to the scheduled start date for Phase 1, the site director/coordinator was contacted to confirm arrangements for the start date and determine the number of interviewers that will be used for data collection.

One week prior to the training date, the materials for the training and data collection were shipped to the site. These materials include interviewer training folders, daily log sheets for both phases, and a site procedures checklist for the site coordinator. Shipping materials were provided for weekly shipments of log sheets to CESAR. The site package also contained two hundred copies of each of the 4 scripts. In order to maintain experimental conditions, the scripts were randomized for use in each phase of the experiment. To randomize the scripts for each phase, the scripts were first photocopied so that the 2 scripts alternate, every other one. The 400 sheets were then broken into smaller stacks and shuffled by picking up varying numbers of sheets from each stack and merging them together. The shuffling step was then repeated several times.

#### ON-SITE TRAINING

Once on site, the trainer met with the study principals (site director, site coordinator, lead interviewer, and facility liaison) to introduce the experiment. Usually a tour of the booking facility and collection area was arranged in order for the trainer to get an overview of the selection process and collection logistics.

Prior to the first day/evening of data collection, the trainer conducted interviewer training for the experiment. The training session included introduction and purpose of experiment, presentation of scripts, walk through of collection procedures, and role playing to address expected scenarios and those proposed by interviewers. The material in the interviewer training folders served as a guideline to scenario responses. Training usually required sixty to ninety minutes to complete.

At the conclusion of the training session, the trainer assisted the site coordinator with the experiment materials (collating scripts with interview forms) and interviewing then begins for the day/evening. The role of the trainer during data collection was to observe (either sit in with an interviewer or observe at a discrete distance) several interviews to insure that interviewers were utilizing the scripts correctly and provide some initial guidance in assisting with informed consent questions. The trainer was also responsible for instructing the site coordinator on managing the scripts, completing the experiment log sheet, and forwarding log sheets (faxed on a daily basis to CESAR) and scripts (overnighted once a week to CESAR). While on site, the trainer made observation notes for inclusion in a travel memo/site report. Observations include a description of the training session, facility, flow rates, interview area, agreement rates, site procedures that effect experiment, and both interview and subject comments/reactions to the experiment. The NIJ project officer for the experiment also visited sites to observe the experiment.



The trainer was usually on site for 2-3 days/evenings of data collection to insure that all interviewers have been trained and the site has incorporated all requirements of the experiment. In Cleveland and Detroit, the trainer returned to the site to assist in the transition from phase 1 to phase 2 of the experiment.

#### OFF-SITE MONITORING

Each day, the site coordinator faxed the daily log sheet from data collection to CESAR so that agreement rates could be monitored and the second phase commencement could be targeted. Once a week, the scripts from the prior week of collection were overnighted to CESAR so the counts from the log sheets could be verified and the script follow-up questions edited. The trainer communicated with the site coordinator on a weekly basis to monitor conditions and maintain the morale and momentum of the experiment.

#### DATA PROCESSING

Interviews and urine specimens collected for the experiment were processed as in a regular DUF collection. A merged SPSS/Win interview data file containing all interviews initiated and urine test results was forwarded to CESAR by AMS, the DUF data processing contractor. CESAR staff constructed an SPSS/Win data file that merged variables denoting the cell to which the arrestee had been assigned (A, B, C, or D) and responses to additional questions about the experiment recorded on the script sheet. This file of data was then merged with the interview data file to construct a final analysis file.

## FINDINGS

### IMPLEMENTATION OF THE EXPERIMENT

The on-site observers indicated that facility staff and research interviewers attempted to maximize the number of arrestees interviewed for the purpose of the experiment (each site was asked to almost double the number of interviews for a quarterly collection) and to minimize contamination of the interviewee pool from subjects introduced to the study. However, in some cases the pooling of arrestees in the interview area could have resulted in subjects being biased by arrestees who had already been interviewed. These effects were minimized in Detroit and Houston where arrestees were pulled individually or in pairs from lockup and returned to their cells following completion of the interview.

The interview environments in each of the three sites were similar--private to semi-private rooms suitable for the exchange of sensitive questions and responses. In Cleveland, interviews for males and females were in the same location, but not at the same time. Female arrestees in Detroit and Houston were interviewed at locations separate from male arrestees.

Observations by the trainers and from the debriefings of interviewers uncovered no procedures that were detrimental to the integrity of the experiment. In Cleveland and Detroit, where reduced arrestee flow required a longer field schedule than originally anticipated, interviewer morale and conflicts with scheduling became a concern. Data collection in these sites was therefore terminated prior to achieving the targeted number of cases. The high volume of arrestees in the Houston site compensated for the shortage of arrestees studied in the other two sites.

Overall, all three sites appeared to adhere to the experiment design and the instructions provided during the training. While the experiment compared the effects of three experimental conditions to the standard DUF protocol (Cell A), it should be noted that for script A, the experiment imposed a more uniform consent procedure than that typically followed by DUF sites. In some DUF sites, interviewers are allowed to tailor the presentation of the study introduction to the individual arrestee.

Some interviewers did mention to the observer, that they felt more comfortable with the experimental conditions where they asked for the urine specimen before administering the interview. They stated that they did not like surprising the arrestee with the request for a urine specimen after they had built up a measure of trust during the interview.

## ANALYTIC APPROACH

We shall begin by comparing the characteristics of the arrestees assigned to each of the four conditions, so as to ensure that the random assignment yielded comparable groups. We then will examine any differences in interview and urine response rates. We will conclude with a set of analyses comparing self-reported drug use.

The comparisons of the experimental cells will be presented in two formats. First, we shall compare the four experimental conditions to each other. In addition, we will combine cells to show the main effects for the standard versus enhanced consent (cells A+B vs. C+D) and for the interview first versus the specimen first conditions (A+C vs. B+D).

Comparisons were first made for the three sites combined. Differences were tested by the chi square statistic with a 2-tailed distribution with  $p \leq .05$ . Any statistically significant differences were then looked at in each site separately. A difference that was found in the combined sample needed to replicate in at least two of the sites for us to consider the difference to be meaningful.

## COMPARABILITY OF PERSONS ASSIGNED TO THE EXPERIMENTAL GROUPS

Before comparing the impact of the four experimental conditions on the arrestee, it was important to ensure that the random assignment resulted in four comparable groups of respondents. There was some information, taken from arrest records or booking slips, that was available for both persons who agreed or declined to participate in the experiment. As Table 2 shows the arrestees approached to participate in each of the four cells did not differ with regard to gender, ethnicity, age or characteristics of the index arrest. However, the main effect for interview versus urine specimen first was significant. Arrestees who were assigned to the urine first condition were somewhat more likely to be charged with a drug offense (19% vs. 15%) and to be charged with a felony offense (77% vs. 73%). These differences were small, however, and separate site analyses replicated these differences in only one of the three sites (Houston). We conclude that the random assignment resulted in similar types of arrestees being assigned to the four conditions.

## INTERVIEW AND URINE SPECIMEN RESPONSE RATES

One possibility that the experiment was designed to explore was whether changing the traditional procedures followed by the DUF program might reduce the likelihood that arrestees would agree to participate and to provide a urine specimen. Table 3 shows, however, that there were no differences in the interview or urine specimen response rates across the four conditions. Between 80% and 85% of all arrestees approached agreed to be interviewed, regardless of the type of consent or the order of

specimen and interview administration and between 88% and 92% of the participants in the four conditions provided a urine specimen.

#### COMPARISON OF THE PARTICIPANT SAMPLES ACROSS THE FOUR CONDITIONS

It was possible that the four experimental cells of arrestees that agreed to participate in the experiment might differ from each other. Table 4 compares the characteristics of all of the arrestees who agreed to participate in the experiment. Age and ethnicity were similar, but some minor differences were detected between the experimental groups. Persons asked to provide the specimen first were more likely to be males (71% vs. 66%), to be charged with a drug offense (18% vs. 14%) and a felony charge (77% vs. 71%). Separate analyses, by site indicated that these differences were found in no more than one of the three sites. Moreover, these differences do not appear to be substantial enough to bias the results of the experiment.

#### SELF-REPORTED DRUG USE--ALL RESPONDENTS

It was hypothesized that the experimental conditions might enhance the respondents' willingness to report alcohol or other drug use. Table 5 compares self-reported use of substances ever in lifetime, during the past month, and during the past three days. Lifetime use of six of the seven drugs was similar across the experimental conditions. Crack cocaine, however, was somewhat more likely to be reported among persons asked to provide the urine specimen before being interviewed (36% vs. 31%). Persons asked to provide the specimen first were also more likely to report past month use of alcohol, marijuana and crack cocaine. Use of alcohol in the past three days was more likely to be reported by persons receiving the enhanced consent and those asked to provide the urine specimen first.

It is noteworthy that while differences in reporting of crack cocaine were found, no differences were found with regard to powder cocaine. This may make sense, in view of the greater stigma attached to crack use on the street, resulting in more underreporting of this drug. The experimental manipulations may thus have more of an opportunity to affect underreporting of crack.

Individual cell comparisons shed some light on the effect of the experimental conditions. The standard DUF procedure (Cell A) yielded an estimate of 17% using crack in the past month, compared with 23% when the standard consent was given but the specimen was taken before the interview (Cell B). Adding the enhanced consent to the urine first condition (Cell C) did not enhance reporting more (21%). Alcohol use in the past 3 days was least likely to be reported in the standard DUF condition (Cell A) but was quite similar in the three other conditions (47%-51%).

The statistically significant differences above were examined separately by site in Table 6. None of these differences replicated in more than one of the three sites. For example, lifetime use of crack was higher among persons who provided the specimen before being interviewed in Houston, especially among those who also received the standard consent (36%). While the results in the other two sites were in the same direction, they did not reach statistical significance.

Crack cocaine use in the past 30 days was more likely to be found among persons in Cleveland who were asked to provide the specimen first. Statistically significant differences were not found in Detroit or Houston, although the results were in the same direction. Nevertheless, the differences were meaningful in Cleveland. The standard DUF procedure yielded an estimate of 14%, about half of the estimates from arrestees who provided a urine specimen first (Cell B and D).

The only comparison which indicated a difference between arrestees according to the type of informed consent was found among arrestees in Cleveland. Use of alcohol in the past 72 hours was more likely to be reported by the arrestees who received the enhanced consent than the standard consent (46% vs 34%).

The different estimates of crack use in the past 30 days found between the standard DUF procedure and the urine first conditions for arrestees in Cleveland prompted us to build a logistic regression model to control for other factors that might have influenced the arrestees' self-reports. Based on the work of Gray 1996, we identified several variables that were related to self-reports of cocaine use in an arrestee sample. These include prior drug treatment and an index arrest for a drug charge. In addition, we added variables to the model to account for ethnicity, age, and gender.

Table 7 shows the logistic model for Cleveland arrestees. Even after controlling for these other factors, arrestees who were assigned to Cells C or D (urine first conditions) were more likely to report use of crack cocaine during the prior 30 days. Other significant variables were ethnicity, prior treatment and age. Findings for Cleveland arrestees indicate that non-white arrestees, those with prior treatment experience, and older arrestees were more likely to self-report crack use in the past 30 days. White arrestees were less likely to report crack use, possibly reflecting ethnic differences in the use of crack cocaine. In the other two sites, the only significant condition was Cell D (urine first, enhanced consent) in Detroit.

#### SELF-REPORTED DRUG USE--DRUG POSITIVE RESPONDENTS

The comparisons of drug use could be affected by both the arrestees' level of drug use and their willingness to report use. It is possible, however, that drug use in the four groups was not

similar. The analyses in Table 8, attempt to limit variation in drug use across the four cells by looking at self-reports of recent use only among persons who tested positive for the drug by urinalysis.

Table 8 shows that about the same percentage of the persons who tested positive for cocaine or marijuana reported using the drug in the prior 72 hours, regardless of experimental condition. Between 43% and 46% of persons positive for cocaine reported using the drug and 56% to 61% of the marijuana positives reported using marijuana. The only difference occurred with regard to opiate positives and this was caused by a small number of persons in Cell A (N=17) of whom only 18% reported using an opiate. However, the reporting of opiates by arrestees in the other three conditions was similar (58%-63%). Analyses of self-reported use in the past 30 days yielded similar findings (no differences in self-reports for cocaine and marijuana, and fewer opiate positives reporting use in Cell A than in the other 3 conditions). Separate analyses for male and female arrestees also showed no differences in reporting of marijuana and cocaine. There were too few cases for opiate positives for analysis by gender. These findings provide strong evidence that the experimental manipulations did not enhance the validity of self-reports of recent use of these drugs.

## DISCUSSION AND RECOMMENDATIONS

We found that the experimental conditions did not affect the willingness of the arrestees to be interviewed or provide a urine specimen. The findings suggest that arrestee cooperation is fairly robust and that ADAM researchers may not have to be too wary of modifying procedures to achieve other goals.

We had hoped that some of the modifications to the DUF procedures that were tried in the experiment would enhance self-reporting of drug use. However, the analyses showed almost no systematic impact of the experimental conditions on arrestee's willingness to report recent drug use. While there were several interesting indications that providing the urine specimen before the interview enhanced reports of drug use, none of these effects were so strong that they showed up consistently across the three sites. Perhaps most telling was the finding that none of the experimental conditions affected the self-reporting of recent use of drugs among persons who tested positive by urinalysis. Moreover, in response to questions on the script administered after participating, only about 5% of the arrestees indicated that they thought that changing the point of requesting the urine specimen would alter their responses.

The enhanced consent procedure did not influence response rates or self-reporting. ADAM sites could therefore adopt a briefer informed consent process similar to that used in DUF, as long as it protects human subjects.

While any recommendations would benefit from additional pilot testing, we would suggest that ADAM researchers consider obtaining the urine specimen before conducting the interview. Assuming that the logistics of obtaining the specimen before the interview are not prohibitive across ADAM sites, such a strategy might enhance self-reporting of drug use as it did in some instances in this experiment. Asking for the specimen first apparently would not adversely affect participation, and according to the remarks of some interviewers, it might make them feel more comfortable than "springing" the request on the arrestee after the interview.

**Table 1**  
**Percentage of Arrestees Positive for Cocaine that Reported Using the Drug**  
**in the 72 Hours Prior to the Interview, by Site and Respondent Gender**  
 (All arrestees interviewed with new DUF instrument in 1995 and 1996  
 who tested positive for cocaine)

Site:*	Male Respondents		Female Respondents	
<b>Houston</b>	<b>(N=453)</b>	<b>65%</b>	<b>(218)</b>	<b>41%</b>
Los Angeles	(583)	56%	(339)	58%
Fort Lauderdale	(541)	54%	(294)	60%
Manhattan	(878)	53%	(441)	73%
Philadelphia	(394)	50%	(253)	66%
Atlanta	(595)	49%	(285)	54%
Indianapolis	(674)	49%	(381)	62%
Birmingham	(361)	49%	(122)	62%
Miami	(669)	47%	**	**
New Orleans	(660)	46%	(170)	50%
Portland	(457)	46%	(299)	52%
San Diego	(355)	46%	(103)	58%
Denver	(484)	45%	(271)	52%
San Jose	(273)	44%	(115)	45%
Phoenix	(374)	44%	(295)	53%
Dallas	(443)	44%	(234)	56%
Washington, D.C.	(441)	40%	(192)	56%
Chicago	(636)	39%	**	**
<b>Cleveland</b>	<b>(419)</b>	<b>39%</b>	<b>(285)</b>	<b>65%</b>
<b>Detroit</b>	<b>(263)</b>	<b>37%</b>	<b>(105)</b>	<b>53%</b>
Omaha	(301)	37%	(50)	46%
St. Louis	(515)	35%	(215)	60%
San Antonio	(367)	25%	(137)	32%

\*Bolded sites participated in the experiment.

\*\*Data not collected.



**Table 2**  
**Sample Characteristics**  
**(All Arrestees Approached in Cleveland, Detroit, and Houston)**

	Standard Consent		Enhanced Consent		Main Effects	
	A Interview 1st	B Urine 1st	C Interview 1st	D Urine 1st	Standard vs. Enhanced	Interview 1st vs. Urine 1st
<b>Gender: (N)</b>	(496)*	(495)	(509)	(509)		
Male	67%	69%	67%	70%	68% / 69%	67% / 69%
<b>Race:</b>						
Black	72%	69%	65%	70%	70% / 67%	68% / 69%
White	16%	17%	21%	17%	16% / 19%	19% / 17%
Hispanic	12%	13%	13%	13%	12% / 13%	12% / 13%
<b>Age:</b>						
<21	16%	19%	16%	18%	17% / 17%	16% / 18%
21-25	22%	24%	20%	23%	23% / 22%	21% / 24%
26-30	19%	16%	19%	15%	17% / 17%	19% / 15%
31-35	16%	16%	15%	14%	16% / 15%	16% / 15%
35+	27%	25%	30%	30%	26% / 30%	29% / 27%
<b>Criminal Characteristics:</b>						
Drug Charge	15%	18%	16%	19%	16% / 17%	15% / 19%**
Felony Charge	75%	77%	71%	77%	76% / 74%	73% / 77%**

\*N's may vary slightly because of missing data.

\*\* $p < .05$

**Table 3**  
**Interview and Urine Response Rates**  
**(All Arrestees Approached in Cleveland, Detroit, and Houston)**

Percent of Arrestees Who	Standard Consent		Enhanced Consent		Main Effects	
	A Interview 1st	B Urine 1st	C Interview 1st	D Urine 1st	Standard vs. Enhanced	Interview 1st vs. Urine 1st
Agreed						
To Interview	(N=496) 84%	(495) 81%	(509) 80%	(509) 85%	83% / 82%	82% / 83%
Of Interviewed, Provided Urine	(416) 92%	(403) 92%	(409) 88%	(430) 92%	92% / 90%	90% / 92%

**Table 4**  
**Sample Characteristics**  
**(All Respondents in Cleveland, Detroit, and Houston)**

	Standard Consent		Enhanced Consent		Main Effects	
	A Interview 1st	B Urine 1st	C Interview 1st	D Urine 1st	Standard vs. Enhanced	Interview 1st vs. Urine 1st
<b>Gender: (N)</b>	(416)*	(403)	(408)	(430)		
Male	66%	71%	67%	72%	68% / 70%	66% / 71%**
<b>Race:</b>						
Black	69%	66%	63%	69%	68% / 66%	66% / 68%
White	18%	17%	23%	17%	17% / 20%	20% / 17%
Hispanic	13%	15%	14%	14%	14% / 14%	13% / 15%
<b>Age:</b>						
<21	17%	20%	16%	19%	19% / 18%	17% / 19%
21-25	21%	25%	20%	22%	23% / 21%	20% / 23%
26-30	19%	15%	18%	15%	17% / 17%	18% / 15%
31-35	16%	17%	15%	14%	17% / 14%	15% / 16%
35<	28%	23%	30%	30%	26% / 30%	29% / 27%
<b>Criminal Characteristics:</b>						
Drug Charge	14%	19%	14%	18%	17% / 16%	14% / 18%**
Felony Charge	73%**	77%**	68%**	76%**	75% / 72%	71% / 77%***

\*N's may vary slightly because of missing data.

\*\* $p < .05$ , \*\*\* $p < .01$

**Table 5**  
**Percentage of Arrestees Who Reported Use of Selected Substances,**  
**by Experimental Condition**

Ever Use	Standard Consent		Enhanced Consent		Main Effects	
	A	B	C	D	Standard vs. Enhanced	Interview 1st vs. Urine 1st
	Interview 1st	Urine 1st	Interview 1st	Urine 1st		
Alcohol	(N=416) 92%	(403) 93%	(408) 91%	(430) 94%	92% / 92%	91% / 94%
Tobacco	(416) 78%	(402) 78%	(408) 77%	(430) 80%	78% / 78%	78% / 79%
Marijuana	(416) 75%	(402) 80%	(408) 74%	(430) 77%	77% / 76%	75% / 78%
Crack Cocaine	(416) 33%*	(402) 38%*	(408) 29%*	(430) 35%*	35% / 32%	31% / 36%*
Powder Cocaine	(416) 29%	(402) 30%	(408) 31%	(430) 31%	30% / 31%	30% / 31%
Heroin	(416) 10%	(402) 14%	(408) 11%	(430) 12%	12% / 12%	11% / 13%
Valium	(416) 13%	(400) 16%	(408) 15%	(430) 14%	15% / 15%	14% / 15%

Past Month Use	Standard Consent		Enhanced Consent		Main Effects	
	A	B	C	D	Standard vs. Enhanced	Interview 1st vs. Urine 1st
	Interview 1st	Urine 1st	Interview 1st	Urine 1st		
Alcohol	(414) 70%	(402) 76%	(408) 71%	(428) 75%	73% / 73%	71% / 76%*
Tobacco	(413) 64%	(400) 62%	(408) 64%	(428) 62%	63% / 63%	64% / 62%
Marijuana	(414) 36%	(402) 44%	(407) 37%	(430) 40%	40% / 39%	37% / 42%*
Crack Cocaine	(416) 17%*	(401) 23%*	(408) 16%*	(430) 21%*	20% / 19%	16% / 22%**
Powder Cocaine	(416) 7%	(401) 8%	(408) 6%	(430) 6%	8% / 6%	6% / 7%
Heroin	(416) 4%	(402) 8%	(407) 6%	(430) 7%	6% / 7%	5% / 7%
Valium	(415) 4%	(400) 6%	(408) 5%	(429) 6%	5% / 5%	4% / 6%

Past 3 Days Use	Standard Consent		Enhanced Consent		Main Effects	
	A	B	C	D	Standard vs. Enhanced	Interview 1st vs. Urine 1st
	Interview 1st	Urine 1st	Interview 1st	Urine 1st		
Alcohol	(415) 41%*	(402) 48%*	(408) 47%*	(430) 51%*	44% / 49%*	44% / 50%*
Tobacco	(414) 58%	(400) 55%	(408) 59%	(429) 57%	57% / 58%	58% / 56%
Marijuana	(415) 20%	(402) 27%	(407) 23%	(430) 25%	24% / 24%	22% / 26%
Crack Cocaine	(416) 13%	(402) 15%	(408) 11%	(430) 15%	14% / 13%	12% / 15%
Powder Cocaine	(416) 4%	(401) 5%	(408) 3%	(430) 4%	5% / 4%	4% / 4%
Heroin	(416) 3%	(402) 6%	(408) 6%	(430) 6%	4% / 6%	5% / 6%
Valium	(415) 2%	(400) 4%	(408) 3%	(429) 4%	3% / 3%	3% / 4%

NOTE: Substances for which less than 15% of the sample reported using were not included in this analysis.

\* $p < .05$ , \*\* $p < .01$

**Table 6**  
**Percentage of Arrestees Who Reported Use of Selected Substances,**  
**by Experimental Condition and Site**

<b>% Ever Used Crack Cocaine</b>						
<b>Site:</b>	<b>Standard Consent</b>		<b>Enhanced Consent</b>		<b>Main Effects</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Standard vs. Enhanced</b>	<b>Interview 1st vs. Urine 1st</b>
	<b>Interview 1st</b>	<b>Urine 1st</b>	<b>Interview 1st</b>	<b>Urine 1st</b>		
<b>Cleveland</b>	(N=119) 45%	(115) 50%	(116) 40%	(118) 47%	48% / 43%	43% / 49%
<b>Detroit</b>	(119) 28%	(123) 28%	(118) 29%	(130) 35%	28% / 32%	28% / 31%
<b>Houston</b>	(178) 28%*	(164) 36%*	(174) 21%*	(182) 29%*	32% / 25%	24% / 32%*

<b>% Used Alcohol in Past 30 Days</b>						
<b>Site:</b>	<b>Standard Consent</b>		<b>Enhanced Consent</b>		<b>Main Effects</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Standard vs. Enhanced</b>	<b>Interview 1st vs. Urine 1st</b>
	<b>Interview 1st</b>	<b>Urine 1st</b>	<b>Interview 1st</b>	<b>Urine 1st</b>		
<b>Cleveland</b>	(119) 74%	(115) 74%	(116) 78%	(118) 69%	74% / 74%	76% / 71%
<b>Detroit</b>	(117) 72%	(123) 80%	(118) 75%	(128) 80%	76% / 78%	74% / 80%
<b>Houston</b>	(178) 67%*	(164) 74%*	(174) 64%*	(182) 76%*	71% / 70%	65% / 75%**

<b>% Used Marijuana in Past 30 Days</b>						
<b>Site:</b>	<b>Standard Consent</b>		<b>Enhanced Consent</b>		<b>Main Effects</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Standard vs. Enhanced</b>	<b>Interview 1st vs. Urine 1st</b>
	<b>Interview 1st</b>	<b>Urine 1st</b>	<b>Interview 1st</b>	<b>Urine 1st</b>		
<b>Cleveland</b>	(119) 38%	(115) 49%	(116) 44%	(118) 48%	43% / 46%	41% / 48%
<b>Detroit</b>	(118) 42%	(123) 53%	(118) 47%	(130) 43%	47% / 45%	44% / 48%
<b>Houston</b>	(177) 31%	(164) 35%	(173) 27%	(182) 32%	33% / 30%	29% / 34%

<b>% Used Crack Cocaine in Past 30 Days</b>						
<b>Site:</b>	<b>Standard Consent</b>		<b>Enhanced Consent</b>		<b>Main Effects</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Standard vs. Enhanced</b>	<b>Interview 1st vs. Urine 1st</b>
	<b>Interview 1st</b>	<b>Urine 1st</b>	<b>Interview 1st</b>	<b>Urine 1st</b>		
<b>Cleveland</b>	(119) 14%*	(115) 28%*	(116) 14%*	(118) 25%*	21% / 19%	14% / 26%**
<b>Detroit</b>	(119) 15%	(122) 17%	(118) 19%	(130) 24%	16% / 21%	17% / 21%
<b>Houston</b>	(178) 20%	(164) 24%	(174) 15%	(182) 17%	22% / 16%	18% / 20%

<b>% Used Alcohol in Past 72 Hours</b>						
<b>Site:</b>	<b>Standard Consent</b>		<b>Enhanced Consent</b>		<b>Main Effects</b>	
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Standard vs. Enhanced</b>	<b>Interview 1st vs. Urine 1st</b>
	<b>Interview 1st</b>	<b>Urine 1st</b>	<b>Interview 1st</b>	<b>Urine 1st</b>		
<b>Cleveland</b>	(119) 34%*	(114) 33%*	(116) 43%*	(118) 48%*	34% / 46%**	38% / 41%
<b>Detroit</b>	(118) 45%	(124) 56%	(118) 57%	(130) 50%	50% / 53%	51% / 53%
<b>Houston</b>	(178) 43%	(164) 52%	(174) 44%	(182) 54%	47% / 49%	43% / 53%*

\* $p < .05$ . \*\* $p < .01$

**Table 7**  
**Logistic Regression Model: Crack Cocaine Self-Report Past 30 Days**  
**(Cleveland N=463)**

Variable:	B	S.E.	Sig.	Exp (B)
<b>Script</b>				
Cell A (N=119)				1.0000
Cell B (115)	.2547	.4184	.5427	1.2901
Cell C (113)	1.2884	.3915	.0010	3.6270
Cell D (116)	1.1179	.3932	.0045	3.0585
<b>Gender</b>				
Females (105)				1.0000
Males (358)	-.7046	.3010	.0192	.4943
<b>Race</b>				
Non-White (320)				1.0000
White (143)	-1.4559	.3446	.0000	.2332
<b>Charge</b>				
Non-Drug (290)				1.0000
Drug (173)	.2085	.2787	.4543	1.2319
<b>Prior Substance Abuse Treatment</b>				
None (305)				1.0000
Prior Tx (158)	1.8607	.2825	.0000	6.4280
<b>Age</b>	.0400	.0139	.0039	1.0408

**Table 8**  
**Percentage of DUF Arrestees at 3 Sites (Cleveland, Detroit, and Houston)**  
**that Reported Current Use of Cocaine, Marijuana, and Opiates,**  
**by Experimental Condition**  
**(Only Respondents Who Tested Positive For That Drug)**

Percent Reporting Use in Past 72hrs of:	Standard Consent		Enhanced Consent		Main Effects	
	A	B	C	D	Standard vs. Enhanced	Interview 1st vs. Urine 1st
	Interview 1st	Urine 1st	Interview 1st	Urine 1st		
Cocaine	(N=105)46%	(131)45%	(100)43%	(126)44%	45% / 44%	44% / 45%
Marijuana	(119)56%	(130)59%	(115)61%	(129)59%	57% / 60%	59% / 59%
Opiates	(17) 18%*	(26) 58%*	(23) 61%*	(27) 63%*	42% / 62%	43% / 60%

Percent Reporting Use in Past 30 Days of:	Standard Consent		Enhanced Consent		Main Effects	
	A	B	C	D	Standard vs. Enhanced	Interview 1st vs. Urine 1st
	Interview 1st	Urine 1st	Interview 1st	Urine 1st		
Cocaine	(N=105)56%	(131)58%	(100)54%	(126)60%	57% / 58%	55% / 59%
Marijuana	(118)79%	(130)83%	(115)82%	(129)83%	81% / 82%	80% / 83%
Opiates	(17) 18%**	(26) 65%**	(22) 64%**	(27) 70%**	47% / 67%	44% / 68%*

\* $p < .05$ , \*\* $p < .01$

## REFERENCES

Gray, T. The validity of self-reported drug use: An assessment of female arrestee drug users. Unpublished Master's thesis. University of Maryland, 1996.

Harrison, L., O'Neil, J., Wish, E. And Lively, M. The validity of self-reported drug use among arrestees. Unpublished manuscript. National Institute of Justice, 1990.

Mieczkowski, T. The accuracy of self-reported drug use: Implications for criminal justice policy. In R. Weisheit (Ed.) Drugs, Crime and the Criminal Justice System. Cincinnati, Ohio: Anderson Publishing Company, 1990.

Wish, E.D. Johnson, B.D. The impact of substance abuse on criminal careers. In A. Blumstein, J. Cohen, J.A. Roth, and C.A. Visher (Eds.) Criminal Careers and Career Criminals, Vol. II. Washington, D.C.: National Academy Press, 1986.



APPENDIX A  
EXPERIMENTAL SCRIPTS

INTERVIEW #: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

INFORMED CONSENT A  
(STANDARD CONSENT, INTERVIEW FIRST)

Hi, my name is \_\_\_\_\_ and I'm one of several researchers here at the jail today doing interviews with arrestees.

This interview is part of a federally funded study. Your participation is voluntary. The information you provide is confidential and anonymous. It will not help or hurt your case.

Would you agree to the interview? 1 2 3 4 \_\_\_\_\_

Now we need to get a urine sample from you. We're asking you for a urine sample for the purposes of planning services such as treatment. If you help us out with this, we'll give you a couple of candy bars.

Specimen: 0 1 2

*(After specimen requested/collected...)*

Thank you for participating in the research study. I have one last follow-up question about the interview:

If I had asked you for the urine first, would you still have done the interview?

No - 0 (Finish)

Yes - 1 (Ask follow-up)

If YES: Would your answers have been different?

No - 0 (Finish)

Yes - 1 (Finish)

INTERVIEW #: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

INFORMED CONSENT C  
(ENHANCED CONSENT, INTERVIEW FIRST)

Hi, my name is \_\_\_\_\_ and I'm one of several researchers here at the jail today doing interviews with arrestees. I'd like to do an interview with you that will take around 10 minutes.

Your participation is voluntary. That means that you don't have to do this. The information you give us will be confidential and anonymous. Nothing that you tell me will be repeated to anyone and the answers you give me will be written on a form that doesn't have your name on it. Do you have any questions or concerns about confidentiality?

We received money from the government to do this research. But we don't work for the police, courts, or the jail. Your taking part in this study will not hurt your case, or help your case. Do you have any questions?

I'll ask you some things about your background, including questions about your use of different kinds of drugs. If there is any question that you don't want to answer, just tell me and we'll skip over it. I'd rather that you told me you didn't want to answer a question than to answer it untruthfully. Do you have any questions?

Will you do the interview? 1 2 3 4 \_\_\_\_\_

Now we've come to the last part of the interview. I need to get a urine sample from you. It'll be used to show the drugs you told me you used or did not use in the last three days. The results won't have your name on them and will be put together with the results of thousands of other tests. If you help us out with this, we'll give you a couple of candy bars. Do you have any questions?

Specimen: 0 1 2

(After specimen requested/collected...)

Thank you for participating in the research study. I have one last follow-up question about the interview:

If I had asked you for the urine first, would you still have done the interview?

No - 0 (Finish)

Yes - 1 (Ask follow-up)

If YES: Would your answers have been different?

No - 0 (Finish)

Yes - 1 (Finish)

INFORMED CONSENT B  
(STANDARD CONSENT, URINE FIRST)

Hi, my name is \_\_\_\_\_ and I'm one of several researchers here at the jail today doing interviews with arrestees.

This interview is part of a federally funded study. Your participation is voluntary. The information you provide is confidential and anonymous. It will not help or hurt your case.

Would you agree to the interview? 1 2 3 4 \_\_\_\_\_

First we need to get a urine sample from you. We're asking you for a urine sample for the purposes of planning services such as treatment. If you help us out with this, we'll give you a couple of candy bars. After that, we'll do a short interview that will take around 10 minutes.

Specimen: 0 1 2

(Collect specimen; or if declined specimen, proceed with interview. Ask follow up questions below after interview is completed.

-----  
-----

If respondent initially declined to provide a urine specimen ask...

Now that you have completed the interview portion of the study, would you be willing to provide a urine specimen? No - 0 (Ask follow-up)  
Yes - 1 (Collect, and ask follow-up)

Thank you for participating in the research study. I have one last follow-up question about the interview:

Would your answers have been different if I hadn't asked you for a urine sample? No - 0 (Finish)  
Yes - 1 (Finish)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INTERVIEW #: \_\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

INFORMED CONSENT D  
(ENHANCED CONSENT, URINE FIRST)

Hi, my name is \_\_\_\_\_ and I'm one of several researchers here at the jail today doing interviews with arrestees. I'd like to do an interview with you that will take around 10 minutes.

Your participation is voluntary. That means that you don't have to do this. The information you give us will be confidential and anonymous. Nothing that you tell me will be repeated to anyone, and the answers you give me will be written on a form that doesn't have your name on it. Do you have any questions or concerns about confidentiality?

We received money from the government to do this research. But we don't work for the police, courts, or the jail. Your taking part in this study will not hurt your case, or help your case.

I'll ask you some things about your background, including questions about your use of different kinds of drugs. If there is any question that you don't want to answer, just tell me and we'll skip over it. I'd rather that you told me you didn't want to answer a question than to answer it untruthfully. Do you have any questions?

Will you do the interview? 1 2 3 4 \_\_\_\_\_

Before we begin, I need to get a urine sample from you. It'll be used to show the drugs you tell me you used or did not use in the past three days. The results won't have your name on them and will be put together with the results of thousands of other tests. If you help us out with this, we'll give you a couple of candy bars. Do you have any questions?

Specimen: 0 1 2

*If respondent initially declined to provide a urine specimen ask...*

*Now that you have completed the interview portion of the study, would you be willing to provide a urine specimen? No - 0 (Ask follow-up)*

*Yes - 1 (Collect, and ask follow-up)*

Thank you for participating in the research study. I have one last follow-up question about the interview:

Would your answers have been different if I hadn't asked you for a urine sample? No - 0 (Finish)

Yes - 1 (Finish)

Clifford Karchmer  
Police Executive Research Forum  
2300 M Street  
Washington, D.C. 20037

RE: Grant #92-IJ-CX-K013  
Columbian Drug Trafficking Organizations

Dear Dr. Karchmer:

This is to inform you that all financial and substantive reporting requirements under this grant have been met. At this time, the official NIJ file will be placed in an inactive status. Please note that all project related materials must be maintained for a period of three years in accordance with Federal Retention Requirements to ensure the availability of complete information should NIJ conduct an audit of this grant.

If you require additional information or have questions, please feel free to contact me at 202-616-4577.

Sincerely,

Sherran D. Thomas  
Program Operations Specialist  
Office of Research and Evaluation  
National Institute of Justice

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