Privacy Effects on Self-Reported Drug Use: Interactions With Survey Mode and Respondent Characteristics

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ABSTRACT

This chapter examines the impact of interview privacy on self-reported illicit drug use. In 1991, interviews were completed with an urban-suburban sample of 2,417 adults aged 18 to 45. Results show that the presence of third parties during the interview significantly influences respondents' willingness to reveal illicit drug use. Among married respondents, presence of a spouse resulted in higher reporting of illicit drug use, while the presence of adults other than the spouse had a consistent negative effect on drug use reports. A parent's presence during the interview significantly reduced respondents' willingness to report illicit drug use. The pattern of findings suggests that the direction of effects due to third party presence is linked to two factors: the extent of the third party's knowledge of the information requested, and the degree of personal stake the third party may have in the respondent's answers. The differential impact of privacy by interview mode was also examined. Tests of interactions between privacy and interview mode failed to support the hypothesis that the use of self-administered answer sheets reduces privacy effects compared with interviewer-administered interviews.

INTRODUCTION

Most professional survey organizations attempt to conduct personal interviews out of earshot of others (Aquilino 1993) and instruct their interviewers to move to a private location before beginning an interview. Nonetheless, a substantial portion of interviews in most household surveys (often from 25 to 50 percent) are conducted with others nearby or able to overhear the interview (Bradburn and Sudman 1979). Because interviewers are essentially guests in the respondent's home, they often find it hard to insist on complete privacy without jeopardizing the respondent's goodwill. Interviewers often cannot control the behavior of other household members while the interview is underway.

Although the presence of a third party is a common occurrence in household surveys, their influence on responses to sensitive questions has received relatively little attention in the survey literature on response effects (Aquilino 1993). There is little agreement among extant empirical studies concerning either the direction or magnitude of privacy effects. Some studies have reported significant effects (e.g., Casterline and Chidambaram 1984; Taietz 1962); others have found few or no effects (e.g., Anderson and Silver 1987; Zanes

and Matsoukas 1979); while some have reported mixed results (Bradburn and Sudman 1979). The literature on this topic suffers from a lack of any theoretical framework to guide research or explanation. No research has described how privacy effects might differ among modes of interview, and little attention has been given to possible interactions of interview privacy and respondent characteristics in producing response effects.

This chapter examines the impact of interview privacy on self-reported illicit drug use in three interview modes: self-administered, interviewer-administered face-to-face, and telephone. The study was designed to develop and evaluate a theoretical framework predicting the magnitude and direction of expected third-party effects. The primary research questions in this effort were:

1. Does the presence of others during the interview influence respondents' willingness to reveal the lifetime use of illicit substances?

2. Do privacy effects differ according to the identity of the person(s) present, their knowledge of the respondent's past behavior, and their personal stake in learning of the respondent's past drug use?

3. Does the impact of the presence of others on response tendencies differ by mode of interview (including self-administered, face-to-face, and telephone survey)?

4. Does the impact of lack of privacy during the interview differ by respondent characteristics such as sex, age, education, race/ethnicity, and marital/cohabitation status?

EMPIRICAL LITERATURE AND A THEORETICAL FRAMEWORK

The literature on response effects due to lack of interview privacy is surprisingly sparse. Several studies have concluded that privacy effects are small or nonexistent in most surveys. Anderson and Silver (1987) reported that the answers of married couples interviewed together were not more similar than those of couples interviewed apart on both factual and attitudinal questions. Tendencies of respondents to overreport voting behavior did not vary by the presence of others (Silver et al. 1986). With a sample of adolescents from a single school, Zanes and Matsoukas (1979) found that the presence of parents in the same room during the interview had little impact on adolescents' reports of illicit drug use.

Bradburn and Sudman (1979), in a national sample of 1,200 adults, also found no consistent pattern of privacy effects on responses to a variety of sensitive questions. They did report, however, that item nonresponse to sensitive questions was higher when others were present. The presence of a child during the interview also appeared to diminish respondents' willingness to admit they or their friends had ever used marijuana. The overall conclusion of this study was that evidence for third-party presence effects is weak and that lack of privacy does not greatly threaten the validity of sensitive surveys.

In contrast to Bradburn and Sudman's conclusions, several studies have found that the presence of others does affect response tendencies. Studies by Casterline and Chidambaram (1984) and Taietz (1962) found that third-party presence increased tendencies toward socially desirable responses—saying things that would please the person present. Strong privacy effects have been found for adolescents' self-reported drug use. Gfroerer (1985) analyzed data from the 12- to 17-year-old respondents in the 1979 and 1982 National Household Survey on Drug Abuse (NHSDA) surveys and found strong evidence that parents' presence during the interview resulted in less reporting of illegal drug use by adolescents. The use of anonymous self-administered questionnaires for most NHSDA drug categories did not prevent or diminish the influence of parental presence during the interview. Similarly, adolescents have been found to underreport drug use when identifying information is included on the questionnaire cover (Malvin and Moskowitz 1983). Both studies suggest that privacy concerns may be central to the validity of sensitive interviews with adolescents.

Lack of privacy does not always push responses in the direction of increased social desirability (or decreased willingness to reveal sensitive information). Based on a large national sample of married couples, Aquilino (1993) reported that, when spouses were present during the interview, subjective assessments of the utility of marriage were more positive. Higher estimates of spouse contributions to housework were obtained, and men gave lower estimates of the likelihood of marital dissolution. But spouse presence was also linked to a greater willingness to report sensitive factual information concerning the marriage; respondents were more likely to report cohabiting with the spouse before marriage, and self-reported levels of marital conflict were higher. Thus, lack of privacy increased social desirability bias only for subjective assessments of the marriage. Effects

were in the opposite direction (more candor) when questions tapped events and behaviors. It is important to note that spouse-presence effects were found despite the use of self-administered forms for items concerning marriage.

This pattern of spouse-presence findings is consistent with a hypothesis of third-party effects proposed by Mitchell (1965), who suggested that when factual information is requested in a survey, the presence of others who are knowledgeable about the subject matter of the interview may actually increase the accuracy of responses, even to sensitive questions. Mitchell hypothesized that it may be harder for respondents to misrepresent (or forget) factual information when someone who knows the truth is nearby.

If this hypothesis is correct, it also suggests that the identity of the others present might moderate third-party effects. The presence of those with the most knowledge of the respondent's behaviors or experiences should elicit more accurate reporting of factual information than would the presence of those with minimal knowledge of the respondent's experiences. A related issue is the extent to which the person present has a stake in learning of the respondent's answers (e.g., wives who would be affected by hearing husbands' assessments of marital relations). The greater the personal stake of the third party in the respondent's answers, the more third-party presence would tend to elicit socially desirable responding.

These propositions suggest that determining whether third-party presence during the interview will affect responses to sensitive questions depends on the answers to a number of questions:

1. Do the survey items ask for factual reports on events and behaviors, or do they ask for subjective assessments of attitudes, feelings, or relationships?

2. If factual reports are requested, how much knowledge does the person present have about the events or behaviors in question? Does the third party know what the respondent's answer should be?

3. If the third party doesn't have knowledge of the factual information requested, or if the interview requests subjective assessments of feelings or relationships, how will the person present be the affected by respondent's answers? Does the third party have a stake in how the respondent answers the question? To what extent will the respondent be concerned about how the listener might react to his or her survey responses, especially if the information would be new to the person overhearing the survey responses?

A first hypothesis based on this framework would be that when purely factual information is requested and the third party has full knowledge of the events or behaviors under question, third-party presence will lead to more accurate reporting of sensitive information (Mitchell 1965). For example, Aquilino (1993) found respondents more likely to report cohabiting before marriage if their spouse was present than if interviewed in private. If sensitive factual information is requested and the third party does not have knowledge of the events or behaviors, third-party presence should not lead to more accurate reporting.

A second prediction of this framework would be that if the third party does not have knowledge of the factual information requested and has a personal stake in the respondent's answers to these sensitive questions, responses will be pulled in the direction of more social desirability (i.e., pulled in the direction that would tend to please the listener). If the questions and answers are irrelevant to the listener, survey responses should be less affected by lack of privacy.

A similar argument can be made for subjective survey questions: If the third party has a stake in learning the respondent's subjective assessments or perceptions, responses will tend toward pleasing the third party (more social desirability bias). If the subjective assessments are irrelevant to the third party, responses should not be affected by lack of privacy.

Application to This Research

The analyses reported in this chapter estimate the effects of spouse presence, child presence, parent presence, and presence of other adults (relatives or nonrelatives) on self-reports of lifetime drug use among 18- to 45-year-old respondents. The dependent

variables request only factual information from the respondent: whether they had ever used marijuana, cocaine, psychotherapeutic drugs, or an illicit drug of any type. The theoretical approach outlined above suggests that these different types of listeners may have different effects on responses to sensitive drug questions based on their knowledge of the respondent's lifetime drug use and their stake in learning about the respondent's past drug use. If the third party already has full knowledge of the respondent's drug use, third-party presence should increase the likelihood of respondents' revealing their lifetime drug use. The presence of third parties who have no knowledge of respondents' past drug use would not increase the probability of positive drug use reports; however, if the third party has little knowledge of respondent drug use and has a great personal stake in learning of such usage, his or her presence should decrease respondents' willingness to reveal illicit drug use.

Among the four categories of potential listeners considered here, spouses (or partners in cohabiting unions) likely have the most knowledge of respondents' past drug use. Many couples may have used illicit drugs together during the dating and courtship phases of the relationship or after marriage or cohabitation. There may be little reluctance among many married or cohabiting couples to reveal past experimentation with drug use, especially when such usage was a short-lived phenomenon of youth. Thus, spouse presence should have a positive impact on drug use reports.

Parents, on the other hand, may be the least likely listeners to have full knowledge of respondents' drug use, and also have the greatest stake in learning about it. Many parents might feel personally responsible and deeply troubled by their child's drug use. It is safe to assume that most children (minor or grown) conceal illicit drug use from parents, most of whom would disapprove. Parents' lack of knowledge and personal stake in the outcome suggest that their presence will decrease respondents' willingness to reveal past drug use. The analyses in this research focus primarily on spouse or partner presence and parent presence. Presence of children and of other relatives or nonrelatives are included in the models as control variables. This was done so that effects of spouse presence and parent presence could be estimated, controlling for the influence of anyone else who may have been nearby during the interview.

Privacy Effects and Mode of Interview

The possible connection between interview mode and privacy effects has not been investigated in earlier research. Recent studies (Aquilino 1992, 1994; Gfroerer and Hughes 1991; Johnson et al. 1989; Turner et al. 1992) have shown that self-administered interviews, in-person interviewer-administered interviews, and telephone interviews yield different estimates of self-reported drug and alcohol use when effects due to sampling and screening are controlled. Survey mode effects appear strongest among minorities (Aquilino 1994), especially among African Americans.

This chapter explores one of the avenues by which survey mode might influence responses: Different interview modes may either exacerbate or suppress the potential influence of privacy on respondents' willingness to reveal illicit or undesirable behaviors. In particular, the use of self-administered answer sheets to maximize response anonymity during the interview should decrease problems of self-presentation (Sudman and Bradburn 1974). The self-administered format may reduce or eliminate effects due to the presence of others during the interview, compared to interviewer-administered surveys. Multivariate analyses test this prediction.

Privacy Effects and Respondent Characteristics

Very little is known about variation in privacy effects by respondent characteristics such as age, sex, race/ethnicity, or education; interactions of third-party presence with background characteristics have not been tested. The research described here tested for such interactions in all drug use models, but no predictions were made about the direction of possible interaction effects.

METHODS

The Data Set

The data were collected from June through December, 1991. Interviews were completed with 2,417 adults aged 18 to 45 drawn through a multi-stage area probability sample of the 37 largest standard metropolitan statistical areas (SMSAs) in the coterminous United States (an urban- suburban sample). These SMSAs contain about 36 percent of the U.S. population, and had a minimum size of 1.88 million inhabitants. African Americans and Hispanics were double sampled. The sample was restricted to younger adults to maximize the chances of interviewing current and recent users of illicit drugs (12- to 17-year-olds were not included in the sample because of cost constraints). A screening response rate of 94.3 percent and an interview response rate of 80.6 percent were achieved.

Experimental Design and Controls

Screening and Respondent Selection. All households in the sample were screened in person for eligibility. One respondent was randomly selected if more than one adult aged 18 to 45 resided in the household. All respondents in the study were selected using identical sampling, screening, eligibility, and respondent-selection procedures.

Assignment to Mode. Each housing unit in the sample was randomly assigned to one of three interview modes: (1) self-administered question- naire (SAQ), a face-to-face interview using self-administered answer sheets for drug and alcohol items; (2) personal/no SAQ, a face-to-face interview in which all questions were asked and responses recorded directly by the interviewer; and (3) telephone—the interview was conducted by telephone from the interviewer's home. Households without telephones were excluded from the analyses (N = 169).

Questionnaire. The questionnaire was adapted from the 1990 NHSDA questionnaire; Spanish translation was based on the NHSDA Spanish translation. Question wording, question order, and response categories were identical in all three modes. No show cards were used in the SAQ or personal modes to ensure comparability to the telephone mode.

The SAQ mode used the standard NHSDA procedures for self-administered answer sheets. Answer sheets were sealed in an envelope in the respondent's presence upon completion of the interview. No names were recorded on the questionnaires or answer sheets.

Interviewers. The same interviewers conducted the interviews in all three modes. About one-third of each interviewer's assignment was done in person with SAQs, one-third in person without SAQs, and one-third by telephone from the interviewer's home.

Experienced interviewers were recruited for this study. As a group, they had an average of more than 11 years interviewing experience. Nearly all interviewers were women; their

average age was 48 years, with 14.5 years of school completed (82 percent of the interviewers had at least some college, and about one-third were college graduates). More than 85 percent of the interviews were conducted by someone with previous interviewing experience in drug use surveys.

Multivariate Analyses

Dependent Variables. Four binary dependent variables reflecting lifetime drug use were selected, all coded 1 = yes, 0 = no. The questions were: ever used any illicit drug; ever used marijuana or hashish; ever used cocaine; and ever used pills (nonmedical use of prescription drugs). The "any illicit drug" category includes use of marijuana, cocaine, nonmedical use of prescription drugs (sedatives, tranquilizers, stimulants, and analgesics), inhalants, hallucinogens, and heroin. Thus, this variable indicates the respondent's willingness to reveal any use of an illicit substance.

The dependent variables were restricted to lifetime use due to sample size and use prevalence. For cocaine and pill use especially, there were too few past-year and past-month users to derive reliable estimates of third-party effects.

Independent Variables. When the interview was conducted in the personal or SAQ modes, interviewers recorded (after leaving the respondent's household) who was present during all or part of the interview. Upon completion of the telephone interview, respondents were asked to report who was present or able to overhear the conversation. Four binary independent variables were constructed for third-party presence, all coded 1 = present some or all the time, 0 = not present: spouse/partner present, child present, parent present, and other relative or nonrelative present. A categorical variable for interview mode was included: personal/no SAQ (the omitted category), SAQ, and telephone. Control variables in the models included sex, race/ethnicity, age, education, cohabitation status (only in models for married/cohabiting respondents), household income, and employment status. In the models predicting lifetime drug use, age (in years) and years of education completed were entered as continuous variables.

It is important to note that the analyses and interpretation of results focus primarily on the effects due to spouse presence and parent presence. Although terms for child presence and other presence are included in the models, they will be treated more as control variables than as independent variables in describing results.

Logistic regression was used to estimate the effects of third-party presence, respondent characteristics, mode of interview, and interaction terms on the dependent variables. To control for household composition, two separate sets of analyses were conducted. The first estimated effects due to spouse/partner presence and the sample was restricted to couple households where the respondent was either currently married or cohabiting (N = 1,118). The second set estimated effects due to parent presence, and the sample was restricted to cases in which the respondent resided with a parent (N = 521). Those living with parents

were primarily younger respondents; about 60 percent of this subsample was between ages 18 and 25. After testing the main effects of interview privacy in the models, interaction terms of presence variables by interview mode, age, sex, race/ethnicity, education, and cohabitation status were tested. Case weights were computed and used in the regression analyses and population estimates of lifetime drug use. Marginally significant findings ($p < 0.10$) are noted in the tables of results, but these estimates should be interpreted with caution.

The significance tests in the regression analyses have not been adjusted to reflect two sources of variation: the clustered nature of the sample and the use of case weights. Thus, the true standard errors may be somewhat larger than those reported. The large size of the 37 primary sampling units and the fact that random assignment to survey mode was done within clusters should reduce the effects of sample design on the estimated standard errors. To compensate for not controlling sample design effects in the analyses, two-tailed tests of statistical significance were used in evaluating directional hypotheses (where one-tailed tests would have been appropriate). This raised the critical values needed to achieve significance.

RESULTS

The Likelihood of Third-Party Presence

The proportion of interviews with a spouse/partner or parent present is shown in table 1. Spouses were present for at least some of the time in about one in four interviews with married respondents (throughout the rest of the chapter the terms "spouse" and "married" are intended to include partners and cohabiting couples as well). This is nearly identical to the proportion found in the National Survey of Families and Households (NSFH) sample of nearly 7,000 married couples (Aquilino 1993). Parents were present in about one in six cases where respondents lived with parents.

Spouse Presence. The likelihood of third-party presence varies by respondent and household characteristics. Logistic regression models predicting spouse presence and parent presence are given in table 2. Consistent with previous research (Aquilino 1993), spouse presence was more common when husbands were interviewed, less common when wives were interviewed. Wives may simply be more likely to be at home while husbands are being interviewed, and may have a greater interest in the proceedings than men whose wives are being interviewed. Spouse presence was less likely among African Americans than among whites or Hispanics (15 percent compared to 25 percent), a pattern also found among NSFH married couples (Aquilino 1993). The consistency of results across two diverse samples suggests that this is not an artifact. However, the causes of the racial/ethnic difference are unclear. Spouse presence was most likely among the least educated respondents and among those with the lowest family incomes (33 percent among those with less than $10,000 income in past 12 months). These results parallel findings from the NSFH married couples (Aquilino 1993), which suggest that social class is inversely related to the presence of others during the interview. One possibility is that low-income

respondents live in much smaller homes with fewer rooms than do wealthier respondents, making it much more difficult for interviewers to insist on privacy during the interview.

Number of household members was inversely related to spouse presence; the chances of the spouse's being nearby were lower in households of four or more members, compared to two- or three-member households. It may be that there are more distractions and competing

TABLE 1. *Percentage of cases with spouse/partner or parent present during the interview (unweighted estimates).*

	Respondent currently married/cohabiting		Respondent currently living with parent	
	N of cases	% Spouse present	N of cases	% Parent present
Total	1,118	23	521	17
Male	476	30	267	17
Female	642	18	242	17
Hispanic	191	26	77	22
White/other	758	25	305	18
African American	164	15	122	11
Age18-25	114	22	298	16
26-34	442	26	135	16
35-45	562	22	76	20
Currently married	1,002	24	--	--
Currently cohabiting	115	21	--	--
Education				
Less than high school	136	30	50	24
High school grad	305	22	162	18
Some college	246	24	93	19
College graduate	358	20	80	5
Currently enrolled	55	27	123	18
Work status				
Full time	793	25	313	16
Part time	124	18	94	15
Unemployed	35	20	51	12
Not in labor force	147	18	50	28
Household income				
< $10,000 (omitted)	54	33	30	10
$10,000 - $29,999	228	22	99	24
$30,000 - $49,999	296	26	146	19
$50,000 or higher	456	22	164	12
Income missing	69	17	70	16
Household size				
Two	260	29	76	20
Three	227	27	172	17
Four	370	19	132	14
Five	169	21	69	15
Six+	77	17	60	20
Children coresident				
Yes	804	21	89	18
No	299	29	420	16

TABLE 1. *Percentage of cases with spouse/partner or parent present during the interview (unweighted estimates) (continued).*

	Respondent currently married/cohabiting		Respondent currently living with parent	
	N of cases	% Spouse present	N of cases	% Parent present
Other coresident				
Yes	79	23	72	6
No	1,024	23	437	19
Mode of interview				
Personal, no SAQ	353	27	167	23
SAQ	384	22	166	16
Telephone	366	22	176	11

duties for the spouse in larger households, allowing less free time to monitor the interview.

Parent Presence. Parent presence (among young adults living with parents) did not vary by sex (table 2). Sons and daughters age 18 and older were equally as likely to have a parent nearby during the interview. Consistent with the spouse findings, the racial/ethnic difference was large, with African-American youth only about half as likely as whites or Hispanics to have a parent present. The most educated respondents (college graduates) were by far the least likely to have a parent in the room or able to listen in (5 percent). College graduates may command a bit more respect for their privacy than do less educated sons and daughters, and may be more likely to have the resources to maintain a private telephone line. Surprisingly, however, the pattern for household income was the reverse of that for spouse presence: Respondents in the lowest income households were the least likely to have a parent present during the interview. The reasons for this are not clear.

Parent presence was less likely in households with members other than the respondent and parents, such as siblings, other relatives, or roommates. Again, the suggestion is that other household members may distract or divert parents' attention from the interview.

Finally, mode of interview was strongly related to parent presence. Respondents interviewed by telephone were by far the least likely to

TABLE 2. *Logistic regression models predicting the likelihood of spouse presence and likelihood of parent presence during the interview (standard error in parentheses; unweighted estimates).*

Independent variable	Spouse/partner presence[1]	Parent presence[2]
Sex (female)	-0.64 (0.16)***	0.14 (0.27)
Race/ethnicity		
White/other (omitted)	--	--
African American	-0.57 (0.25)*	-0.84 (0.37)*
Hispanic	-0.15 (0.23)	0.18 (0.37)
Age 18-25	-0.20 (0.27)	-0.09 (0.33)
26-34 (omitted)	--	--
35-45	-0.08 (0.16)	-0.15 (0.41)
Cohabiting	-0.46 (0.27)+	--
Education		
Less than high school	0.61 (0.27)*	0.50 (0.45)
High school graduate	--	--
Some college	0.08 (0.22)	0.19 (0.36)
College graduate	-0.21 (0.22)	-1.29 (0.59)*
Currently enrolled in college	0.33 (0.35)	-0.03 (0.35)
Employment		
Employed full time (omitted)	--	--
Employed part time	-0.30 (0.27)	-0.13 (0.36)
Unemployed	-0.46 (0.46)	-0.29 (0.51)
Not in labor force	-0.10 (0.26)	0.78 (0.41)+
Household income		
Less than $10,000 (omitted)	--	--
$10,000 - $29,999	-0.68 (0.36)+	1.53 (0.72)*
$30,000 - $49,999	-0.42 (0.37)	1.21 (0.74)
$50,000 or higher	-0.72 (0.39)+	0.82 (0.77)
Income missing	-0.94 (0.47)*	0.96 (0.78)
Household size	-0.26 (0.10)*	0.11 (0.13)
Any children coresident	-0.00 (0.25)	-0.13 (0.41)
Any relative/nonrelative coresident	0.20 (0.32)	-1.41 (0.57)*
Interview mode		
Personal, no SAQ (omitted)	--	--
SAQ	-0.25 (0.18)	-0.44 (0.30)
Telephone	-0.26 (0.18)	-0.97 (0.32)**

KEY: 1 = Sample restricted to married and cohabiting respondents (N = 1,118).
2 = Sample restricted to respondents living with parents (N = 521).
+ = p < 0 .10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

have parents listening in. Many homes with more than one telephone have at least one phone in a bedroom or in other more private rooms. Because respondents have a choice of phones (and therefore rooms), it may be easier to achieve privacy in a telephone interview than in the face-to-face interview. In face-to-face mode, the interviewer (as guest) will

likely be seated in the more public or shared rooms in the home, such as living room or kitchen, where it becomes more difficult to avoid other family members.

Impact of Privacy on Drug Use Self-Reports

Overview of Main Findings. Multivariate analyses show that third- party presence during the interview significantly influences respondents' willingness to reveal illicit drug use. However, as predicted, the direction of effects depends on the identity of the person present. In the analyses of married and cohabiting respondents (see tables 3 to 7), presence of the spouse or partner had a significant positive effect on the self-reported lifetime use of any illicit drug, marijuana, and cocaine, and nonmedical use of prescription drugs. That is, on all four dependent variables, respondents were more likely to report illicit drug use if the spouse was present than if the interview was conducted in privacy. Significant interactions of spouse presence with respondent's age, race/ethnicity, and sex were found in three of the four models. However, the effects of spouse presence were unrelated to mode of interview.

As the theoretical framework suggested, results were in the opposite direction in the sample of respondents living with parents. A parent's presence during the interview significantly reduced respondents' willingness to report illicit drug use (see tables 8 to 11). Significant negative effects were found for reports of lifetime use of marijuana and any illicit drug. No significant interactions with respondent characteristics were found. Parent-presence effects were linked to mode of interview, but in an unexpected direction: The negative effects were stronger in the SAQ and telephone modes than in the face-to-face mode.

Models for Spouse Presence. Weighted estimates of lifetime drug use by spouse presence, interview mode, and respondent characteristics are given in table 3. Logistic regression models estimating the impact of spouse presence are presented in tables 4 to 7. For the total sample, the presence of the spouse or partner had a consistently positive effect on self-reported drug use on all four dependent variables. These effects are significant in all four logistic regression models with controls for sex,

		Percent who report ever using:							
		Marijuana		Cocaine		Pills[1]		Any illicit drug	
	N of cases	Spouse not present	Spouse present	Spouse not present	Spouse present	Spouse not present	Spouse present	Spouse not present	Spouse present
Total	1,118	57	66	20	32	23	30	61	70
Male	476	65	69	30	33	26	34	66	72
Female	642	51	62	12	29	20	25	56	67
Hispanic	191	37	29	17	29	27	29	45	43
White/other	758	61	74	21	33	24	33	64	77
African American	164	56	55	14	21	11	9	58	55
Age 18-25	114	51	75	19	40	21	29	55	75
25-34	442	63	76	24	39	24	33	67	78
35-45	562	53	54	17	22	23	28	57	61
Education									
Less than HS	137	34	47	13	38	20	30	43	64
HS grad	310	59	68	22	21	27	28	63	70
Some college	248	63	78	23	42	26	37	65	82
College grad.	420	57	64	18	30	19	27	61	65

KEY: 1 = Pills refers to the nonmedical use of four classes of prescription drugs: stimulants, analgesics, tranquilizers, and sedatives.

	Percent who report ever using:								
		Marijuana		Cocaine		Pills[1]		Any illicit drug	
	N of cases	Spouse not present	Spouse present	Spouse not present	Spouse present	Spouse not present	Spouse present	Spouse not present	Spouse present
Married	1,002	56	65	18	29	22	30	60	70
Cohabiting	115	66	77	35	55	30	34	72	77
Interview mode									
Personal		56	66	20	30	20	30	61	71
SAQ	361	58	66	22	39	27	32	62	67
Telephone	388	56	68	18	25	21	29	59	73
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TABLE 4. *Impact of spouse presence during the interview on self-reported lifetime use of any illicit drug: Logistic regression models for married/cohabiting respondents age 18 to 45 (N = 1,118; standard errors in parentheses; data are weighted).*

Independent variables	Dependent variable: ever used any illicit drug I	 II
Female	-0.49 (0.14)***	-0.51 (0.14)***
White/other (omitted)	--	--
African American (AA)	-0.34 (0.20)+	-0.20 (0.22)
Hispanic	-0.85 (0.20)***	-0.65 (0.22)**
Age	-0.05 (0.01)***	-0.03 (0.01)**
Education (years)	-0.04 (0.03)	-0.04 (0.03)
Cohabiting	0.53 (0.23)*	0.53 (0.23)*
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	0.53 (0.35)	0.48 (0.35)
$30,000 - $49,999	1.10 (0.36)**	1.03 (0.36)**
$50,000 or higher	1.58 (0.37)***	1.55 (0.37)***
Income missing	0.43 (0.42)	0.37 (0.42)
Work full-time (omitted)	--	--
Work part-time	0.14 (0.21)	0.14 (0.21)
Unemployed	0.81 (0.41)+	0.79 (0.41)+
Not in labor force	0.22 (0.21)	0.28 (0.21)
Interview mode		
Personal (omitted)	--	--
SAQ	-0.08 (0.15)	-0.08 (0.15)
Telephone	-0.10 (0.15)	-0.09 (0.15)
Spouse present	0.39 (0.15)*	2.96 (0.88)***
Child present	0.17 (0.15)	0.16 (0.15)
Other adult present	-0.16 (0.26)	-0.20 (0.27)
Significant interaction terms		
AA x spouse present		-0.62 (0.53)
Hispanic x spouse present		-0.85 (0.43)*
Age x spouse present		-0.07 (0.02)**
-2 log likelihood	1552.79	1541.01
Chi-square for model improvement		11.78**
Degrees of freedom		3

KEY: + = p < 0.10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

TABLE 5. *Impact of spouse presence during the interview on self-reported marijuana use: Logistic regression models for married/cohabiting respondents age 18 to 45 (N=1,118; standard errors in parentheses; data are weighted).*

	Dependent variable: ever used marijuana or hashish	
Independent variables	I	II
Female	-0.65 (0.13)***	-0.68 (0.14)***
White/other (omitted)	--	--
African American (AA)	-0.27 (0.20)	-0.13 (0.22)
Hispanic	-1.06 (0.21)***	-0.75 (0.23)**
Age	-0.05 (0.01)***	-0.03 (0.01)**
Education (years)	-0.03 (0.03)	-0.03 (0.03)
Cohabiting	0.46 (0.22)*	0.46 (0.22)*
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	1.11 (0.40)**	1.02 (0.40)*
$30,000 - $49,999	1.66 (0.42)***	1.55 (0.41)***
$50,000 or higher	2.09 (0.42)***	2.03 (0.42)***
Income missing	0.96 (0.46)*	0.85 (0.47)+
Work full-time (omitted)	--	--
Work part-time	0.14 (0.21)	0.15 (0.21)
Unemployed	1.10 (0.43)**	1.09 (0.43)
Not in labor force	0.21 (0.21)	0.29 (0.21)
Interview mode		
Personal (omitted)	--	-- SAQ -0.01 (0.15) -0.01 (0.15)
Telephone	-0.06 (0.15)	-0.05 (0.15)
Spouse present	0.36 (0.15)*	4.06 (0.91)***
Child present	0.10 (0.15)	0.10 (0.15)
Other adult present	-0.22 (0.26)	-0.28 (0.27)
Significant interaction terms		
AA x spouse present		-0.54 (0.54)
Hispanic x spouse present		-1.43 (0.48)**
Age x spouse present		-0.10 (0.03)***
-2 log likelihood	1571.01	1547.64
Chi-square for model improvement		23.37 ***
Degrees of freedom		3

KEY: + = p < 0.10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

TABLE 6. *Impact of spouse presence during the interview on self- reported cocaine use: Logistic regression models for married/cohabiting respondents age 18 to 45 (N = 1,118; standard errors in parentheses; data are weighted).*

Independent variables	Dependent variable: ever used cocaine I	II
Female	-0.83 (0.16)***	-1.08 (0.19)***
White/other (omitted)	--	--
African American	-0.63 (0.27)*	-0.64 (0.27)*
Hispanic	-0.10 (0.24)	-0.11 (0.24)
Age	-0.05 (0.01)***	-0.03 (0.01)*
Education (years)	-0.03 (0.03)	-0.03 (0.03)
Cohabiting	0.96 (0.22)***	1.00 (0.22)***
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	0.63 (0.50)	0.66 (0.50)
$30,000 - $49,999	0.79 (0.51)	0.78 (0.51)
$50,000 or higher	1.31 (0.52)*	1.34 (0.53)*
Income missing	-0.25 (0.67)	-0.26 (0.68)
Work full-time (omitted)	--	--
Work part-time	-0.32 (0.28)	-0.30 (0.28)
Unemployed	0.07 (0.47)	0.09 (0.47)
Not in labor force	-0.37 (0.28)	-0.29 (0.29)
Interview mode		
Personal (omitted)	--	--
SAQ	0.18 (0.17)	0.18 (0.17)
Telephone	-0.19 (0.18)	-0.17 (0.18)
Spouse present	0.51 (0.16)**	2.00 (0.88)*
Child present	0.09 (0.17)	0.12 (0.18)
Other adult present	-0.59 (0.34)+	-0.65 (0.34)+
Significant interaction terms		
Sex x spouse present		0.75 (0.32)*
Age x spouse present		-0.05 (0.02)*
-2 log likelihood	1242.20	1230.21
Chi-square for model improvement		12.00**
Degrees of freedom		2

KEY: + = p < 0.10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

age, race/ethnicity education, income, work status, interview mode, and the presence of household members other than spouse (see model I in tables 4 to 7). There is an especially large presence effect for lifetime cocaine use; lifetime use estimates are over 50 percent higher in cases when the spouse or partner was present.

Significant interactions of spouse presence with respondent characteristics were found in three of the four models. In the models for lifetime use of any illidit drug (table 4) and lifetime marijuana use (table 5), the impact of spouse presence varies by race/ethnicity and age. The positive effect of spouse presence on willingness to reveal past drug use was stronger for whites than for Hispanics or African Americans (although the contrast in both models is significant only for Hispanic versus white; the same direction of effects is obtained for African Americans). The lifetime estimates of any illicit drug use given in table 3 show almost no effects at all of spouse presence on minority respondents, but a sizable effect for whites (e.g., admission of ever using illicit drugs increases from 64 percent to 77 percent among whites when spouse was present). Estimates of lifetime marijuana use suggest no spouse-presence effects for African Americans, positive effects for whites, and negative effects for Hispanics.

Presence effects varied by respondent's age in three of the four models (tables 4 to 6; all but the model for pill use). The negative interaction term (spouse presence x age) shows that the positive impact of spouse presence wanes with respondent age. It is the younger married or cohabiting respondents who are most influenced by spouse or partner presence, especially in the 18 to 25 age group. As can be seen in table 3, the drug use differentials by spouse presence are very small or nonexis- tent for the middle-aged married respondents (ages 35 to 45), but very large (20 percentage points or more) for the youngest group. The youngest group most likely contains a disproportionate share of new marriages; thus age may be tapping duration-of-marriage effects to some extent. Large differentials by spouse presence can also be seen in table 3 for the 26 to 34 age group, although the effects are somewhat smaller than for the youngest group.

A significant sex-by-spouse-presence interaction term was obtained for cocaine use only (table 6). The positive coefficient shows that spouse presence had a significantly larger influence on women than on men. Women were much more likely to report ever having used cocaine if their husband was nearby during the interview (12 percent to 29 percent); wife's presence had little impact on men's reports of cocaine

TABLE 7. *Impact of spouse presence during the interview on self- reported nonmedical use of prescription drugs: Logistic regression models for married/cohabiting respondents age 18 to 45 (N = 118; standard errors in parentheses; data are weighted).*

	Dependent variable: Nonmedical use of prescription drugs
Independent variables	I
Female	-0.35 (0.15)*
White/other (omitted)	--
African American	-1.09 (0.30)***
Hispanic	0.02 (0.22)
Age	-0.00 (0.01)
Education (years)	-0.02 (0.03)
Cohabiting	0.44 (0.22)*
Household income	
< $10,000 (omitted)	--
$10,000 - $29,999	-0.47 (0.36)
$30,000 - $49,999	-0.25 (0.37)
$50,000 or higher	-0.15 (0.38)
Income missing	-1.09 (0.50)*
Work full-time (omitted)	--
Work part-time	-0.01 (0.23)
Unemployed	0.34 (0.43)
Not in labor force	-0.16 (0.24)
Interview mode	
Personal (omitted)	--
SAQ	0.27 (0.16)
Telephone	0.01 (0.17)
Spouse present	0.31 (0.15)*
Child present	0.05 (0.16)
Other adult present	-0.73 (0.33)*
Significant interaction terms: none	
-2 log likelihood	1373.33

NOTE: There is no model 2 in this table because none of the tested interaction terms were significant at the 0.10 level.

KEY: + = p < 0.10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

use. The pattern of stronger spouse-presence effects on women can also be seen in the estimates of marijuana use and any illicit drug use (see table 3), although the interaction terms for those two dependent variables are nonsignificant. There were no significant interactions with respondent characteristics for pill use.

Spouse-presence-by-education interaction terms were nonsignificant in all four models. There were no significant interactions with cohabitation status; the privacy effects were the same for cohabiting and legally married respondents.

Tests for the interaction of spouse presence with interview mode did not support the expectation that the use of self-administered answer sheets (SAQ mode) would eliminate or moderate the effects of third-party presence. The impact of spouse or partner presence did not differ significantly among the three interview modes on any of the four dependent measures. Caution is warranted in interpreting these nonsignificant interactions, because the standard errors of these terms were large. This finding needs to be tested in a larger sample.

Models for Parent Presence. The sample of respondents living with a parent is made up predominantly of young adults, with about three-fifths of this group in the 18 to 25 age range. Most coresidence between parents and adult children involves offspring under age 25 (Aquilino 1991) and becomes relatively rare after age 30. The influence of parent presence in this sample was directly opposite to spouse-presence effects, a pattern consistent with the theoretical model described earlier.

Estimates of the lifetime use of any illicit drug and lifetime marijuana use were substantially lower in the parent-present group (see table 8); 55 percent reported ever using marijuana when parents were not present, compared to 30 percent when parents were nearby during the interview. Self-reported use of any illicit drug dropped from 61 percent to 43 percent when parents were present. Results were in the same direction for lifetime cocaine use (dropping from 18 percent to 12 percent with parent present), but the effect was not significant. Reports of pill use were not affected by parent presence.

The impact of parent presence on survey responses did not differ by respondent characteristics on any of the four dependent measures (all interaction terms for parent presence and sex, age, race/ethnicity, and education were nonsignificant). Marginally significant interaction terms

		Percent who report ever using:							
		Marijuana		Cocaine		Pills[1]		Any illicit drug	
	N of cases	Parent not present	Parent present	Parent not present	Parent present	Parent not present	Parent present	Parent not present	Parent present
Total	521	55	30	18	12	17	18	61	43
Male	273	57	31	20	18	18	16	62	47
Female	248	53	29	15	6	16	20	59	38
Hispanic	79	46	26	20	17	21	17	57	53
White/other	312	57	31	18	12	18	20	62	42
Black	125	51	27	17	10	10	6	56	29
Age 18-25	305	53	24	14	6	13	13	59	38
25-34	137	65	45	30	34	21	29	66	62
35-45	79	48	28	18	3	32	21	59	35
Education									
Less than high school	51	41	56	22	24	30	7	58	60
HS grad	164	63	25	23	9	19	15	67	38
Some college	95	62	28	17	19	22	26	68	37
College grad.	210	50	24	14	6	11	20	54	45
Interview mode									
Personal	171	53	45	13	16	12	15	58	58
SAQ	172	61	24	23	17	19	16	65	27
Telephone	178	52	14	17	2	20	26	59	41

KEY: 1 = Pills refers to the nonmedical use of four classes of prescription drugs: stimulants, analgesics, tranquilizers, and sedatives.

TABLE 9. *Impact of parents' presence during the interview on self- reported use of any illicit drug: Logistic regression models for married/ cohabiting respondents age 18 to 45 coresiding with parents (N = 521; standard errors in parentheses; data are weighted).*

	Dependent variable: ever used any illicit drug	
Independent variables	I	II
Female	-0.06 (0.20)	-0.05 (0.20)
White/other (omitted)	--	--
African American	-0.15 (0.28)	-0.11 (0.28)
Hispanic	0.03 (0.31)	0.03 (0.31)
Age	0.01 (0.02)	0.01 (0.02)
Education (years)	-0.05(0.05)	-0.05 (0.05)
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	-0.57 (0.55)	-0.62 (0.55)
$30,000 - $49,999	-0.17 (0.54)	-0.18 (0.54)
$50,000 or higher	0.21 (0.54)	0.20 (0.55)
Income missing	0.29 (0.57)	0.28 (0.58)
Work full-time (omitted)	--	--
Work part-time	-0.14 (0.26)	-0.09 (0.26)
Unemployed	0.37 (0.37)	0.42 (0.37)
Not in labor force	-1.16 (0.40)**	-1.13 (0.40)**
Interview mode		
Personal (omitted)	--	--
SAQ	0.06 (0.24)	0.34 (0.26)
Telephone	0.02 (0.24)	0.17 (0.26)
Parent present	-0.67 (0.27)*	0.09 (0.43)
Anyone else present	0.13 (0.26)	0.12 (0.26)
Significant interaction terms:		
SAQ x parent present		-1.64 (0.66)*
Telephone x parent present		-0.80 (0.66)
-2 log likelihood	617.33	610.82
Chi-square for model improvement		6.50*
Degrees of freedom		2

KEY: + = p < 0.10;* = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

TABLE 10. *Impact of parents' presence during the interview on self-reported marijuana use: Logistic regression models for married/cohabiting respondents age 18 to 45 coresiding with parents (N = 521; standard errors in parentheses; data are weighted).*

	Dependent variable: ever used marijuana or hashish	
Independent variables	I	II
Female	-0.04 (0.20)	-0.04 (0.20)
White/other (omitted)	--	--
African American	-0.13 (0.27)	-0.12 (0.28)
Hispanic	-0.26 (0.31)	-0.25 (0.31)
Age	0.01 (0.01)	0.01 (0.01)
Education (years)	-0.03 (0.05)	0.03 (0.05)
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	-0.32 (0.55)	-0.35 (0.55)
$30,000 - $49,999	-0.06 (0.54)	-0.06 (0.54)
$50,000 or higher	0.23 (0.54)	0.22 (0.54)
Income missing	0.27 (0.57)	0.27 (0.57)
Work full-time (omitted)	--	--
Work part-time	-0.21 (0.26)	-0.17 (0.26)
Unemployed	0.19 (0.35)	0.23 (0.36)
Not in labor force	-1.33 (0.42)**	-1.27 (0.42)**
Interview mode		
Personal (omitted)	--	--
SAQ	0.13 (0.24)	0.34 (0.26)
Telephone	-0.17 (0.24)	0.04 (0.25)
Parent present	-1.02 (0.28)***	-0.28 (0.42)
Anyone else present	-0.20 (0.26)	-0.19 (0.26)
Significant interaction terms		
SAQ x parent present		-1.26(0.66)+
Telephone x parent present		-1.46(0.77)+
-2 log likelihood	626.08	620.46
Chi-square for model improvement		5.63+
Degrees of freedom		2

KEY: + = p < 0.10; * = p < 0.05; ** = p < 0.01; *** = p < 0.001 (2-tailed tests).

TABLE 11. *Impact of parents' presence during the interview on self-reported cocaine use and the nonmedical use of prescription drugs: Logistic regression models for respondents age 18 to 45 coresiding with parents (N = 521; standard error in parentheses; data are weighted).*

Independent variables	Cocaine	Nonmedical use of prescription drugs
Female	-0.41 (0.27)	0.02 (0.26)
White/other (omitted)	--	--
African American	-0.05 (0.37)	-0.68 (0.43)
Hispanic	0.25 (0.38)	-0.00 (0.38)
Age	0.04 (0.02)*	0.07 (0.02)***
Education (years)	0.02 (0.07)	-0.08 (0.06)
Household income		
< $10,000 (omitted)	--	--
$10,000 - $29,999	0.96 (0.79)	-0.61 (0.72)
$30,000 - $49,999	0.32 (0.80)	-0.02 (0.68)
$50,000 or higher	0.62 (0.80)	-0.10 (0.69)
Income missing	0.19 (0.85)	-0.20 (0.72)
Work full-time (omitted)	--	--
Work part-time	-0.22 (0.37)	0.27 (0.34)
Unemployed	0.33 (0.43)	0.85 (0.43)*
Not in labor force	-0.80 (0.60)	-0.14 (0.54)
Interview mode		
Personal (omitted)	--	--
SAQ	0.61 (0.31)+	0.47 (0.33)
Telephone	0.15 (0.33)	0.75 (0.33)*
Parent present	-0.39 (0.39)	0.15 (0.35)
Anyone else present	-0.72 (0.39)+	-0.15 (0.34)
Significant interaction terms: none		
-2 log likelihood	413.77	411.51

NOTE: There is no model 2 for either of these variables because none of the tested interaction terms were significant in these models ($p > 0.10$).

KEY: + = $p < 0.10$;* = $p < 0.05$;** = $p < 0.01$;*** = $p < 0.001$ (2-tailed tests).

by mode of interview were found in two of the four models. The interaction terms did not support expectations about the ability of self-administered answer sheets to reduce response effects due to social desirability.

In the model for any illicit drug use (table 9), the negative effect of parent presence on drug use reports was significantly stronger in the SAQ mode than in the face-to-face interview (where respondents answered sensitive questions aloud). The pattern was similar for marijuana, but the interaction terms were not significant at conventional levels ($p < 0.10$). There were no significant presence-by-mode interactions in the models for cocaine or pill use. No firm conclusions about mode differentials in presence effects can be drawn, given the inconsistency of interaction results over the four models for parent presence.

Effects of Child Presence and Other Adult Presence. In the models for married and cohabiting respondents (tables 4 to 7), presence of children and presence of other adults during the interview were included as control variables. The presence of adults other than spouse or partner had a consistent negative impact on drug use self-reports in the models for married/cohabiting respondents, an effect in the opposite direction than spouse presence. The negative coefficients are marginally significant for cocaine ($p < 0.10$) and pill use ($p < 0.05$), but nonsignificant for marijuana and use of any illicit drug. These patterns suggest that the direction and magnitude of third-party effects on survey responses may depend on the identity of the person present. Replication with larger samples is needed to move beyond tentative findings.

The presence of children had no significant effects on any of the dependent measures in the married/cohabiting analyses and the regression coefficients were very close to zero in all models. These findings are similar to results reported by Bradburn and Sudman (1979), who found few consistent effects for child presence. Child presence was not tested in the models for parent presence because few of the respondents coresiding with parents also had coresident children of their own.

A somewhat different specification was used in the models for respondents coresiding with parents. In these models, the age of others present is not distinguished; instead, a dummy variable for the presence of anyone other than a parent was included. Siblings undoubtedly make up the largest portion of the "others" present in this sample; nearly half of the respondents living with a parent had coresident siblings also, while only about 15 percent reported adults other than parent or sibling in the household. Only one marginally significant effect of others' presence was obtained: Self-reported cocaine use was lower ($p < 0.10$) if someone other than a parent were present during the interview.

DISCUSSION

The findings for spouse/partner presence and parent presence are generally consistent with the theoretical assumptions of this study. The magnitude and direction of third-party effects in surveys appear to be linked to the extent of the third party's knowledge of the information requested, and to the degree of personal stake the third party may have in the respondent's answers. The results summarized below should be taken as tentative and in need of replication in larger and more diverse samples.

Consistent with earlier research (Aquilino 1993) on married couples, the analyses suggest that willingness to report sensitive factual information may be increased by the presence of a spouse or partner during the interview. It is likely that in many relationships, the spouse or cohabiting partner knows of the respondent's past drug use, either because couples have used drugs together or have discussed details of past behavior. The effect is stronger among the younger married and cohabiting couples, especially those in their early twenties. These younger couples are more likely than older ones to be current or recent users of illicit drugs, and this may heighten sensitivity to the presence of someone who knows about this recent behavior. These findings support Mitchell's (1965) contention that it is more difficult to deny past behavior when someone who knows the truth is nearby.

In the married/cohabiting sample, the presence of children had no impact on response tendencies. The presence of other adults (related or unrelated), however, had a consistent negative effect on drug use reports, although the effects became borderline with control variables in the model. These findings suggest that spouse presence and other-adult presence have effects in the opposite direction: Spouse presence increases the probability of reporting illicit drug use, while other-adult presence lowers that probability. This pattern provides tentative support for the proposition that the identity of the third party is critical in estimating effects related to lack of privacy.

The results for the parent coresident sample are also consistent with the theoretical approach. When someone without knowledge of the illicit behavior is present and that person has a personal stake in learning about such behavior, respondents will be less likely to reveal illegal or socially undesirable behavior. Parents fit both of these conditions in regard to their adult children's drug use; thus, their presence during the interview resulted in significantly lower reports of lifetime illicit drug use and marijuana use.

The subsample of respondents living with parents is predominantly in the 18 to 25 age range, ages at which parent-adult child coresidence tends to be very high. These results suggest that, in a household survey, inter-viewing young adults in the presence of their parents could introduce a downward bias in the drug use estimates for this group. These results are consistent with Gfroerer's (1985) research showing that

younger adolescent respondents in the NHSDA were less willing to reveal illicit drug use when parents were present during the interview.

An unexpected finding of this research was the lack of association of privacy effects with interview mode. There was no significant linkage in the analysis of spouse or partner presence. In analyses of parent presence, interaction effects were inconsistent across models, and the two significant parameters were opposite to what was expected (stronger parent presence effects in the self-administered mode).

The findings for mode-by-presence interactions need to be interpreted very cautiously, however, due to the small sample sizes available to test these effects and the relatively large standard errors in the regression models. If accurate, the pattern of results would suggest that the use of self-administered answer sheets may not shield respondents from the potentially biasing effects of another person's presence during the interview. Having someone other than the interviewer nearby may alter the psychological setting of the interview, even if survey questions and answers are not spoken aloud. The self-administered interview may not feel completely private if someone with an interest in the responses is in the setting. It is also possible that third parties may intrude upon the self-administered interview directly by looking at the forms while they are being filled out, or by asking the respondent about questions and answers. Future research on this topic would benefit from having much more detailed information on the precise manner in which other household members involved themselves in the interview, whether self- or interviewer-administered.

One primary weaknesses of this study is the crudeness of the measurement of the presence variables. Interviewers were not asked to record which specific parts of the interview were completed in private and which in the presence of others. Much more precise estimates of presence effects could be made if the presence variables could be linked to individual questions and if more detailed measures of the degree and manner of third-party intrusions were included in the data-collection protocol.

Implications for Survey Management

The results of this research suggest that interview setting influences response tendencies when information about sensitive or illegal behavior is sought. Third-party presence has the potential to alter the probability that respondents will admit illicit drug use. Although the effect may be positive (for spouse or partner presence) or negative (for parent presence and other adult presence), it is likely that variation in interview privacy within the sample increases measurement error. These results reinforce the need for interviewers in drug surveys to seek and maintain privacy during the interview. This is true regardless of survey mode, since privacy effects may be large even when the self-administered format is used. Interviewers should know, however, that the presence of a spouse or cohabiting partner during the interview appears to be less of a threat to the validity of self-reported drug use than is

the presence of a parent or other adult. Interviewers need to be especially vigilant in preserving privacy when the respondent—whether an adolescent or young adult—coresides with parents. It might also be beneficial in such situations to have interviewers emphasize to respondents that parents will never see the answers recorded on the self-administered forms and that their answers will never be revealed any time after the interview. Respondents living in a parental home may need greater assurances of confidentiality than do those living in their own households. Researchers may need to make greater efforts to develop techniques and strategies for maximizing interview privacy when children of any age are interviewed in the parental home.

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