

THE EFFECTS OF INTERVIEWER CHARACTERISTICS ON ARRESTEES' RESPONSES TO DRUG-RELATED QUESTIONS

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The Social Attribution Theory, which suggests that respondents respond in ways to meet the norms and expectations that they perceive are held by the interviewer, and the Social Distance Theory, which suggests that respondents provide more truthful answers when they share common characteristics with the interviewer, have been used by previous studies to explain differences in interviewees' responses. Examining these two theories further, arrestees' responses from seven quarters of data from the Charlotte, North Carolina Arrestee Drug Abuse Monitoring (ADAM) site were used to study the impact of interviewers' characteristics and on-the-job experience on arrestees' willingness to respond to the ADAM questionnaire and submit to a urine sample. Although experience does appear to impact consent, shared race, gender, and similar age have greater impact on gaining agreement to be interviewed. These results tend to more strongly suggest the applicability of Social Distance Theory.

Structured interviews are a major source of data on individual attitudes, perceptions, and behavior. This form of data collection is also a source of information on personal and high-risk behavior,

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especially delinquency and illegal substance use and abuse (Junger-Tas, Terlouw, & Klein, 1994; National Institute of Justice, 2003). Unfortunately, the veracity and completeness of self-reported information, indeed the subject's willingness to respond to an interview, are influenced by a number of factors such as embarrassment or fear of consequences.

In the late 1990s the National Institute of Justice (NIJ) expanded its Drug Use Forecasting (DUF) program into a regular data collection process based on probability sampling techniques to interview arrestees about their drug use. Used to collect responses of arrestees' self-reported drug use, The Arrestee Drug Abuse Monitoring Program, (ADAM), was funded until 2003 in 35 major cities in the United States. ADAM was one of the major sources of information for estimating the extent of substance abuse among the offender population. Using responses from seven quarters of data from the Charlotte, North Carolina ADAM site, this study examines the impact of interviewers' characteristics and on-the-job experience on arrestees' willingness to respond to the ADAM questionnaire and to submit to a urine sample.

THEORETICAL BACKGROUND

Researchers propose that multiple steps occur from the time the interviewer asks a question and the response, presenting a number of possible factors that can influence responses. These steps begin with a question asked, and the interviewee interpreting the question. The interviewee must be able to retrieve the information from memory, formulate an opinion, and construct an answer. During the cognitive process in which respondents formulate answers, they edit their responses for social desirability, or shape their responses to suit what they believe the interviewers will find more acceptable (Heeb & Gmel, 2001). Interviewers characteristics such as, gender, race, and age are considered likely factors that influence the responses and have been studied in areas ranging from general opinions, such as political beliefs and electoral participation, to more personal subjects, such as sexual behavior and drug and alcohol use. There are two theories researchers have developed and compared to describe elements that influence this edit-

ing process: Social Attribution and Social Distance (Heeb & Gmel, 2001; Johnson, Fendrich, Shaligram, Garcy, & Gillespie, 2000).

The Social Attribution model suggests that respondents may modify their answers to meet the norms and expectations they perceive are held by the interviewer. As described by Golub, Johnson, Taylor, and Liberty (2002), individuals may be hesitant to divulge personal information especially on sensitive topics such as criminal behavior and drug use that are stigmatized by society. The authors note that respondents' willingness to disclose sensitive information depends on the level of stigma they associate with it.

The respondent constructs these perceptions of stigma around generalizations formed on interviewer characteristics that are readily available, such as gender, age, and race (Johnson et al., 2000). A number of researchers (Axinn, 1991; DeLamater, 1974; Groves & Fultz, 1985) have found that respondents' willingness to disclose particularly sensitive areas varied by the gender of the interviewer. For example, female interviewers collected more accurate information on topics related to AIDS, contraception, and fertility. Dailey and Claus (2001) also found evidence that respondents were more likely to disclose physical or sexual abuse to female interviewers. Using data from the 1984 National Black Election Study, Davis (1997a, 1997b) examined the influence of the interviewers race on the political attitudes among African Americans. He found that African American respondents voiced moderate views when interviewed by White, rather than African American researchers. Davis noted, "Respondents adjust their political and racial attitudes to what they think will satisfy their perceived racial expectations of an interviewer. . ." (1997b, p. 184).

When researchers asked questions specifically about illegal substance use and abuse, they discovered that younger adult and male interviewers, characteristics of individuals who might be perceived as more tolerant of illegal substance abuse, received more responses reflective of drug use from interviewees. The characteristics of the interviewers' gender and age seemed to have an impact on the responses to questions about legally or socially acceptable drugs such as alcohol and marijuana, but little impact

on responses about cocaine use (Lu, Taylor, & Riley, 2001; Johnson et al., 2000).

The Social Distance Model attributes response editing, or the shaping of “acceptable” answers, to differences between the respondent and the interviewer. “The more the social identities of the respondent and the interviewer differ, the more likely the respondent is to edit responses” (Heeb & Gmel, 2001, p. 434; also see Johnson et al., 2000). If the Social Distance Model were correct, then a greater number of truthful answers would be expected when the respondent and the interviewer share personal characteristics (e.g. gender, race, and age). In contrast, more editing occurs in cases where a greater distance existed between the interviewer's social identity and the respondent's identity. People tend to disclose honestly and in greater detail to people with whom they feel emotionally comfortable (Catania, Binson, Canchola, Pollack, Hauck, & Coates, 1996). For example, Heeb and Gmel (2001) found a greater likelihood that respondents admitted alcohol consumption to older interviewers, but an interactive analysis revealed that younger subjects were more likely to admit alcohol use to interviewers who were closer in age. The Social Distance model was further supported by Johnson et al. (2000), who found strong results when the interviewers’ characteristics, age, race, gender, and education, were combined rather than analyzed separately.

A variable unrelated to either model - the amount of on-the-job experience of the interviewer - has received limited analysis with mixed results (Johnson et al., 2000; Singer, Frankel, & Glassman, 1983; Van Tilburg, 1998). Van Tilburg (1998) found that experience developed by interviewers within the project actually did influence their outcomes, but Johnson and colleagues (2000) did not find an association between interviewer experience and subject self-reported substance use. Singer et al. (1983) concluded that some experience was better than none, but with more experience, response rates declined.

Although veracity of responses to interviews is important, the individuals must first agree to be interviewed. Are the Social Attribution and Social Distance models applicable at this stage in

the interview process? How important are interviewer characteristics in soliciting participation, especially under the difficult, stressful, and particularly vulnerable circumstance of having just been arrested? Using responses from seven quarters of data from the Charlotte, North Carolina ADAM site, this study examines the impact of interviewers' characteristics and on-the-job experience on arrestees' willingness to respond to the ADAM questionnaire and submit to a urine sample.

The ADAM questionnaire is personally administered and consists of questions that ask respondents about their drug use, a topic that carries societal stigma, and legal ramifications for some. At the end of the interview, respondents are asked to provide a urine sample to cross-validate the veracity of their responses. The interview environment is such that these respondents have been arrested within 48 hours and are in jail with all the tension and anxiety such an environment creates. Although all responses and urine tests are confidential with no legal consequences, the arrestees must be comfortable with the individual asking the questions to be willing to answer the questionnaire. Therefore, this study examines the following questions:

1. What is the relationship between the interviewers' characteristics and the arrestees' willingness to answer the ADAM questionnaire and to provide a urine sample?
2. Does the on-the-job experience of the interviewer influence the arrestees' willingness to participate?
3. If there is a significant relationship between interviewers' characteristics and the arrestee participation, does the relationship support either the Social Attribution or the Social Distance model?

METHOD

ADAM collected data throughout the United States in approximately 30 cities' booking facilities and jails. These data were collected daily for two weeks each quarter through voluntary, confidential interviews and by taking urine samples from arrested individuals. In general at all the sites, more than 80% of the arrest-

ees randomly selected agreed to be interviewed with a comparable percentage agreeing to provide a urine sample (NIJ, 2003).

The site for this study, Charlotte, North Carolina, is a city with a rapidly growing population of more than 650,000. It became an ADAM site during the fourth quarter, 2000. There is only one arrest-processing center in the city, facilitating data collection. This study examines data derived from the first three quarters of 2001, the last three quarters of 2002, and the first quarter of 2003. Although Charlotte became an ADAM site during the fourth quarter of 2000, no female arrestees were interviewed that first quarter. Because we are interested in both female and male responses, the decision was made to exclude fourth quarter, 2000 cases. The site's funding to continue ADAM surveying was interrupted for financial reasons after the third quarter of 2001; data collection resumed in the second quarter of 2002.

ADAM Questionnaire

There are four components to the ADAM data: face sheet, core interview, urine screen, and facility census data. All data collected are confidential and anonymous; none of the data from the four components can be linked to an individual sampled case. There are no identifiers of the arrestee sampled (Hunt & Rhodes, 2001).

Face sheet. The face sheet information is collected on all arrestees selected for interviewing, no matter whether they complete the interview. The information that includes arrestee's offenses, time of arrest and booking, location of arrest, race, date-of-birth, and gender of each arrestee is obtained from the jail's official records (excluding any identifying information). The back of the face sheet contains the information that is read to each arrestee regarding the confidentiality and voluntariness of their responses. If the arrestee agrees to the interview, the language in which the interview will be given (English or Spanish) and the number of hours since his or her arrest is noted (the interview is only conducted if the arrestee has been in custody for 48 or less hours). If the arrestee is not interviewed, the reason is documented on the back of the face sheet.

Core interview. The questionnaire consists of questions on demographics, housing, employment, arrests, drug use patterns, treatment, and drug market activity. Most of the responses are force-choice; exceptions are questions that require a number. An example of a force-choice question is:

The last time you bought marijuana at what type of place did you get it:

1. In a house or apartment
2. In a public building such as a store, bus station, gas station, or restaurant
3. In an abandoned building
4. On a street, alley, or road
5. Other Outdoor area such as a park, lot, etc.
6. Other (specify)

An example of a question that requires a number is: "How old were you the first time you used marijuana or hashish?"

Interviews typically take 25 to 30 minutes; no drug use in the past 12 months will reduce the time to about 10 minutes, and extensive use can increase the time to 45 minutes.

Urine screen. After the interview is completed, the arrestee is asked to voluntarily provide a urine specimen. If he or she consents, the arrestee is given a bottle and directed toward the closest toilet. If the arrestee refuses or cannot provide a urine sample, the interview information can still be used and the reason for no urine sample is noted on his or her interview. Samples are coded with the same numbers as the interviews. An external lab tests the samples for a panel of drugs (Hunt & Rhodes, 2001). Results are sent to the Data Center for merging by bar code with the interview results.

Facility census data. Data on the universe of persons during the data collection time period are collected and submitted to the Data Center for use in the development of sampling weights. Data used includes time of booking, day of the week, charges, gender, race and-or ethnicity, and date of birth of the arrestee.

Selection of Sample. All ADAM sites divided the booked population into stock and flow. Stock comprised everyone who had been booked before the interviewers arrived each day. Flow consisted of those arrestees who arrived while the interviewers were in the jail. The interviewers were in the jail from 3 p.m. to 10:59 p.m.

The site coordinator would select a random sample from stock, and the interviewer was trained to interview a systematic sample of arrestees from flow each day. To randomly select the sample from stock, the site coordinator used the booking log of the facility in which the arrestees were listed chronologically between 11 p.m. (the night before) and 2:59 p.m. (that day) to select arrestees at the interval determined by the target number of stock cases. Representing the period of day that bookings were at their highest point (3 p.m. to 10:59 p.m.), arrestees were selected throughout the period that the interviewers were available. The flow collection began as soon as the interviewer entered the jail (3 p.m.) with the interviewer selecting the case booked closest to when his or her previous interview was completed. This method ensured that the interviews represented the entire period. Even when the target number was reached, the interviewing continued until the period was over.

The interviews were conducted in relatively private settings. Selected subjects, who were in the flow sample, were interviewed at stations away from other arrestees and detention officers. Subjects in both flow and stock samples, who were awaiting hearings with the magistrate or court services or permission to make calls for bond, were interviewed in an area of the magistrate hall or holding area away from other arrestees. The stock subjects, who did not make bond and had been assigned a jail cell, were interviewed in their assigned pods in the common area away from other inmates.

Research contractors for NIJ determined the sample size by calculating a number equivalent to the variance that resulted from sampling proportional to size. Also, post-sampling stratification was used to assign a sampling weight equal to the reciprocal of that

arrestee's selection probability. This technique reduced bias, defining the strata so every arrestee within the time period had the same probability of selection into the sample (Hunt & Rhodes, 2001).

Arrestees. Table 1 compares gender, race, and age of arrestees identified for interviewing (labeled selected in Table 1), those who were actually available for interviewing, and the total arrest population during the interviewing time periods. Often those selected randomly in stock had already bonded. As a result, the interviewer was then directed to interview the arrestee processed immediately before the selected subject. Therefore, the available sample consists of only those who were in the jail and accessible for interviewing. Demographic data were still collected on the original selected subjects. The difference between available and interviewed are those arrestees who refused to be interviewed.

As shown in Table 1, ethnicity was collapsed into the four categories: White, African American, Hispanic, and other. Age was merged into six categories. Phi (categorical data) and chi-square (continuous data) analyses were utilized to compare differences between the randomly selected and the available arrestees who were actually interviewed. We found significant differences for race ($\phi = .214, p < .001$) and age ($\chi = 26.77, p < .001$), but not gender. There were proportionately more African American arrestees who remained in the jail and therefore available for interview than were in the arrested population or the random sample. Proportionately fewer White and Hispanics were available for interview. Those arrestees interviewed were more likely to be in the older age range.

Arrestees between the ages of 31 and 35 were three times more likely to remain in jail than the other age groups. Male arrestees composed 79.4% of the sample, which is similar to the population.

Table 1.
Comparison of Arrestee Sample with Arrestee Population by Gender, Race and Age

Characteristics	Interviewed (n=1552)	Available (n=1814)	Selected (n=2679)	Population (n=39,083)
Race				
White	395 (25.5%)	462 (25.5%)	791 (29.6%)	12,022 (30.0%)
African American	1047 (67.5)	1228 (67.8)	1627 (60.9)	23,593 (60.0)
Hispanic/Latino	96 (6.2)	108 (6.0)	231 (8.6)	3,436 (9.0)
Other	13 (0.9)	14 (0.8)	23 (0.9)	32 (0.1)
Age				
16-17	136 (8.8)	142 (7.8)	178 (6.6)	1,924 (5.0)
18-20	229 (14.8)	257 (14.2)	348 (13.0)	4,721 (12.0)
21-25	306 (19.7)	356 (19.6)	556 (20.8)	8,290 (21.0)
26-30	224 (14.4)	260 (14.3)	416 (15.5)	6,616 (17.0)
31-35	207 (63.3)	249 (13.7)	376 (14.0)	5,621 (14.0)
36+	450 (29.0)	550 (30.3)	805 (30.0)	12,246 (31.0)
Gender				
Male	1233 (79.4)	1460 (80.5)	2151 (80.3)	31,546 (80.0)
Female	319 (20.6)	354 (19.5)	528 (19.7)	7,782 (20.0)

Remaining in jail rather than securing bond is a function of the capability of procuring the necessary funds and the severity of the offense. A composite profile of those interviewed is African American, male, and greater than age 30.

Interviewers. Interviewers were mainly college students recruited primarily from the researchers' classes. The interviewers received 16 hours of initial training and then 4 hours of follow-up training before each quarter collection. NIJ staff developed the training, and the site coordinators used the same format and material.

During each of the two week interviewing periods there was one interviewer hired for flow and one interviewer for stock. A third interviewer was added the second quarter of 2002 to interview female arrestees. Table 2 displays the interviewers' race, age,

gender, number of quarters experience, and number of interviews attempted. The interviewers are diverse with about 1/3 White, 1/3 African American and 1/3 Hispanic or Asian. Nine interviewers were male; 16 were female. The ages of the interviewers range from 20 to 47, and their experience in interviewing arrestees ranges from 1 to 7 quarters, totaling 12 to 359 interviews. Four of the interviewers spoke Spanish. Although the Asian interviewers spoke other languages, the ADAM instrument has only been translated into Spanish and English.

Table 2.
Characteristics of Interviewers

Characteristic	Percentage (n)
Race	
White	36 (9)
African American	32 (8)
Hispanic	12 (3)
Other	20 (5)
Gender	
Male	36 (9)
Female	64 (16)
Age	
18-20	4 (1)
21-25	48 (12)
26-30	24 (6)
31-35	12 (3)
36+	12 (3)
# of Interviews	
<30	36 (9)
30-50	16 (4)
51-85	28 (7)
86-150	8 (2)
>150	12 (3)

ANALYSIS

Using seven quarters of data that include the self-report and urinalysis information, the interviewers' gender, ethnicity, age, and experience were analyzed for their effects on arrestees' consent to respond to the interview and then provide a urine sample.

Because the Social Attribution model suggests that the arrestees might edit their responses to conform to the norms and expectations of the interviewers; responses would be directly affected by the attitudes they ascribe to the interviewers. Therefore to test the Social Attribution model, the main effects of the interviewers' characteristics were analyzed:

$$\text{Gender}_{\text{Interviewer}} + \text{Ethnicity}_{\text{Interviewer}} + \text{Age}_{\text{Interviewer}} = \text{Arrestees' Participation}$$

With the Social Distance model, the differences and/or similarities of the characteristics of arrestees and interviewers jointly influence the response editing that may take place and would result in a statistical interaction between the arrestee's characteristics and the interviewers' characteristics.

$$\text{Gender}_{\text{Interviewer}} \times \text{Gender}_{\text{arrestee}} + \text{Ethnicity}_{\text{Interviewer}} \times \text{Ethnicity}_{\text{arrestee}} + \text{Age}_{\text{Interviewer}} \times \text{Age}_{\text{arrestee}} = \text{Arrestees' Participation.}$$

Two additional variables are considered to potentially influence the arrestees' participation, and therefore need to be controlled. As noted earlier in the literature, the interviewers' on-the-job experience has been found to influence responses to interviews (Singer, Frankel, & Glassman, 1983; Van Tilburg, 1998). Interviewers' experience is defined and measured as the number of successful interviews completed and later the number of urine samples collected. We believed that interviewers' experience would affect positively the likelihood of obtaining consent for the interview and subsequent urine sample.

An additional variable is the period in which the interview took place. It may be assumed that arrestees, who had just been brought in for processing (flow), might be preoccupied with their immediate circumstance and have only thoughts of release, and therefore be more resistant to intrusion by an interviewer. On the other hand, once arrestees are in stock, they usually know when they are likely to be released, and at a minimum, the release time would not usually be until the next day. Once bond was established and they had made their telephone calls, they had little to occupy their time. We believed that there would be much higher

interview compliance rates for arrestees in stock than those in flow regardless of the interviewers' individual characteristics.

Multivariate logistic regression was employed to test the Social Attribution and Social Distance models. Logistic regression is used to analyze the association of several independent variables with a dichotomous outcome variable. If the main effects of the interviewers' gender, age, or ethnic group alone were found to be significant, these results would support the Social Attribution model. Conversely, if there were significant interaction effects between any of the interviewers' characteristics and the same arrestees' characteristics, then the Social Distance model would be supported. Interviewers' experience and the interview time periods were included as control variables. The same analyses were conducted on arrestees' willingness to provide urine samples.

RESULTS

Interview Agreement

Initial analysis found significant differences between the interviewers ($\phi = .252, p < .001$); however, with a simple test of association, we cannot discern what interviewer characteristics account for the difference. Also, an initial analysis of the relationship between the time period (stock or flow) and the arrestees' response was found to be significant ($\phi = .121, p < .001$). Researchers who interviewed in flow rather than stock had a more difficult time obtaining either an interview or a urine sample. Of those who agreed to be interviewed, 55.6% were in stock whereas 56.9% of those who refused were in flow. The refusal rate was greater in flow, 17.8% compared with 11.4% in stock.

We used logistic regression to estimate the likelihood of interview consent based on interviewer characteristics. Table 3 displays the main effects equation, and Table 4 shows the effects of several interactions. As noted earlier, significant main effects of interviewers' characteristics on arrestees' willingness to participate in the survey would support the Social Attribution model, whereas significant interactive effects of interviewers' characteris-

tics with arrestees' characteristics would support the Social Distance model (Johnson et al., 2000).

Table 3 displays the relationship between the interviewers' characteristics: ethnicity, gender (1 = male, 0 = female), age, experience, and interview time period (0 = stock, 1 = flow) of the interview on the arrestees' consent (0 = disagreed, 1 = agreed). This direct model for interview consent fits the data well (χ^2 (7, N = 1685) = 45.82, $p < .001$), explaining 4.7% of the variance. In addition, the time period, age, gender, and ethnicity wielded statistically significant effects. African American interviewers were twice as likely to obtain the arrestee's willingness to complete the interview (odds ratio = 2.163, $p < .001$) than interviewers of other ethnic groups. Male interviewers were 1.69 times more likely to receive a positive response than female interviewers. The effect of similar-aged interviewers with their similarly-aged arrestees is significant. The most notable bivariate difference was that 31 to 35 year old interviewers received positive responses from 64.3% of the 18-20 year old arrestees whereas they were able to get positive responses from over 77% of all other age arrestees. Consent for interviews conducted in the flow period were less likely to occur than those requested from the stock population. Experience of the interviewer did not provide any additional information to the predictability of the model.

Interactions between interviewers and arrestees' ethnicity, gender, and age were then added (Table 4) to test the Social Distance Model. The model including the interactions still fit the data well (χ^2 (23, N = 1686) = 84.15, $p = .001$), explaining about 8.7% of the variance. The gender interaction was significant (odds ratio = 5.08, $p < .001$) such that the male interviewer is more likely to obtain consent than female interviewers, but the probability of receiving consent is also five times greater for male offenders than female offenders. Age and race-specific interactions were not significant. The direct effects of interview location and situation and interviewer gender remain significant.

Table 3.
Main Effects of Interviewers' Characteristics on Interview Status (N=1685)

Variable	Unstandardized Beta	SE	Significance	Odds Ratio
Experience (# interviews)	-.001	.001	.166	.999
Ethnicity:				
White	.007	.284	.981	1.007
African American	.771	.233	.001	2.163
Hispanic	-.214	2.46	.384	.807
Other	ref	ref	ref	ref
Gender	.522	.211	.013	1.685
Age	.026	.013	.052	1.026
Time Period	-.420	.211	.013	1.685

Model χ^2 (df = 7) = 45.823, $p = .001$

$R^2 = .047$

Percent of Outcomes Correctly Predicted: 85.2%

-2 Log likelihood 1365.95

Urine Specimen Compliance

Initial analysis found that there were significant differences between the interviewers in general and their ability to get arrestees to agree to provide urine samples ($\phi = .161$, $p < .05$); however, the initial analysis of the relationship between the time period and the arrestees' response was found not to be significant. The sample of arrestees who agreed to provide a urine sample came only from respondents who had completed the interview so the sample was restricted to those who had already complied once. Therefore, although obtaining the agreement of the arrestee initially was related to where in the arrest process he or she was approached, once the agreement was given, obtaining the urine sample was not an issue.

Logistic regression was used to estimate the likelihood of obtaining a urine sample based on interviewer characteristics (Table 5). An equation with main effects was first estimated, and then another equation with interactions between arrestees' and interviewers' characteristics was analyzed. The main effect model was not significant; therefore, the additional interactive variables were

Table 4.
Interactive Effects of Interviewers' and Arrestees' Ethnicity and Gender on Interview Status

Variable	Unstandardized Beta	SE	Significance	Odds Ratio
White Interviewer	.254	.363	.485	1.289
African American Interviewer	-.557	.288	.053	.573
Hispanic Interviewer	.380	.261	.145	1.462
Other	ref	ref	ref	ref
White int. & White arrestee	1.169	18.076	.999	.000
White int. & African American arrestee	.931	18.072	.999	.000
White int. & Hispanic arrestee	2.005	18.090	.999	.000
African American int. & African American arrestee	.810	20.044	.999	.000
African American int. & White arrestee	.134	20.047	.999	.000
African American int. & Hispanic arrestee	.635	20.063	.999	.000
Hispanic int. & White arrestee	-4.79	15.781	.999	.000
Hispanic int. & African American arrestee	-5.41	15.776	.999	.000
Hispanic int. & Hispanic arrestee	-.375	15.798	.999	.000
Interviewer's gender	-2.398	.543	.000	.091
Gender int. & gender arrestee	1.624	.442	.000	5.075
Interviewer's Age	.023	.033	.485	1.023
Age int. & age arrestee	.001	.001	.538	1.001
Experience (# interviews)	-.001	.001	.200	.999
Time Period (0=Stock)	.443	.159	.005	1.558

Model χ^2 (df = 23) = 78.969 p = .001

R^2 = .087

Percent of Outcomes Correctly Predicted = 85.4

-2log likelihood = 1221.5

not added. Limiting the arrestees to those who agreed to be interviewed more than likely restricted the range of arrestees and therefore restricted the variance that might be accounted for by interviewer characteristics.

Summary of Results

Our findings statistically support the Social Attribution Model with significant main effects of race, gender, and age on the willingness of arrestees to consent to a drug use survey. However, the Social Distance Model should not be *conceptually* ruled out. Although African American interviewers overall obtained more agreements for interviews than other interviewers, it was primarily with African American arrestees, who made up the largest number of arrestees interviewed. This was not statistically significant in the interactions model but may be a contributing factor to the greater success of the African American interviewers. Although age was

significant as a main effect in the logistical regression, the bivariate correlations revealed the significance was most evident for young arrestees with young interviewers ($r = -.062, p < .001$).

Table 5.
Main Effects of Interviewers' Characteristics on Obtaining Urine Samples

Variable	Unstandardized Beta	SE	Significance	Odds Ratio
Experience (# interviews)	.000	.003	.905	1.0
Ethnicity:				
White	-.858	.856	.316	.424
African American	-.695	.624	.265	.499
Hispanic	-1.745	.741	.019	.175
Other	ref	ref	ref	ref
Gender – Female	.809	.620	.193	2.246
Age	.010	.036	.785	1.010
Time Period (0=Stock)	-.795	.401	.047	.451

Model χ^2 (df = 7) for interview compliance = 11.368 ($p = .123$).

* $p < .05$ ** $p < .01$ *** $p < .001$

Unrelated to the two models, the significance of the experience of the interviewers did not hold when other interviewer characteristics were added. The location or timing of the interview continued to have great impact even when other variables were added.

Neither model was significant when examining the individual interviewer characteristics with the urine acquisition. With the restricted range (urine samples could only be requested from those arrestees who agreed to the interview), these results are not surprising.

DISCUSSION

As noted earlier, this study examines the influence of interviewers' characteristics on interview and subsequent urine sample consent. We considered two models. The Social Attribution model suggests that respondents may modify their answers in an effort to meet the norms and expectations that they perceive are held by the interviewer. The Social Distance Model relates response editing to similarities and differences between the respondent and the interviewer such that the more the respondent and the interviewer differ, the more likely the respondent is to edit responses. Two additional unrelated variables were examined, experience of interviewers and location of interview.

The initial and significant main effects between interviewers' characteristics and resulting interview compliance are considered support for the Social Attribution model, however our data also found support for the Social Distance model. These data could, for the most part argue for either model. For example, the significant main effect that African American interviewers get more agreement could be interpreted from the Social Attribution model as African American interviewers may be perceived to be more sympathetic to drug use and the plight of the arrestee than non-African American interviewers. However, more than two-thirds of the arrestees are African American, which could also support that African American interviewers are seen as more similar to the consenting arrestees than the non-African American interviewers resulting in greater agreement to participate in the interview.

Consistent with Heeb and Gmel (2001), young arrestees were more likely to consent to be interviewed by young interviewers and interviewers older than 35 had proportionately better success with arrestees 36 or older. Also, most of the arrestees were male, and male interviewers had better results in getting interviews. These two similarities would appear to support Social Distance. However, Axinn (1991) speculates that interviewees are more likely to report behaviors that society considers inappropriate to those interviewers whom they perceive to consider the behaviors less harshly, (e.g. young male interviewers). As a result it is contextually unclear if Social Attribution or Social Distance is supported.

Although a great deal of research has been conducted on interviewers' personal characteristics, we speculated that the most important factor was the interviewer's experience with the specific questionnaire and its designated population. Our results reveal however, that experience among the interviewers did not impact consent rates to the degree that was expected; interviewers' age, race, and gender were more influential. We would still contend that experienced interviewers are valuable and at minimum important in the investment of training time.

Overall, the variable that most influences an arrestees' willingness to complete the ADAM questionnaire is the arrestees location in the booking process. There is a significant difference in whether the arrestee was asked to respond before or after he or she had been able to see the magistrate and use the phone. As a result, the location of the interview should be studied further. This study is limited in its examination of one jail facility. As researchers continue to explore ways to increase the rate of consent to answer questionnaires concerning sensitive subjects with precarious populations, characteristics of the interviewers, locations of the interviews, and the means by which these interviews are conducted will need to be further explored.

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