ASSESSING THE RELATIONSHIP BETWEEN INTERVIEWER EFFECTS AND NSDUH DATA QUALITY

RTI Project Nos. 0211838.108.006.020 and 0212800.001.108.006.020
Contract Nos. HHSS283200800004C and HHSS283201000003C

Authors:

Kevin Wang
Phil Kott
Andrew Moore

Project Director:

Thomas G. Virag

Prepared for:

Substance Abuse and Mental Health Services Administration
Rockville, Maryland 20857

Prepared by:

RTI International
Research Triangle Park, North Carolina 27709

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1. Introduction

For interviewer-administered surveys, interviewers can have a major effect on various measures of survey data quality, including unit response rates, item missing rates, estimates of uncertainty (variances), and the accuracy of survey estimates. Interviewers play a crucial role in gaining initial cooperation from respondents, then sustaining that cooperation throughout the interview. Interviewers are also responsible for administering the survey instrument, perhaps asking follow-up questions or probes when the respondent does not answer a question adequately. Finally, interviewers are responsible for recording responses into the data collection instrument.

Sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Survey on Drug Use and Health (NSDUH) is a face-to-face survey that was initiated in 1971 as the National Household Survey on Drug Abuse (NHSDA).[1] The survey is a primary source of information on the use of illicit drugs, alcohol, and tobacco by the civilian, noninstitutionalized population of the Unites States aged 12 years old or older. During this time, the survey has undergone several changes in sample design and data collection procedures in order to meet changing demands for information and to take advantage of technological advances in data collection methods. Prior to 1999, the survey was designed to produce national estimates for major population subgroups and used paper-and-pencil interviewing (PAPI) methods. Self-administered answer sheets were used to collect data on substance use. In 1999, the survey was expanded to a 50-State design of about 67,500 persons per year to enable the production of State-specific estimates. This expanded sample led to the hiring of and data collection by a large number of field interviewers (FIs) inexperienced on NSDUH. Also in 1999, the mode of interviewing was changed to computer-assisted interviewing (CAI). The nonsensitive portions of the questionnaire were administered by the interviewer using computer-assisted personal interviewing (CAPI). The substance use questions were administered using audio computer-assisted self-interviewing (ACASI).

Decisions regarding the NSDUH sample and survey design could affect the number of NSDUH FIs and the composition of NSDUH FIs in terms of experience, the number of hours they work, the distances they travel, and so on. These factors have been shown to be related to key NSDUH outcome measures. To inform future decisions about NSDUH's survey and sample design, it is crucial to understand the relationships between interviewer characteristics and outcomes of interest, such as response rates and prevalence rates. Such knowledge then can be used not only to inform the degree to which changes in NSDUH's study design that affect interviewer composition and work practices may affect response rates, prevalence rates, and other outcome measures of interest, but also to direct efforts at identifying and removing the causes of different prevalence rates.

The report is organized as follows. The remainder of this chapter briefly summarizes extant research on the relationships between interviewer characteristics and data quality on NSDUH and describes the variables used in the various analyses presented. Chapter 2 reports on three repeated cross-sectional analyses of the effects of interviewer characteristics on measures

[1] As of 2002, the survey has been called the National Survey on Drug Use and Health (NSDUH).

of survey participation: screener contact, screener cooperation, and interview cooperation. Chapter 3 presents analyses on the relationships between interviewer characteristics and substantive items of interest from the survey, namely, measures of substance use and mental health outcomes. Chapter 4 describes the results of two cohort analyses that were carried out to assess whether the relationship between survey outcomes and interviewer experience uncovered in the previous chapters was due to the gaining of experience or the nature of interviewers who eventually gained experience (even after using regression techniques to control for their caseloads and other characteristics). Conclusions and a discussion of the results are provided in Chapter 5.

Besides the list of cited references, three appendices are included in this report. Appendix A presents regression results for a subset of variables used as predictors in the analyses described in Chapters 2 and 3.[2] Appendix B provides conditional marginal plots, and Appendix C presents data for the cohort analyses described in Chapter 4.

1.1 Previous Research on Interviewer Characteristics and Data Quality on NSDUH

This section briefly reviews prior NSDUH research on the relationships between interviewer characteristics and measures of data quality, particularly response rates and prevalence estimates. Response rates are an indicator of the potential for nonresponse bias, conditional upon the differences between respondents and nonrespondents on the survey items of interest. A low response rate is not indicative of high nonresponse bias if the differences between the respondents and nonrespondents on the survey items of interest are small. Conversely, a moderately high response rate may "hide" a large bias due to nonresponse if there are substantial differences between respondents and nonrespondents. Setting aside response rate concerns, higher reporting of drug use is viewed as an indicator of higher data quality. Respondents may underreport use because of social desirability concerns. They may also underreport in an effort to avoid questions as they learn that affirmative responses to initial drug questions lead to additional questions. The section closes with a brief discussion of other potential indicators of data quality that have not been subjected to nearly as much scrutiny as either response rates or self-reporting of substance use and other survey items.

1.1.1 Screener and Interview Cooperation

The 1999 NHSDA nonresponse analysis (Office of Applied Studies [OAS], 2001a) reported on detailed analyses of the correlates of response in the 1999 NHSDA and differences over time (between the 1994 and 1999 surveys) in the composition of nonresponse between refusals and noncontacts. The report also contains a literature review of the correlates of nonresponse and trends in response rates in other surveys. The detailed analyses of the 1999 response rates were carried out to compare the correlates of nonresponse on NHSDA with patterns from other surveys. The study found that female interviewers had higher screener and

[2] This appendix's tables are a subset of the tables in this report's accompanying document: RTI International. (2013, October 4). *Assessing the relationship between interviewer effects and NSDUH data quality: Regression results tables* (prepared for the Substance Abuse and Mental Health Services Administration, Contract Nos. HHSS283200800004C and HHSS283201000003C, RTI Project Nos. 0211838.108.006.020 and 0212800.001.108.006.020). Research Triangle Park, NC: Author.

interview response rates than males and older interviewers were more successful than younger interviewers. It was also found that interviewers with a high school level of educational attainment had higher response rates than interviewers with higher levels of education. Finally, interviewers with prior survey experience had higher response rates than those without any prior experience, and those with prior NHSDA experience were the most successful.

Using data from the 1999, 2000, and 2001 surveys, Chromy, Eyerman, Odom, McNeeley, and Hughes (2005) carried out analyses examining the relationships between several interviewer characteristics and four stages of the response process: (1) screener contact, (2) screener cooperation, (3) contact with the person selected for the interview, and (4) interview cooperation. For the analysis of these outcomes, interviewer experience was measured based on screener interviewing experience. FIs who had completed fewer than 120 screeners were classified as inexperienced. The experienced category consisted of FIs who completed 120 to 299 screeners, and highly experienced FIs were those who completed 300 or more screeners. Highly experienced interviewers had higher screener contact rates than inexperienced interviewers. Both experienced and highly experienced interviewers had a greater likelihood of obtaining a completed screener (conditional on contact) than inexperienced interviewers. Highly experienced interviewers were also more likely to make contact with the selected person than inexperienced interviewers. Finally, FI experience was found to be a statistically significant predictor of cooperation on the interview (conditional on successful contact). Both highly experienced and experienced interviewers had higher cooperation rates on the interview than inexperienced interviewers.

Chromy et al. (2005) also examined the effects of other FI characteristics on contact and cooperation rates at both screening and interviewing. The main findings were as follows:

- FI race/ethnicity, gender, and age were not found to be predictive of screening contact.
- Female FIs had higher screener cooperation rates than male FIs.
- The model in the analysis of screener cooperation included an interaction term between FI race/ethnicity and the percentage of the segment that was Hispanic. The race/ethnicity of the FI had no impact on screener cooperation in segments with a high concentration of Hispanics (greater than 70 percent). The only significant interaction occurred when the FI was black and Hispanics made up 20 to 70 percent of the population in the segment.
- Interviewer age and gender had no impact on the probability on interview contact (successfully contacting the person selected for an interview).
- The model of contact with the selected person included an interaction term between respondent and FI race/ethnicity. Black and Hispanic FIs were less likely to obtain contact with the selected person than white FIs when the selected respondent was white. Black and Hispanic respondents were less likely than white respondents to be successfully contacted when the interviewer was white.
- In contrast with the results for screener cooperation, female FIs did not have higher interview cooperation rates than male FIs.

- Interviewers 61 years of age or older were less likely to obtain a completed interview than interviewers under the age of 41.
- The model predicting interview cooperation (conditional on contact) included interaction terms between the FI's and the respondent's race/ethnicity. There was no impact of FI race/ethnicity on the probability of completing the interview (conditional on contact with the selected person) when the respondent was white. Black and Hispanic respondents were more likely to complete the interview than white respondents when the interviewer was white. Respondents classified as "other" on race/ethnicity were less likely to complete the interview than white respondents when the interviewer was white.

Using data from the 2002 NSDUH, Murphy and Eyerman (2005) examined the components of nonresponse (refusals, noncontacts, and/or other incompletes) among the 50 years old or older group in NSDUH. Their analysis also included a regression of refusal at the interview level on a number of interviewer and respondent characteristics for the entire sample (not just those 50 years old or older). FI age was found to be unrelated to the likelihood of refusal. They found evidence of interaction effects between respondent and FI gender on refusals at the interview level, with all combinations significantly more likely to result in a refusal relative to when both the respondent and the FI were female. With respect to race/ethnicity, they found that relative to when both the FI and respondent were both white/other, a refusal was significantly less likely when the respondent was either black or Hispanic. Also, refusals were less likely to take place when both the FI and respondent were Hispanic or the interviewer was black and the respondent was Hispanic relative to the baseline condition of both the FI and respondent being white/other. Finally, the analysis revealed that cases attempted by inexperienced interviewers (i.e., those with no prior NSDUH experience) were significantly more likely to result in an interview refusal than those worked by highly experienced FIs (i.e., those who had completed 100 or more NSDUH interviews in prior years).

Relying on data from the 2004 NSDUH, Safir, Murphy, Park, and Wang (2006) conducted analyses of screener contact, screener cooperation, and interview cooperation that included a number of FI characteristics as predictors. In addition to standard demographic measures, such as race/ethnicity, gender, and age category, some of their analyses included FI tracking and performance measures, such as miles traveled per interview, hours per week worked, bonuses received, and pay rate (the average for all 2004 quarters worked by each FI). These were included as predictors of cooperation on the main interview. For interviewer experience, FIs were categorized based on the number of completed interviews prior to 2004 since the 1999 survey (no prior experience; 1 to 115; 116 to 256; 257 to 446; 447 and higher), based on approximate quintiles of interviewers.

- Screener contact was positively associated with interviewer experience. Also, the likelihood of screener contact for black interviewers was lower than for white interviewers. Interviewer age was found to be unrelated to screener contact.
- FIs under the age of 50 were less likely to obtain cooperation at the first screener contact than FIs who were 60 years of age or older. FIs with more experience were more likely to obtain cooperation on the screener than those with less experience. Female FIs had higher cooperation rates than male FIs. The race of the interviewer

was not found to be a statistically significant predictor of screener cooperation on the first contact.

- FI experience was not strongly related to cooperation on the main interview. The likelihood of a completed main interview was higher with black interviewers than white interviewers. Higher levels of FI efficiency, FI hours per interview, and the total number of dwelling units (DUs) assigned to an FI, were all negatively related to main interview cooperation.

1.1.2 Substance Use Prevalence Rates

The initial evidence to suggest a possible relationship between interviewer experience and substance use reporting was uncovered in the analysis of data from a large-scale NHSDA field test in 1990 that was designed to test new questionnaire wordings, formats, and modes of administration (Turner, Lessler, & Devore, 1992). For illicit drugs, this study showed higher reported usage by respondents in face-to-face interviews when interviewed by interviewers with no prior experience than those with any prior experience, but similar rates for licit drugs, such as alcohol and cigarettes.

The change to a design capable of producing State-level estimates in 1999 provided a much larger sample size with which to examine the relationship between interviewer experience and self-reported substance use. Hughes, Chromy, Giacoletti, and Odom (2002) presented the results of several analyses using data from the 1998 and 1999 surveys. In the 1999 survey, both CAI and PAPI interviews were conducted. Self-reports of lifetime use of both any illicit drug and any psychotherapeutic were lower for interviewers with some prior NHSDA experience than those with no prior NHSDA experience in both years and in both modes. In addition to measures of interviewer experience, the logistic regression models used several other predictors, including respondent demographics (age, gender, and race/ethnicity), census region, and a measure of population density. For experience, a cumulative interview count variable that reflected cumulative experience was used, but this only reflected experience during the 1999 interview. Overall, Hughes et al. (2002) concluded that the association between experience and prevalence of substance use reporting was weaker in the CAI sample than in the PAPI sample, but the association was still problematic and warranted additional analyses.

The 2000 NHSDA summary of findings report (OAS, 2001b) indicated that a change in the distribution of interviews done by experienced and inexperienced interviewers between 1999 and 2000 may have affected estimated drug use rates in 1999 and 2000, and as a result, estimates of change between the 2 years. Regression analyses of substance use reporting revealed a negative association between interviewer experience and substance use reporting. In this analysis and in Hughes et al. (2002), interviewer experience was based on the number of interviews completed in each year and did not cumulate across years. Other predictors in the models were identical to the ones used by Hughes et al. (2002). In 2000, only CAI was used. Overall, the negative effect of experience on prevalence rates in the 1999 and 2000 CAI versions was smaller than the effect in the 1999 PAPI, which again suggested that using CAI reduced the association between FI experience and self-reported substance use, but did not mitigate it entirely.

Chromy et al. (2005) analyzed substance use reporting using data from the 1999 to 2001 NHSDAs to examine the impact of interviewer experience, gender, and race/ethnicity.

Their outcomes included lifetime, past year, and past month use measures for each of the following substances: any illicit drug, marijuana, any nonmedical psychotherapeutic drug, any nonmedical pain reliever, alcohol, and cigarettes. Only the results for lifetime use of any illicit drug were published. Consistent with previous findings, interviewer experience continued to have a negative association with self-reports of lifetime use of any illicit drug. Respondents were less likely to report lifetime use of any illicit drug when interviewed by black or Hispanic FIs than when interviewed by white FIs. The gender of the FI did not have a statistically significant effect on self-reports of lifetime use of any illicit drug. In an important departure from previous studies, this study used a measure of interviewer experience that was cumulative across years of the survey. Cumulative interview count was defined in terms of a three-category variable (0 to 39 interviews; 40 to 99 interviews; 100+ interviews). Also, although the survey was conducted before 1999, that year was selected as the starting point for measuring cumulative interviewer experience because it was thought that only interviews carried out using CAI should be included.

Vorburger and Wang (2005) replicated the analyses in the 2000 NHSDA summary of findings using data from the 2002 and 2003 surveys. The additional data allowed for the creation of a nine-category measure of cumulative interviewer experience with the following categories: 1 to 19, 20 to 39, 40 to 59, 60 to 99, 100 to 249, 250 to 499, 500 to 749, 750 to 999, and 1,000+. Lifetime, past year, and past month use measures of any illicit drug, marijuana, nonmedical use of any psychotherapeutic drug, pain relievers, tranquilizers, stimulants, and sedatives were regressed on the same predictors that were used in Hughes et al. (2002) and in the 2000 summary of findings report (OAS, 2001b).

Their analysis estimated the effects of experience on self-reported use of psychotherapeutics (overall and separately) to see whether the effects of cumulative interviewer experience had a greater impact on rates for using these substances (pain relievers, tranquilizers, stimulants, and sedatives) than any illicit drug and marijuana. As part of the NSDUH interview, when respondents are asked questions about their use of psychotherapeutics, they are asked to prompt the interviewer to present pill cards that contain images and names of these substances (in order to aid respondent recall). These pill cards are contained in a booklet of showcards (which are mostly used in the CAPI portions of the survey). It is possible that some interviewers simply hand the booklet to respondents and allow the respondents to determine for themselves whether to look at the pill cards when prompted to do so by the CAI program. If experienced interviewers were less likely than new interviewers to actually show the pill cards when prompted by the respondent, it might be expected that the negative effects of interviewer experience on substance use reports might be more pronounced for psychotherapeutics than other substances (which do not have pill cards). The analysis revealed mixed evidence in support of this hypothesis. In general, the effects of experience on the use of any psychotherapeutics, pain relievers, and tranquilizers were smaller than the effects on self-reports for any illicit drug use and marijuana across the three reporting periods (lifetime, past year, and past month). However, for stimulants and sedatives, the effects of experience were higher than those for any illicit drug use across the three reporting periods.

Odom, Aldworth, and Wright (2005) included interviewer experience as a covariate in models predicting lifetime use of marijuana, cocaine, any illicit drug, alcohol, and cigarettes. Their study examined whether field interventions intended to reduce FI effects (e.g., the standardization across FI training and field procedures) that were introduced at different times

during the 2001 NHSDA had any impact on self-reported use of these substances. These interventions included the following: (1) interviewers were given guidelines ("Steps to Maximize Data Quality") in order to encourage adherence to study protocols, (2) field observations by project staff were initiated, and (3) a series of weekly training sessions was initiated to follow up field observations. It was found that these interventions did not have an impact on respondent reports of lifetime substance use. Interviewer experience was measured using four categories based on the cumulative number of interviews completed since the 1999 survey: none, 1 to 99, 100 to 199, and 200 or more. As with prior studies, respondents interviewed by FIs with less experience were more likely to report substance use than respondents interviewed by FIs with less experience.

Wang and Baxter (2005) conducted analyses using data from the 2002 and 2003 NSDUHs to test the sensitivity of the relationship between interviewer experience and respondent reports of any illicit drug use. They estimated regression models that included variables thought to confound the relationship between interviewer experience and reporting of any illicit drug use. In particular, the variables selected were believed to be related to response propensity and illicit drug use. The additional covariates included family income, number of moves in the past year, religious service attendance, neighborhood homogeneity in terms of race/ethnicity, the presence of children in the household, marital status, education, requiring additional interview days, employment status, being born outside the United States, receipt of public assistance, serious mental illness (SMI), family structure for adolescents (e.g., if both biological parents are in the household), and "neighborhood disadvantage." This latter measure was constructed using segment-level indicators of percent living below the poverty line, percent of households headed by a female, male unemployment rate, and percent of families receiving public assistance. In general, the analysis found that in spite of the additional control variables used in the model (most of which had statistically significant effects on any illicit drug use), interviewer experience continued to show a negative association with self-reports of illicit drug use.

1.1.3 Other Indicators of Data Quality

The average length of time it takes to administer a survey is a crucial element of the survey design that may reflect survey data quality in different ways. First, the expectation of a longer interview time may reduce response rates and introduce nonresponse bias. In general, the longer potential respondents are told an interview will take, the less likely they are to want to participate and, therefore, the greater the impact on response rates, a potential indicator of data quality.

Second, short interview times may be an indicator of poor data quality if this is due to interviewers taking shortcuts in the administration of survey protocols. Short interview times can also be the result of respondents giving too little thought to the survey items. Finally, it is generally the case that respondents who report less substance use should have shorter interview times because they are asked fewer questions than those who do report substance use.
A considerable amount of analysis would need to be carried out to determine which of these three mechanisms might account for short interview times and to see whether respondents being interviewed by more experienced FIs are being "coached" to report less substance use than those being interviewed by less experienced FIs. In addition to the factors noted above, timings may

depend on other confounders, such as familiarity with computers. Even the timing for such tasks as introducing the calendar or explaining ACASI to respondents will reflect both the FI's abilities and familiarity with the instrument, as well as the respondent's ability to follow what is being explained. For these reasons, this report does not examine the relationships between interviewer characteristics and interview administration times.

Another source of information on data quality that has been examined in previous studies is data gathered on field protocol errors collected during field observations of FIs. The survey began observing FIs in 2001. SAMHSA and RTI observers are sent to accompany interviewers to record the degree to which FIs are adhering to project protocols. Analyses of field observation data between 2002 and 2004 found that veteran interviewers tended to make more protocol errors than new FIs (Brantley, Cunningham, Granger, & Perkins, 2005). More recently, Clark, Cohen, Johnson, and McHenry (2010) reported that in 2009 previously observed FIs were more likely to make biasing or inappropriate remarks during screening than FIs being observed for the first time. Although substance use items are administered using self-interviewing methods, it is possible that such protocol violations could affect substance use reporting by respondents, even if these violations occur during the administration of the screener, because this may affect willingness to take part in the survey. For example, if FIs inform respondents that the interview will take longer if they report using substances, this may affect participation (and possibly reporting).

Using the survey responses and data on protocol errors from 949 field-observed interviews from the 2002 and 2003 surveys, Flicker and Wang (2005a) carried out analyses in which lifetime, past year, and past month use of illicit drugs use were regressed on respondent characteristics and several measures based on observed protocol errors. In general, neither the presence of protocol errors nor the number of protocol errors was found to be associated with reports of any illicit drug use. In a subsequent analysis, Flicker and Wang (2005b) expanded the analysis to include all interviews that were completed by FIs who had at least one interview observed in 2002. In an approach similar to that used by Odom et al. (2005), comparisons were made between interviews done by interviewers before and after being observed. Flicker and Wang (2005b) further distinguished by whether or not a protocol error was observed and what type of error was observed. With one exception, the type of error observed had no impact on reports of any illicit drug use. Their analysis found that FIs who were observed not reading verbatim had higher rates of reporting past month use of illicit drug after being observed than before being observed. A major limitation on the use of data from field observations for quantitative analysis to inform interviewer effects is the nonrandom selection of FIs for observation, which makes it difficult to generalize the results to the full survey.

1.1.4 Summary of Previous Research

Previous studies have revealed statistically significant associations between interviewer experience and two of the measures of data quality reviewed in this study—response rates and respondent self-report of substance use. The evidence for these correlations is based entirely on a cross-sectional study design. None of the studies reviewed so far has examined the degree to which an individual interviewer's response rate actually increases over time or self-report rates of substance use actually decline over time.

In the case of response rates, it is possible that the interviewers do improve their abilities to gain participation over time. But it may also be the case that interviewers with high response rates are more likely to stay on the job longer and that the association between experience and response rates is an artifact of experienced interviewers having success and staying on the project while the less successful and inexperienced interviewers are less likely to stay on the job for long.

It is less clear why respondents interviewed by more experienced interviewers are less likely to report substance use than those interviewed by less experienced interviewers. One explanation is that associations between interviewer experience (length of time on the job) and prevalence rates are an artifact of nonrandom assignment of interviewers to areas that differ in terms of response rates and prevalence rates. A second explanation for this relationship posits that experienced interviewers are more familiar with the structure of the CAI questionnaire than less experienced interviewers and are more likely to provide cues to potential respondents that the length of the interview is minimized if respondents limit their reports on the use of substances. To gain cooperation, interviewers may do this prior to the interview in order to reduce the potential respondent's perception of burden. Interviewers may also do this in order to reduce the administration time needed for the survey. Explanations such as these would require unobtrusive monitoring of interviewer fieldwork. An understanding of why interviewer characteristics are related to outcomes of interest is a necessary first step toward making counterfactual inferences with confidence about how changes in NSDUH's design can affect response rates, prevalence rates, and other aspects of data quality.

1.2 Methodology

This section describes the methodology and measures for the regression analyses presented in Chapter 2 on response rate outcomes and Chapter 3 on substance use and mental health outcomes. The methodological features specific to the cohort analyses presented in Chapter 4 are described within that chapter.

The research presented in this report attempts to increase an understanding of the relationships between interviewer characteristics and data quality. First, prior analyses, such as those cited earlier, relied on data primarily from NHSDA interviews conducted between 1999 and 2001, which predates a substantial number of changes in the survey design begun in 2002, such as offering a $30 incentive to all interview respondents. In this study, NSDUH data between 2002 and 2007 are used, which allows for a much longer time period for assessing these broad changes in design. In addition, using a longer time interval makes it possible to determine whether cross-sectional associations between interviewer characteristics and outcomes, such as prevalence rates, are changing over time.

Also, prior studies were done when attrition rates among FIs were relatively high and were declining over time. As shown in ***Table 1.1***, attrition rates steadily declined between 1999 and 2002 and have been stable since 2003. NSDUH may face more pressures to reduce the sample size rather than increase it. So, data collected under more stable interviewer attrition rates will be more pertinent than data collected when attrition rates began at very high levels and then dropped off. A large number of new FIs were needed in 1999, the first year of data collection for the 50-State design. In 1999, 1,544 out of 1,787 FIs (86.4 percent) who completed at least one

interview that year had no prior experience on the project (OAS, 2001b). By 2002, 183 out of 926 FIs (19.8 percent) who completed at least one interview that year had no prior NHSDA experience (Vorburger & Wang, 2005).

Table 1.1 1999 to 2009 NHSDA and NSDUH Interviewer Attrition

Survey Year	FIs Hired and Trained	FIs Attrited	Percent Attrition
1999	1,975	745	37.7%
2000	1,407	404	28.7%
2001	1,251	365	29.2%
2002	959	241	25.1%
2003	864	168	19.4%
2004	872	189	21.7%
2005	860	196	22.8%
2006	888	190	21.4%
2007	845	193	22.8%
2008	863	198	22.9%
2009	804	163	20.3%

FI = field interviewer.

Source: Center for Behavioral Health Statistics and Quality, National Household Survey on Drug Abuse, 1999 to 2001, and National Survey on Drug Use and Health, 2002 to 2009.

Another way in which this study attempts to advance the project's state of knowledge about the relationships between interviewer characteristics and data quality is by bringing more information to bear on the question by (1) considerably expanding the variables used as controls in regression models predicting outcomes, (2) including different measures of interviewer experience to test the sensitivity of results, (3) including additional characteristics of interviewers (such as hours worked, travel mileage), and (4) expanding the set of outcome measures to include mental health measures.

The analysis examined three types of outcome measures:

Survey participation measures:

- *Screener contact*. Among eligible households, final screening result codes of 11 (no one home after repeated visits), 12 (screening respondent unavailable - repeated visits), and 21 (denied access - building/complex) were coded as noncontacts on the screener; all other final screener result codes were coded as contacts.
- *Screener cooperation*. This measure involved completed screeners among contacted households.
- *Interview cooperation*. Among contacted persons selected for the interview, final interview result codes of 70 (interview complete), 73 (breakoff - partial interview), and 93 (completed interview, verification revealed that the interviewer did not follow correct procedures) were coded as completed interviews.

Substance use measures:

- *Lifetime use of cigarettes*,
- *Past year use of cigarettes*,

- *Lifetime use of alcohol*,
- *Past year use of alcohol*,
- *Lifetime use of marijuana*,
- *Past year use of marijuana*,
- *Lifetime use of analgesics (prescription pain relievers)*,
- *Past year use of analgesics*,
- *Lifetime use of cocaine*, and
- *Number of positive responses* ("yes") to 47 lifetime gate questions in the core substance use modules was used as an outcome. A gate question is one that asks whether the respondent has ever used a particular substance; if the response to the question is affirmative, follow-up questions are then asked about the substance in question.

Mental health measures:

- *Past year major depressive episode (MDE)*. This has been available only since the 2004 NSDUH.
- *Past year mental health specialty treatment (for youths)*. This indicates whether a youth aged 12 to 17 reported receiving specialty mental health services in the past year from any inpatient or outpatient specialty sources for problems with behavior or emotions not caused by substance use.
- *Past year mental health treatment (for adults)*. This refers to the receipt by an adult aged 18 or older of inpatient or outpatient mental health services or the use of prescription medication in the past year.

Interviewer experience can be conceptualized in at least two different ways. First, experience can reflect a cumulative interview count, which is the cumulative number of interviews completed by an interviewer since 1999, up to and including the current interview (e.g., Hughes et al., 2002; Olson & Peytchev, 2007;). Consistent with studies starting with Chromy et al. (2005), 1999 was chosen as the starting point for measuring cumulative interviewer experience under the assumption that only interviews carried out using CAI should count toward a measure of relevant experience. Interviewer experience (cumulative interview count) was treated as (1) a categorical measure with nine categories (1 to 19, 20 to 39, 40 to 59, 60 to 99, 100 to 249, 250 to 499, 500 to 749, 750 to 999, 1,000+) and (2) as a continuous measure. For analyses of screener contact, screener cooperation, and interview cooperation, record of call (ROC) data were used to identify the date of the first attempt at the appropriate level (screener or interview) and to match the interviewer experience up to that point by date.

In addition, experience can be viewed as elapsed time on the job rather than numbers of interviews conducted. Two such measures were used in preliminary analyses—the number of quarters worked up to the current quarter on the NSDUH (since 1999) and the number of years worked up to the current year on the NSDUH (also since 1999).

Two other interviewer characteristics that are associated with survey costs are the amount of time that interviewers spend on the project and the amount of travel required to conduct interviews. Data on FI hours worked per week and miles traveled per week were obtained from weekly reports based on FI timesheet submissions. The number of miles traveled reflects mileage for which interviewers are reimbursed. These data were matched to the week in which the interview was completed for substance use outcomes or the week that the screener or interview was attempted (for the screener contact, screener cooperation, and interview cooperation outcomes). For these analyses, both measures were categorized into approximate quartiles. For interviewer hours worked that week, these were 1 to 18 hours, 18.25 to 26 hours, 26.25 to 35.75 hours, and 36 or more hours. For interviewer miles per week, the categories were 0 to 135 miles, 136 to 250 miles, 251 to 415 miles, and 416 or more miles.

For the analyses related to substance use and mental health indicators, it was decided that the measures of hours worked and the mileage tied to a particular week may have been too precise and that more general measures were preferable. For this reason, alternative measures for these concepts were used in the analyses of substance use and mental health indicators. For hours, the average hours per week were computed for the quarter, and the calculation was based on the number of weeks that the FI worked during the quarter (not all the weeks in the quarter). Similarly, the average miles per week was computed for the quarter, reflecting mileage recorded by the FI for reimbursement purposes. FIs are compensated for the use of their own personal vehicles based on mileage. This does not include miles traveled using a rental car. The calculation is based on the number of weeks that the FI worked during the quarter.

Finally, data on FI gender, race/ethnicity (white, non-Hispanic; black, non-Hispanic; other, non-Hispanic; Hispanic) and age (40 or younger, 41 to 50, 51 to 60, 61+) were obtained from files containing FI characteristics available on a yearly basis. Whenever possible, missing data on these variables for an FI in a particular year were logically assigned by examining valid reports in other years.

Other predictors for each of the models (organized by the unit of analysis) were as follows:

Indicators of interview "effort":

- *Interview nonresponse adjustment factor*. This variable is the factor that is used to increase the weights of interview respondents to compensate for the weights of interview nonrespondents. It takes on higher values for respondents with lower probabilities of completing the interview.
- *Ever refused interview at the interview level*.

The interview-level nonresponse adjustment factor was used as a regressor to help control for differing response propensities of respondents. Also included was an indicator of whether there had ever been an interview refusal in the ROC data. These variables were included in the model because, using data from the 2004 NSDUH, Wang, Murphy, Baxter, and Aldworth (2005) found that those who had ever refused to do the interview reported lower self-report rates on any illicit drug and marijuana for lifetime, past year, and past month measures.

Respondent characteristics:

- *Respondent race/ethnicity* (white, non-Hispanic; black, non-Hispanic; other, non-Hispanic; Hispanic),
- *Respondent gender*,
- *Respondent age group* (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50+),
- *Income* (less than $20,000; $20,000 to $49,999; $50,000 to $74,999; and $75,000+),
- *Selected person's relationship to householder* (householder or spouse, child, other relative, nonrelative), and
- *Group quarters indicator* (college dormitory, other group quarters, nongroup quarters).

Interactions between respondent and FI characteristics:

- *Interaction between FI gender and respondent gender*,
- *Interaction between FI age and respondent age*, and
- *Interaction between FI race/ethnicity and respondent race/ethnicity*.

Segment level and other area characteristic measures:

These variables were the same as those used to produce State-level estimates from the 2006 and 2007 NSDUHs (Hughes, Sathe, & Spagnola, 2009). The variables were obtained from several sources, including Claritas Inc., the U.S. Census Bureau (the 2000 census), and the Federal Bureau of Investigation (FBI) (Uniform Crime Reports).

- *Percent population 65+ in block group*,
- *Percent* population 25 to 34 in block group,
- *Percent* population 35 to 44 in block group,
- *Percent* blacks in block group,
- *Percent* other race in block group,
- *Percent* female head of household, no spouse, child > 18,
- *Drug sale/manufacture arrest rate*,
- *Serious crime rate*,
- *Percent* persons 16 to 64 with a work disability,
- *Percent* households with public assistance income,
- *Percent* housing units rented,
- *Median rents*,
- *Metropolitan statistical area (MSA) status* (1 million or more persons in an MSA, less than 1 million persons in an MSA, non-MSA),

- *Census region*,
- *Percent of owner-occupied units – segment level* (less than 10 percent, 10 to 49 percent, 50 percent or more),
- *Percent black, non-Hispanic – segment level* (less than 10 percent, 10 to 49 percent, 50 percent or more),
- *Percent Hispanic – segment level* (less than 10 percent, 10 to 49 percent, 50 percent or more), and
- *Median rent / median housing value quintiles – segment level*.

Cases for FIs on travel or "borrowed" status were excluded from the analysis. "Borrowed" status refers to FIs who are available to work in other regions under a different field supervisor than they are normally assigned to. These were excluded because such interviews would be outliers on such measures as mileage per week for the quarter and perhaps hours per week for the quarter as well. In addition, the circumstances under which these FIs operate are fundamentally different from other FIs. Overall, 88 percent (357,571) of the 407,650 interviews completed between 2002 and 2007 were conducted by nontraveling FIs.[3]

All analyses were conducted using SUDAAN® version 10.0 (RTI International, 2008). Standard errors were computed based on the Taylor series approximation method incorporating features of the survey design. For logistic regression analyses, odds ratios, regression coefficients, standard errors, and *p* values are reported. For some interviewer characteristics, predictive marginal or conditional marginal effects also are provided. The predictive marginal for a given category can be interpreted as the average predicted response on the dependent variable (e.g., completing the screener) if every respondent in the sample had been in that category (Graubard & Korn, 1999). It can be viewed as calculating the predicted probability for each observation with all observations set to the same value for the predictor variable of interest. A conditional marginal is the predicted response for a specified level or value of an independent variable based on the estimated regression coefficients. The calculation of the conditional marginal uses the specified values for the predictors of interest and estimated averages as values for the other variables in the model that are continuous and estimated proportions for variables that are categorical.

Tables 1.2 and ***1.3*** present the distribution of interviews completed between 2002 and 2007 by interviewer experience. ***Table 1.2*** shows that in each year about 10 percent of completed interviews were done by FIs with no prior NSDUH experience. ***Table 1.3*** shows that the proportion of interviews being completed by FIs working on their 1,000th or higher interview had increased dramatically, from just over 1 percent of interviews in 2002 to 20 percent of interviews in 2007.

[3] Interviews done by FIs on travel (or borrowed) status did count in the measures of cumulative interview count.

Table 1.2 2002 to 2007 NSDUH Interviews, by Any Prior NSDUH Experience

Any NSDUH Experience	2002	2003	2004	2005	2006	2007	Total
No Prior NSDUH Experience	5,581	5,665	6,378	7,267	7,046	5,760	37,697
Some Prior NSDUH Experience	55,334	53,219	54,074	51,778	51,196	54,273	319,874
Total	60,915	58,884	60,452	59,045	58,242	60,033	357,571
Percent No Prior NSDUH Experience	9.2%	9.6%	10.6%	12.3%	12.1%	9.6%	10.5%

Note: Table excludes interviews done by traveling and "borrowed" FIs.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 1.3 2002 to 2007 NSDUH Interviews, by Interviewer Experience (Cumulative Interview Count)

Cumulative Interview Count	2002	2003	2004	2005	2006	2007	Total
1 to 19	3,215	2,545	2,938	3,022	3,452	2,805	17,977
	5.3	*4.3*	*4.9*	*5.1*	*5.9*	*4.7*	
20 to 39	3,133	2,534	2,249	2,722	2,568	2,595	15,801
	5.1	*4.3*	*3.7*	*4.6*	*4.4*	*4.3*	
40 to 59	3,156	2,048	2,129	2,206	2,111	2,306	13,956
	5.2	*3.5*	*3.5*	*3.7*	*3.6*	*3.8*	
60 to 99	5,676	4,157	3,446	3,745	3,506	3,659	24,189
	9.3	*7.1*	*5.7*	*6.3*	*6.0*	*6.1*	
100 to 249	19,693	14,789	11,620	9,963	10,056	8,750	74,871
	32.3	*25.1*	*19.2*	*16.9*	*17.3*	*14.6*	
250 to 499	19,279	19,614	18,177	14,461	11,784	10,749	94,064
	31.7	*33.3*	*30.1*	*24.5*	*20.2*	*17.9*	
500 to 749	4,824	8,864	10,696	11,192	9,548	9,604	54,728
	7.9	*15.1*	*17.7*	*19.0*	*16.4*	*16.0*	
750 to 999	1,199	2,503	5,683	5,497	6,640	7,508	29,030
	2.0	*4.3*	*9.4*	*9.3*	*11.4*	*12.5*	
1,000+	740	1,830	3,514	6,237	8,577	12,057	32,955
	1.2	*3.1*	*5.8*	*10.6*	*14.7*	*20.1*	
Total	60,915	58,884	60,452	59,045	58,242	60,033	357,571

Note: Entries in italics are column percentages. Table excludes interviews done by traveling and "borrowed" FIs.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 1.4 provides data on the numbers of nontraveling FIs in each interviewer order category for each year, using the highest cumulative interview count category observed for each FI in that year. Within a year, an interviewer may complete enough interviews to move across cumulative interview count categories. In 2002, only five FIs were conducting their 1,000th or higher interview. In 2007, there were 88 FIs in that category.

Table 1.4 2002 to 2007 NSDUH Interviewers, by Highest Cumulative Interview Count Category

Highest Cumulative Interview Count	2002	2003	2004	2005	2006	2007	Total
1 to 19	83	40	62	54	90	66	395
	9.17	*5.06*	*7.63*	*6.69*	*10.69*	*8.16*	
20 to 39	68	61	55	73	76	62	395
	7.51	*7.71*	*6.77*	*9.05*	*9.03*	*7.66*	
40 to 59	58	41	40	40	44	38	261
	6.41	*5.18*	*4.92*	*4.96*	*5.23*	*4.7*	
60 to 99	90	63	66	59	61	75	414
	9.94	*7.96*	*8.12*	*7.31*	*7.24*	*9.27*	
100 to 249	303	219	176	151	150	153	1,152
	33.48	*27.69*	*21.65*	*18.71*	*17.81*	*18.91*	
250 to 499	242	252	229	208	165	138	1,234
	26.74	*31.86*	*28.17*	*25.77*	*19.6*	*17.06*	
500 to 749	49	81	118	125	119	116	608
	5.41	*10.24*	*14.51*	*15.49*	*14.13*	*14.34*	
750 to 999	7	23	42	52	75	73	272
	0.77	*2.91*	*5.17*	*6.44*	*8.91*	*9.02*	
1,000+	5	11	25	45	62	88	236
	0.55	*1.39*	*3.08*	*5.58*	*7.36*	*10.88*	
Total	905	791	813	807	842	809	4,967

Note: Entries in italics are column percentages. Table excludes traveling and "borrowed" FIs.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

2. Analysis of Screener and Interview Cooperation

This chapter briefly describes the results from logistic regression models that examine the relationship between interviewer characteristics and the likelihood of obtaining screener contact, screener cooperation, and interview cooperation. As noted in Section 1.1.1 of Chapter 1, interviewer experience has been associated with higher levels of respondent cooperation. For the most part, these analyses used data from years prior to 2002, when a number of important changes were introduced in the survey protocol, including the introduction of respondent incentives and a change in the name of the survey from the National Household Survey on Drug Abuse (NHSDA) to the National Survey on Drug Use and Health (NSDUH). In addition, just 3 years prior, in 1999, the survey adopted the 50-State design and introduced interviews through audio computer-assisted self-interviewing (ACASI). Thus, a number of major changes in protocol were introduced in a fairly short time period. In contrast, the survey has had no major changes in protocol since the 2002 survey. For the purpose of informing how changes in the distribution of the characteristics of interviewers due to alternative sample designs in the future may affect survey outcomes, more recent data (since 2002) is called for because these data capture a period of relative stability in the survey's essential conditions.

In prior analyses, the strategy has been to regress outcomes of interest (e.g., respondent participation in the survey) on covariates that include field interviewer (FI) characteristics, such as interviewer experience, race/ethnicity, gender, and age. In these analyses, the approach has usually been to use cross-sectional regression analysis, which produces point-in-time estimates of associations (regression coefficients) between outcomes and FI characteristics. Such analyses do not provide information on the effect of experience (something that changes over time) on obtaining cooperation for individual FIs as in a cross-sectional time-series design. Nevertheless, the cross-sectional analysis strategy was used in order to facilitate comparisons with earlier results.

For these analyses, regressions were carried out for each survey year between 2002 and 2007 using the same set of predictors for each year. This is equivalent to conducting a single regression using the entire NSDUH dataset from 2002 to 2007 and with interaction terms between each year and every covariate in the model.

The predictors for each of the models are presented in ***Table 2.1***. An "X" indicates that this predictor was used in the particular model. Segment-level characteristics included in the models predicting screener contact, screener cooperation, and interview cooperation were chosen based on their use in the creation of screener- and interview-level nonresponse adjustments for the main study.

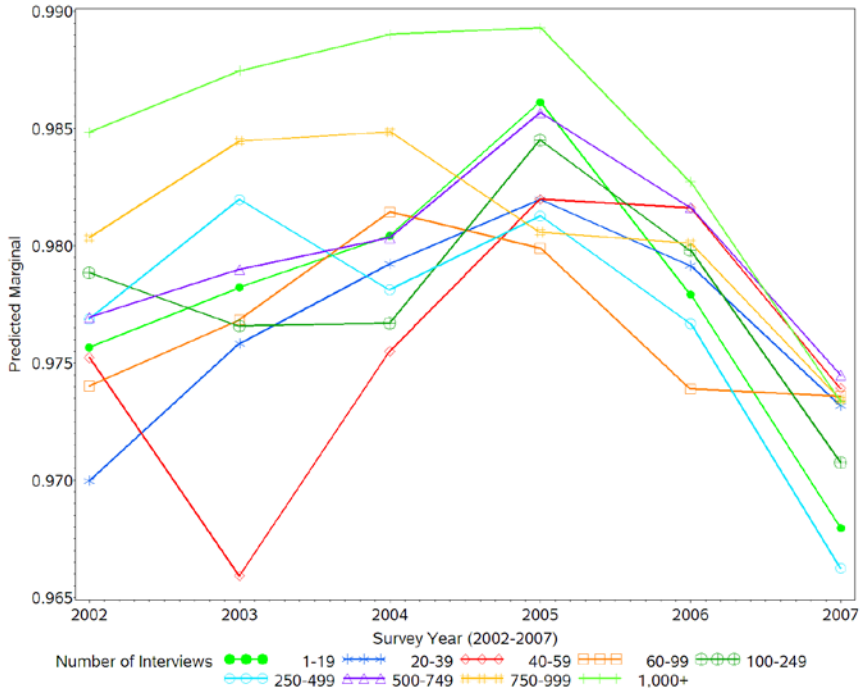
Table 2.1 Summary of Predictors in Regressions on Screener Contact, Screener Cooperation, and Interview Cooperation

Variable	Screener Contact and Cooperation	Interview Cooperation
Field Interviewer (FI) Gender	X	X
FI Race/Ethnicity (White, Non-Hispanic; Black, Non-Hispanic; Other, Non-Hispanic; Hispanic)	X	X
Selected Person Race/Ethnicity from the Screener (White, Non-Hispanic; Black, Non-Hispanic; Other, Non-Hispanic; Hispanic)		X
Selected Person Age from the Screener (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50+)		X
Selected Person Gender from the Screener		X
Metropolitan Statistical Area (MSA) Status (1 Million or More Persons in an MSA; Less Than 1 Million Persons in an MSA; Non-MSA)	X	X
Census Region (Northeast, Midwest, South, and West)	X	X
Group Quarters (College Dorm, Other Group Quarters, Nongroup Quarters)	X	X
Percent of Owner-Occupied Units (Less than 10 Percent, 10 to 49 Percent, 50 Percent or More)	X	X
Percent Black, Non-Hispanic (Less than 10 Percent, 10 to 49 Percent, 50 Percent or more)	X	X
Percent Hispanic (Less than 10 Percent, 10 to 49 Percent, 50 Percent or More)	X	X
Median Rent / Median Housing Value Quintiles	X	X
Relationship to Householder (Householder or Spouse, Child, Other Relative, Nonrelative)		X
Cumulative Interview Count (1 to 19, 20 to 39, 40 to 59, 60 to 99, 100 to 249, 250 to 499, 500 to 749, 750 to 999, 1,000+)	X	X
Interviewer Hours Worked that Week (1 to 18, 18.25 to 26, 26.25 to 36.75, 36+)	X	X
Interview Miles that Week (0 to 135, 136 to 250, 251 to 415, 415+)	X	X

The effects of categorized FI experience (in terms of cumulative interview count) on screener contact, screener cooperation, and interview cooperation are shown in ***Figures 2.1***, ***2.2***, and ***2.3*** as the predicted marginals for each experience category in each year examined. As an example, the predicted marginal for FIs with 1,000+ completed interviews in 2002 is 0.985. This is the model-predicted screener cooperation rate for 2002 if it is assumed that all FIs have completed 1,000 or more interviews and the values for all the other predictors in the model remain as observed. In contrast, if all FIs were in the 1 to 19 completed interview category, the model predicted screener cooperation rate for 2002 would be just over 0.975.

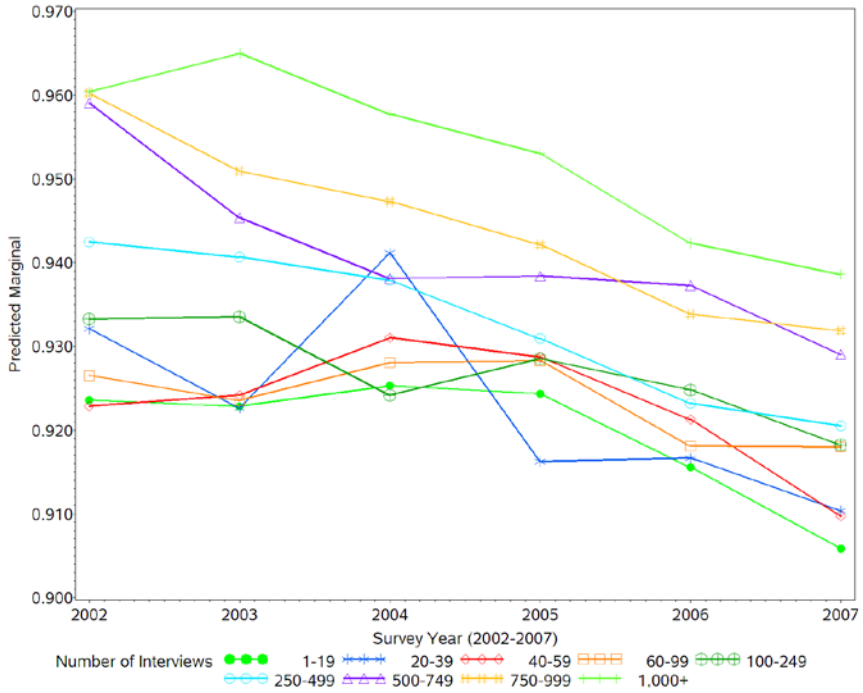
For screener contact, it can be seen that the most experienced FIs (those with 1,000+ interviews since 1999) were more likely to make contact with screener units than less experienced FIs, but the relationship changed during this time period. The likelihood of contact for the most experienced FIs increased gradually from 2002 to 2005, then declined abruptly in the next 2 years. In contrast, contact rates for the other interview experience categories did not change by much over this time period except in 2007 when contact rates fell for all categories of experience. By 2007, there was virtually no difference in contact by interviewer experience category.

Figure 2.1 Predicted Marginals for Categorized Cumulative Interview Count on Screener Contact, 2002 to 2007 NSDUHs



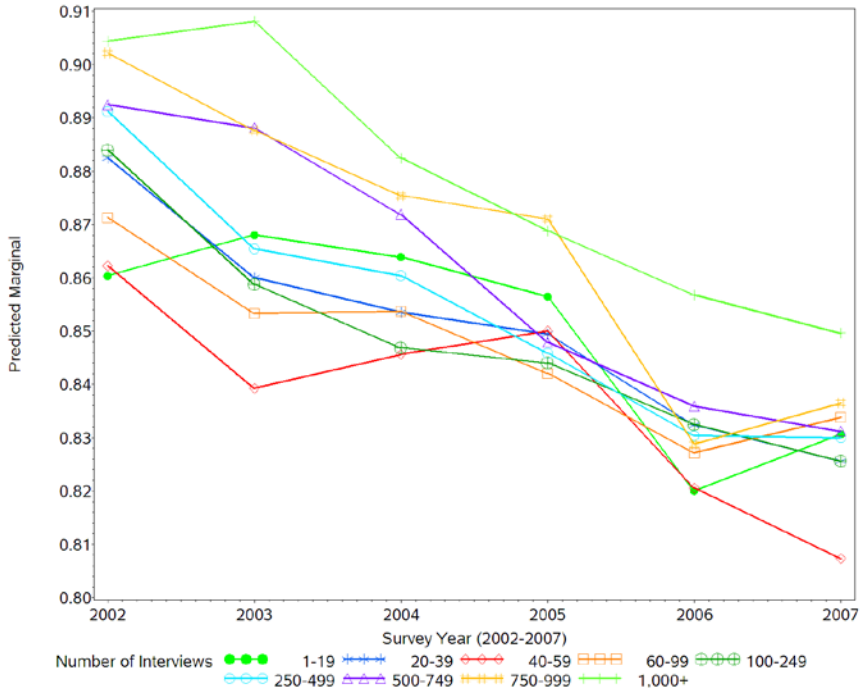
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure 2.2 Predicted Marginals for Categorized Cumulative Interview Count on Screener Cooperation, 2002 to 2007 NSDUHs



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure 2.3 Predicted Marginals for Categorized Cumulative Interview Count on Interview Cooperation, 2002 to 2007 NSDUHs



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

For screener cooperation, FIs with more experience tended to elicit higher levels of screener cooperation than less experienced FIs. In general, however, there was a decline in screener cooperation over this time period, affecting all categories of interviewer experience.

As with screener cooperation, the most experienced FIs tended to experience higher cooperation rates on the main interview as compared with less experienced FIs. Overall, there was a decline in interviewer cooperation rates for this time period.

The number of hours worked in a given week by an FI was not found to have a statistically significant association with either screener contact or screener cooperation. The number of miles reported in a given week by an FI was generally found to be unrelated to screener contact, but was found to be predictive of screener cooperation. For the 2007 survey, the predictive margin for screener cooperation was 91.4 percent if the FI had traveled fewer than 136 miles versus 93.4 percent if the FI had traveled 415 or more miles that week ($p < .0001$).

Hours worked in a week and miles traveled in a week were associated with interview cooperation rates throughout the study period. Respondents were more likely to cooperate when an FI had worked more hours than when an FI had worked fewer hours. In 2007, the model produced predictive marginals of interview cooperation of 79.7 percent for FIs who worked 18 or fewer hours in a given week versus 86.3 percent when FIs worked 36 or more hours that week ($p < .0001$). In contrast, respondents were less likely to cooperate with the interview request when an FI traveled more than when an FI traveled less. For 2007, the predictive

marginal for interviewer cooperation when the FI had traveled fewer than 136 miles was 85.2 percent versus 80.4 percent when the FI had traveled 415 or more miles ($p < .0001$).

Except for 2006, the FI's gender did not have any statistically significant effects on screener contact. For the FI's race/ethnicity, it was found that black, non-Hispanic FIs and, in some years, Hispanic FIs were less likely to make contact on the screener than white, non-Hispanic FIs.

For screener cooperation, it was found that female FIs consistently had higher cooperation rates on the screener than male FIs. For race/ethnicity, there were some instances in which the FIs' race/ethnicity had a statistically significant effect on screening cooperation rates. In some cases, cooperation rates for Hispanic FIs were lower than for white, non-Hispanic FIs.

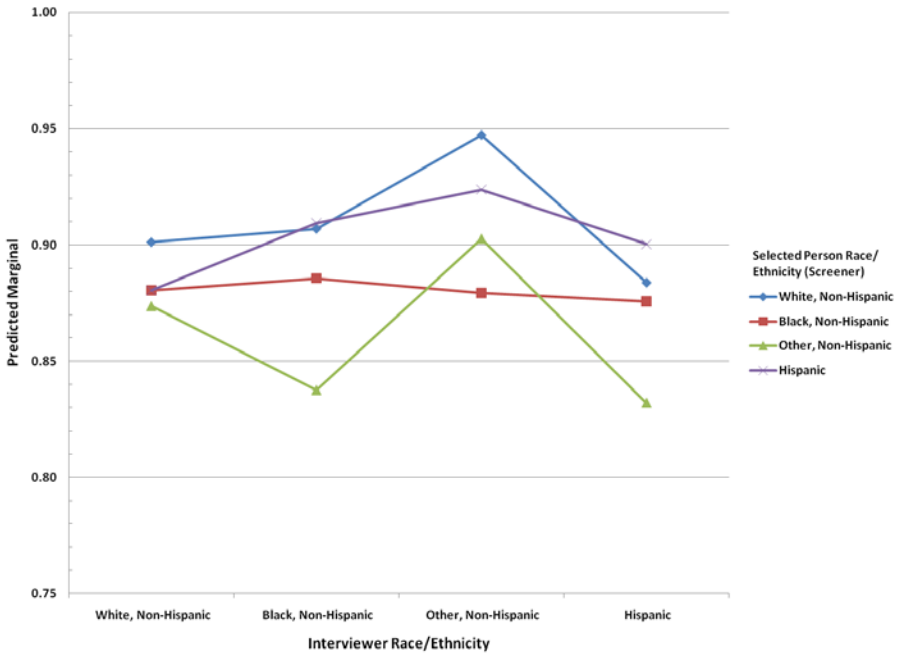
For most years, FI gender was a statistically significant predictor of response to the main NSDUH interview. Female FIs had higher interview cooperation rates than male FIs.

Relationships between FI cooperation and the FI's race/ethnicity and the respondent are displayed in ***Figures 2.4*** to ***2.9***. The most straightforward effects to interpret in terms of statistical tests of significance were when the respondent was white, non-Hispanic or when the FI was white, non-Hispanic (because these are the reference categories for the race/ethnicity variables). In general, white, non-Hispanic respondents were more likely to complete the interview than respondents in the other race/ethnicity groups when the FI was also white, non-Hispanic. This also appeared to hold across the other categories of interviewer race/ethnicity. For the most part, the line for white, non-Hispanics was usually the "highest." Interview cooperation rates for "other, non-Hispanics were generally the lowest across the race/ethnicity categories of the interviewer. When the respondent was white, non-Hispanic, there were no consistent differences in interview cooperation by the FI's race/ethnicity.

There is little evidence that interview cooperation rates were maximized when the FI's race/ethnicity matched that of the screener report of the race/ethnicity of the respondent (or at least matched it within the categories used in this study). For example, among black, non-Hispanic FIs, response rates for white, non-Hispanics and Hispanics were always higher than those for black, non-Hispanic respondents. For some combinations, particularly those involving "other, non-Hispanic" FIs, sample sizes may be very limited, and as result estimates may have large variances.

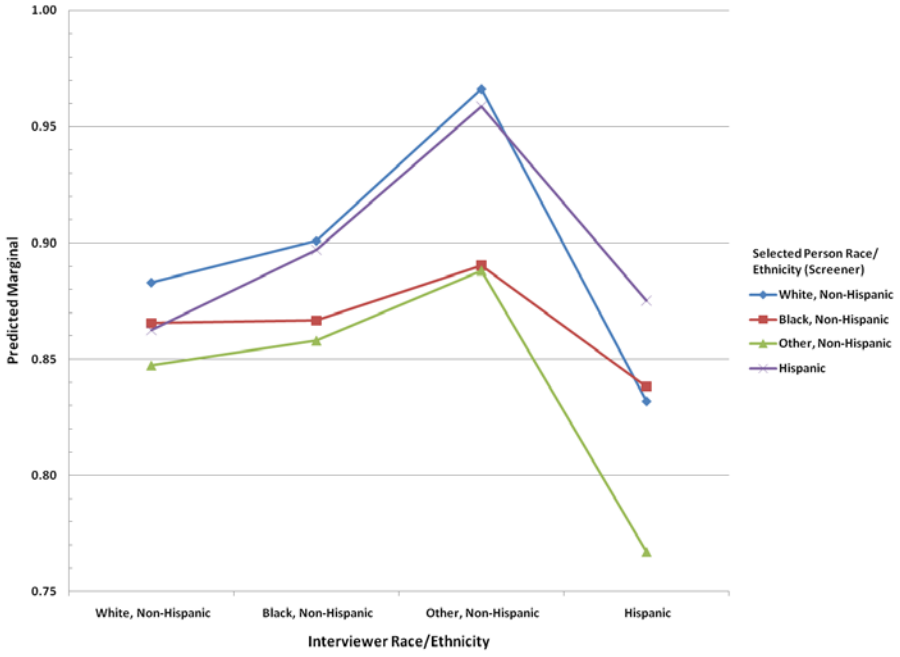
Overall, the results in this chapter are mostly consistent with previous research on the relationships between interviewer characteristics and measures of respondent cooperation. Interviewer experience continues to be positively correlated with response rates. For alternative sample designs in which the distribution of interviewer characteristics (such as experience) may be affected, one might expect response rates to change as a function of changes in the distribution of experience. However, as noted at the beginning of this chapter, this finding is based on cross-sectional analyses. It is not clear if FIs actually increase their cooperation rates as their experience increases or the association between experience and respondent cooperation is a result of FIs with higher response rates being more likely to remain on the job than FIs with lower response rates.

Figure 2.4 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2002 NSDUH



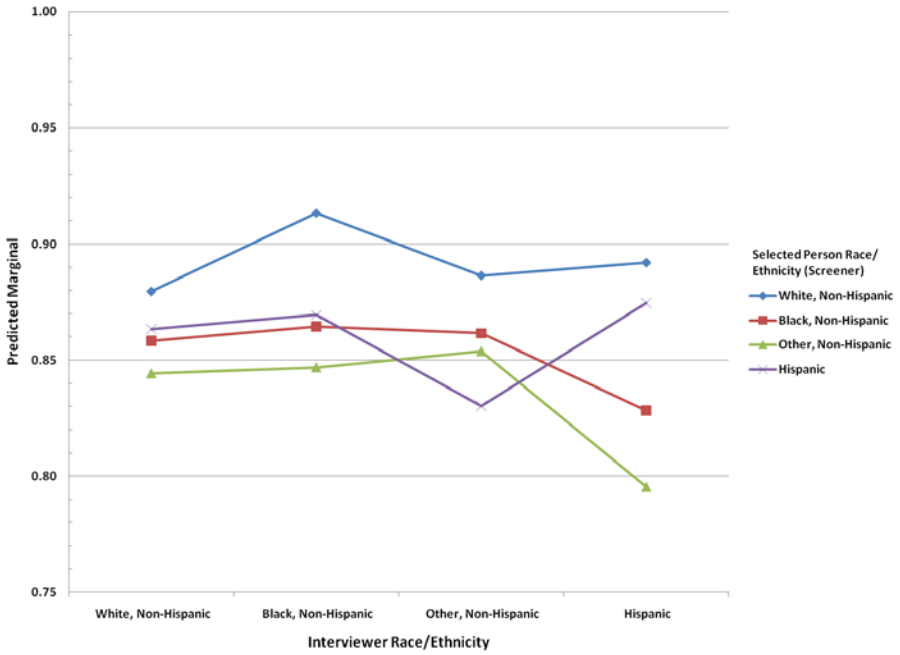
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002.

Figure 2.5 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2003 NSDUH



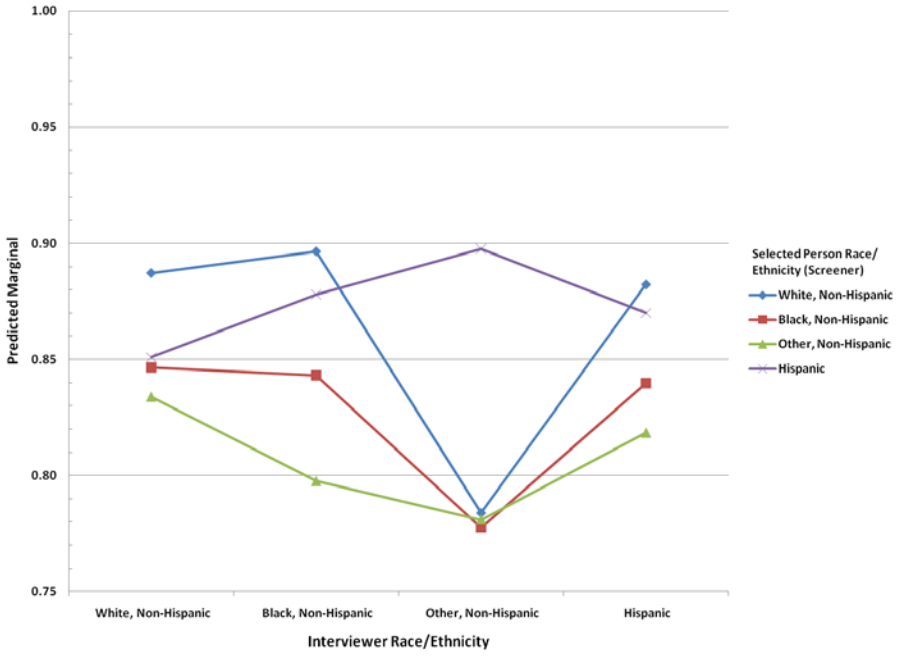
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003.

Figure 2.6 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2004 NSDUH



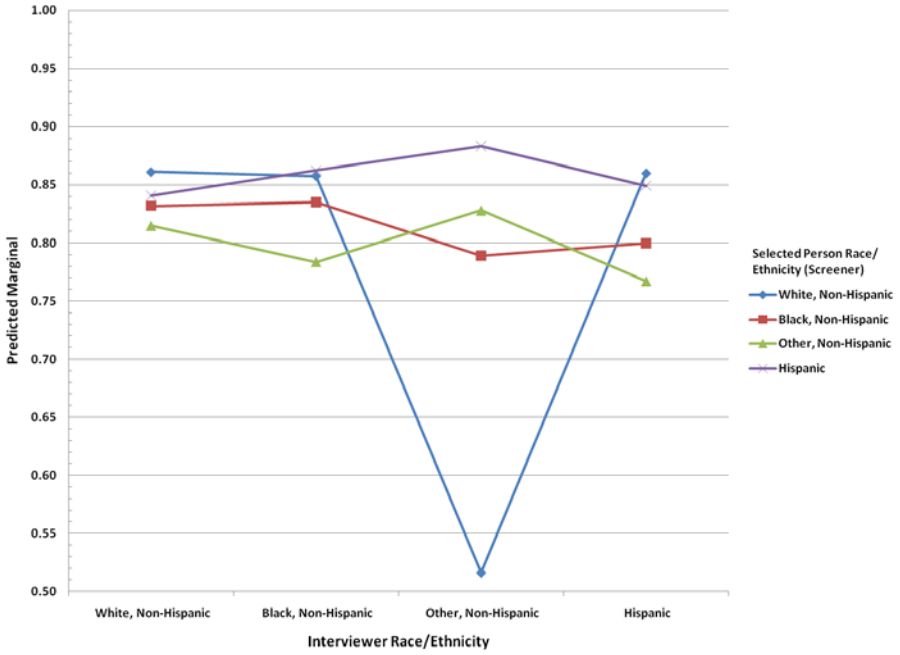
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004.

Figure 2.7 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2005 NSDUH



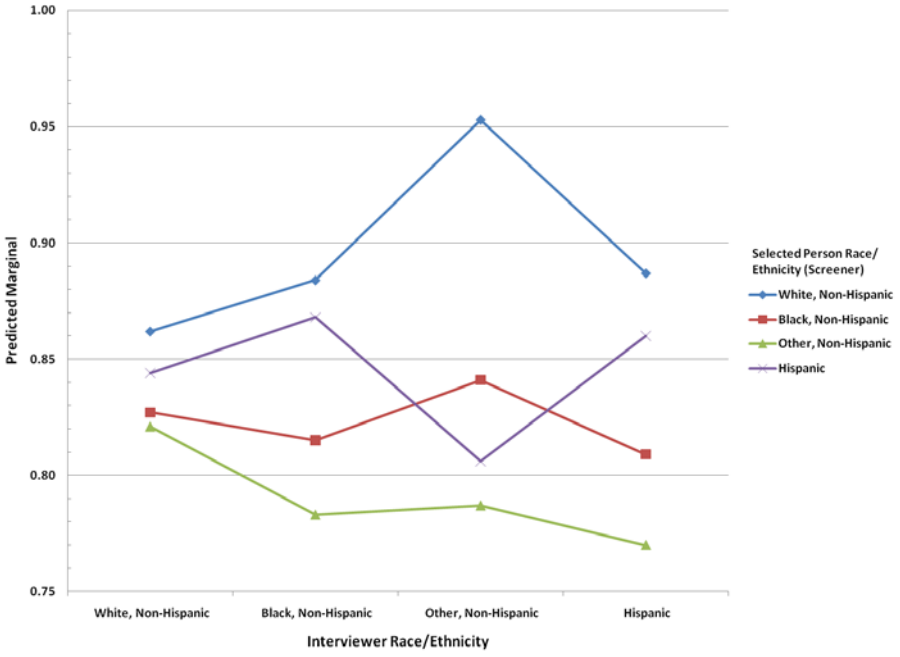
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2005.

Figure 2.8 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2006 NSDUH



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2006.

Figure 2.9 Predicted Marginals for Selected Person Race/Ethnicity (Screener) and Interviewer Race/Ethnicity on Interview Cooperation, 2007 NSDUH



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007.

3. Analysis of Substance Use Rates and Mental Health Outcomes

This chapter summarizes the results of analyses of the effects of various interviewer characteristics on the reporting of substance use and mental health items from the National Survey on Drug Use and Health (NSDUH). It focuses on the effects of interviewer experience on substance use and mental health outcomes. Interview experience is operationalized using a cumulative interview count both as a categorical measure and as a continuous one. Results are also briefly described using additional measures of interviewer experience based on elapsed time on the job, quarters, and years worked on NSDUH since 1999. Although there is general agreement that interviewer experience is related to survey cooperation, it is less clear whether experience is related to how survey items are answered. Thus, in contrast with the previous chapter, different measures of experience are explored in this chapter. Next presented are the effects of other field interviewer (FI) characteristics, such as FI age, race/ethnicity, and gender, as well as miles traveled per week and hours worked per week during the quarter. The chapter concludes with a presentation of the results from an analysis designed to test the generalizability of the findings to interviews conducted by FIs who were on travel status at the time of the interview.

Unlike the models in Chapter 2 in which separate regressions were run for each survey year, the analyses in this chapter consist of single regression models using data pooled across all survey years with one regression for each outcome measure. These models included survey year and State as predictors and interaction terms between survey year and State and between survey year and FI experience. The latter terms were included because of an interest in whether the relationship between experience and self-reporting had changed over time.

3.1 Effects of Interviewer Experience on Substance Use Rates and Mental Health Outcomes

3.1.1 Effects of Categorized Cumulative Interview Count on Substance Use Rates

Table 3.1 presents the effects for each interview experience category on lifetime cigarette use for each year using the full set of predictors described in Chapter 1. For 2002, the effect is the regression coefficient for the corresponding category of interviewer experience. For all other years, "effect" is the sum of the coefficient for categorized cumulative interviews and the respective coefficient for the interaction between categorized cumulative interviews and survey year. For example, in ***Table 3.1***, the effect of being in the 1,000+ category in 2007 is -0.130 (relative to the 1 to 19 interview experience category). This effect is the sum of the regression coefficient for the 1,000+ interviewer experience category (-0.188) and the coefficient for the interaction between being in the 1,000+ interviewer experience category and being in the 2007 survey year (0.058).[4]

[4] A subset of tables showing the regression results is shown in Appendix A.

Table 3.1 Effects of Categorized Cumulative Interview Count on Lifetime Cigarette Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.020	-0.030	0.032	-0.003	-0.114	-0.101
	Std. Err.	0.067	0.069	0.064	0.062	0.066	0.063
	p Value	0.767	0.660	0.613	0.961	0.084	0.106
40 to 59	Effect	-0.110	0.002	0.019	-0.054	-0.118	-0.057
	Std. Err.	0.065	0.071	0.069	0.072	0.075	0.070
	p Value	0.094	0.976	0.784	0.454	0.115	0.414
60 to 99	Effect	-0.077	-0.063	-0.033	-0.033	0.038	-0.107
	Std. Err.	0.059	0.062	0.062	0.060	0.063	0.063
	p Value	0.193	0.309	0.601	0.583	0.542	0.092
100 to 249	Effect	-0.117	0.008	0.044	0.011	-0.095	-0.088
	Std. Err.	0.052	0.052	0.051	0.051	0.051	0.055
	p Value	**0.023**	0.876	0.386	0.836	0.062	0.111
250 to 499	Effect	-0.080	-0.022	0.013	-0.006	-0.024	-0.120
	Std. Err.	0.053	0.053	0.050	0.049	0.050	0.053
	p Value	0.130	0.674	0.791	0.908	0.623	**0.023**
500 to 749	Effect	-0.187	-0.021	0.027	-0.021	-0.050	-0.110
	Std. Err.	0.062	0.056	0.053	0.051	0.052	0.053
	p Value	**0.002**	0.712	0.605	0.681	0.335	**0.039**
750 to 999	Effect	-0.199	-0.026	-0.003	-0.007	-0.052	-0.143
	Std. Err.	0.090	0.071	0.061	0.058	0.054	0.057
	p Value	**0.028**	0.713	0.961	0.901	0.336	**0.012**
1,000+	Effect	-0.188	-0.062	0.073	-0.068	-0.072	-0.130
	Std. Err.	0.116	0.083	0.071	0.058	0.053	0.055
	p Value	0.106	0.459	0.303	0.236	0.177	**0.018**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

These effects can also be seen using conditional marginal plots that are shown in Appendix B. In ***Figure B.1.1***, the conditional marginal for lifetime cigarette use for interviewers with 1,000+ interviews is about 54.5 percent in 2007. The conditional marginal can be viewed as the prevalence rate based on the coefficients of the logistic regression model, assuming the interviewer was in the 1,000+ interviewer experience category and all other predictors are at the overall sample means (regardless of how different the values for these other variables might be among cases in which the interviewer completed 1,000+ interviews).[5] In 2007, for interviewers with very little experience, the conditional marginal is about 58 percent, or about 10 percent higher, which is a statistically significant difference. In contrast, none of the individual effects between 2003 and 2006 is statistically significant.

[5] Averages for the number of completed interviews in each experience category were used to produce ***Figure B.1.1*** and the other 25 figures in Appendix B. Interviewer experience was categorized into nine levels. For 0 to 19 interviews completed, the mean was 9.7; for 20 to 39 interviews completed, the mean was 29.3; for 40 to 59 interviews completed, the mean was 49.3; for 60 to 99 interviews completed, the mean was 79.0; for 100 to 249 interviews completed, the mean was 172.1; for 250 to 499 interviews completed, the mean was 366.4; for 500 to 749 interviews completed, the mean was 610.0; for 750 to 999 interviews completed, the mean was 860.5; and for 1,000 or more interviews completed, the mean was 1,418.7.

Table 3.2 presents results for past year cigarette use that are similar to those for lifetime cigarette use; many of the individual coefficients are not statistically significant. In ***Table 3.3***, only one effect (on lifetime alcohol use) is statistically significant. In ***Table 3.4***, four of the effects (on past year alcohol use) are statistically significant in 2002. In all the other years, there are only two other statistically significant effects (60 to 99 interviews in 2006 and 1,000+ interviews in 2007). In ***Table 3.5***, the effects of the interview experience category on lifetime marijuana use are statistically significant in 2002 and 2007. The effects in 2002 show a consistent ordering for 500+ interviews, with each effect increasing in absolute size and experience increases. This is not the case for 2007, where the effect for the 1,000+ category is half the size of the effect for the 750 to 999 category. A similar pattern is shown in ***Table 3.6*** for past year use of marijuana. For lifetime and past year use of pain relievers (analgesics) and lifetime cocaine use, the results shown in ***Tables 3.7***, ***3.8***, and ***3.9*** show a pattern of large effects in 2002 followed by smaller effects, then an increase in the magnitude of the effects of the categorical cumulative interview count on these outcomes. For the number of positive responses to gate items, the results in ***Table 3.10*** show statistically significant coefficients only in 2002, 2003, and 2007. All of the effects for each category are statistically significant in 2007. For 2002, the slope is downward, while for 2007, the relationship is flat beyond the first experience category.

Overall, the effects of experience are substantially reduced between 2002 and 2007 for cigarettes, alcohol, and marijuana relative to the lifetime use of cocaine and both indicators of pain reliever use. For these outcomes, interviewer experience still seems to have a negative effect on self-reporting of substance use at the end of the period of observation.

However, some of the statistically significant effects in 2007 for the 1,000+ interview experience category reflect the fact that sample sizes for this category have increased steadily since 2002. As a result, the statistical significance of these effects may be the result of increases in the sample size rather than a change in the magnitude of the effect. For example, for lifetime cigarette use, the effect of -0.188 in 2002 is not statistically significant but for 2007, the effect of -0.130 is statistically significant (even though the magnitude of the effect is smaller than that for 2002).

Table 3.2 Effects of Categorized Cumulative Interview Count on Past Year Cigarette Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.029	0.013	0.084	-0.012	-0.171	-0.063
	Std. Err.	0.064	0.066	0.067	0.064	0.072	0.067
	p Value	0.654	0.847	0.207	0.846	**0.018**	0.348
40 to 59	Effect	-0.055	0.035	0.029	-0.060	-0.150	-0.094
	Std. Err.	0.059	0.072	0.071	0.071	0.075	0.073
	p Value	0.354	0.627	0.679	0.401	**0.044**	0.201
60 to 99	Effect	-0.051	-0.077	-0.030	-0.015	-0.055	-0.129
	Std. Err.	0.054	0.063	0.068	0.061	0.066	0.069
	p Value	0.339	0.218	0.654	0.801	0.407	0.060
100 to 249	Effect	-0.073	-0.004	0.054	0.016	-0.128	-0.094
	Std. Err.	0.046	0.052	0.055	0.054	0.053	0.058
	p Value	0.112	0.933	0.325	0.762	**0.017**	0.106
250 to 499	Effect	-0.053	-0.031	0.030	0.018	-0.076	-0.088
	Std. Err.	0.046	0.052	0.053	0.050	0.051	0.057
	p Value	0.248	0.556	0.568	0.727	0.139	0.121
500 to 749	Effect	-0.094	-0.013	-0.022	-0.020	-0.071	-0.070
	Std. Err.	0.059	0.056	0.055	0.053	0.053	0.058
	p Value	0.110	0.823	0.691	0.706	0.175	0.226
750 to 999	Effect	-0.125	-0.001	-0.009	0.019	-0.096	-0.141
	Std. Err.	0.097	0.074	0.063	0.062	0.057	0.062
	p Value	0.196	0.990	0.882	0.756	0.093	**0.024**
1,000+	Effect	-0.347	-0.102	0.061	-0.118	-0.105	-0.104
	Std. Err.	0.135	0.088	0.072	0.060	0.055	0.057
	p Value	**0.010**	0.249	0.396	**0.049**	0.058	0.067

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.3 Effects of Categorized Cumulative Interview Count on Lifetime Alcohol Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	0.050	0.101	0.037	0.012	0.072	0.053
	Std. Err.	0.076	0.078	0.076	0.065	0.076	0.083
	p Value	0.513	0.194	0.627	0.856	0.341	0.522
40 to 59	Effect	0.005	0.094	0.092	0.101	0.045	-0.065
	Std. Err.	0.069	0.086	0.086	0.079	0.079	0.083
	p Value	0.938	0.272	0.288	0.202	0.569	0.438
60 to 99	Effect	-0.029	0.043	0.007	0.002	0.081	-0.025
	Std. Err.	0.063	0.071	0.073	0.065	0.072	0.076
	p Value	0.647	0.544	0.919	0.972	0.260	0.741
100 to 249	Effect	-0.069	0.011	0.071	0.021	-0.073	-0.025
	Std. Err.	0.057	0.061	0.060	0.055	0.060	0.069
	p Value	0.224	0.856	0.235	0.706	0.229	0.715
250 to 499	Effect	-0.022	0.026	0.060	-0.032	-0.015	-0.066
	Std. Err.	0.057	0.060	0.058	0.054	0.058	0.066
	p Value	0.704	0.665	0.302	0.552	0.801	0.321
500 to 749	Effect	-0.095	-0.017	0.147	-0.006	0.024	-0.026
	Std. Err.	0.069	0.066	0.063	0.056	0.063	0.067
	p Value	0.167	0.798	**0.020**	0.908	0.710	0.698
750 to 999	Effect	-0.133	0.019	0.066	-0.008	-0.046	-0.036
	Std. Err.	0.107	0.085	0.070	0.066	0.065	0.072
	p Value	0.212	0.820	0.346	0.902	0.483	0.617
1,000+	Effect	-0.238	-0.115	0.032	-0.009	-0.046	-0.098
	Std. Err.	0.161	0.105	0.081	0.062	0.065	0.067
	p Value	0.141	0.277	0.692	0.886	0.480	0.144

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.4 Effects of Categorized Cumulative Interview Count on Past Year Alcohol Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.038	0.114	0.000	0.029	0.054	0.011
	Std. Err.	0.068	0.072	0.069	0.063	0.069	0.068
	p Value	0.581	0.113	0.995	0.643	0.434	0.871
40 to 59	Effect	-0.062	0.032	0.002	0.104	0.029	-0.048
	Std. Err.	0.062	0.081	0.077	0.070	0.068	0.069
	p Value	0.318	0.687	0.976	0.140	0.666	0.483
60 to 99	Effect	-0.044	0.005	-0.027	-0.049	0.139	-0.041
	Std. Err.	0.057	0.065	0.067	0.060	0.066	0.062
	p Value	0.442	0.938	0.683	0.416	**0.035**	0.511
100 to 249	Effect	-0.125	0.014	0.021	-0.010	-0.026	-0.054
	Std. Err.	0.050	0.057	0.055	0.052	0.054	0.053
	p Value	**0.012**	0.802	0.700	0.852	0.634	0.306
250 to 499	Effect	-0.066	0.025	-0.039	-0.070	0.002	-0.105
	Std. Err.	0.050	0.057	0.053	0.050	0.054	0.054
	p Value	0.184	0.664	0.460	0.165	0.969	0.051
500 to 749	Effect	-0.154	0.002	0.064	-0.041	0.048	-0.040
	Std. Err.	0.062	0.061	0.058	0.051	0.058	0.054
	p Value	**0.013**	0.968	0.271	0.430	0.405	0.462
750 to 999	Effect	-0.272	-0.015	0.006	-0.039	0.006	-0.089
	Std. Err.	0.096	0.079	0.063	0.059	0.059	0.060
	p Value	**0.005**	0.854	0.929	0.514	0.919	0.141
1,000+	Effect	-0.376	-0.126	-0.084	-0.062	0.005	-0.123
	Std. Err.	0.147	0.091	0.073	0.058	0.059	0.055
	p Value	**0.011**	0.166	0.247	0.293	0.931	**0.025**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.5 Effects of Categorized Cumulative Interview Count on Lifetime Marijuana Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.061	-0.069	-0.021	-0.033	0.009	-0.087
	Std. Err.	0.067	0.068	0.065	0.062	0.066	0.063
	p Value	0.358	0.313	0.750	0.596	0.891	0.168
40 to 59	Effect	-0.071	0.040	0.030	0.001	0.004	-0.034
	Std. Err.	0.065	0.076	0.072	0.069	0.075	0.073
	p Value	0.278	0.595	0.680	0.988	0.959	0.637
60 to 99	Effect	-0.091	0.024	-0.011	-0.001	-0.011	-0.051
	Std. Err.	0.058	0.065	0.067	0.060	0.063	0.065
	p Value	0.120	0.712	0.872	0.984	0.859	0.432
100 to 249	Effect	-0.123	0.033	0.046	-0.054	-0.069	-0.089
	Std. Err.	0.053	0.059	0.054	0.052	0.053	0.057
	p Value	**0.021**	0.573	0.391	0.303	0.191	0.116
250 to 499	Effect	-0.088	-0.015	-0.002	-0.047	0.023	-0.073
	Std. Err.	0.053	0.057	0.052	0.051	0.053	0.056
	p Value	0.098	0.789	0.970	0.357	0.659	0.189
500 to 749	Effect	-0.196	-0.047	0.050	-0.047	0.002	-0.068
	Std. Err.	0.067	0.062	0.056	0.053	0.054	0.055
	p Value	**0.003**	0.443	0.375	0.376	0.969	0.216
750 to 999	Effect	-0.267	-0.085	0.014	-0.072	-0.045	-0.206
	Std. Err.	0.095	0.076	0.064	0.061	0.059	0.059
	p Value	**0.005**	0.264	0.822	0.238	0.444	**0.000**
1,000+	Effect	-0.377	-0.111	-0.086	-0.114	-0.046	-0.119
	Std. Err.	0.117	0.094	0.072	0.060	0.057	0.057
	p Value	**0.001**	0.239	0.232	0.058	0.426	**0.035**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.6 Effects of Categorized Cumulative Interview Count on Past Year Marijuana Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.052	-0.013	-0.054	0.044	-0.042	-0.093
	Std. Err.	0.079	0.088	0.080	0.076	0.079	0.078
	p Value	0.512	0.884	0.502	0.559	0.596	0.233
40 to 59	Effect	-0.012	0.182	0.000	0.064	-0.116	-0.147
	Std. Err.	0.078	0.090	0.088	0.079	0.091	0.097
	p Value	0.874	**0.042**	0.997	0.422	0.206	0.130
60 to 99	Effect	-0.013	0.052	-0.074	0.007	0.009	-0.155
	Std. Err.	0.069	0.081	0.075	0.077	0.079	0.087
	p Value	0.851	0.525	0.322	0.932	0.908	0.073
100 to 249	Effect	-0.103	0.064	-0.014	-0.053	-0.085	-0.160
	Std. Err.	0.062	0.069	0.063	0.064	0.066	0.072
	p Value	0.095	0.352	0.829	0.405	0.197	**0.027**
250 to 499	Effect	-0.063	0.012	-0.092	-0.020	-0.006	-0.105
	Std. Err.	0.062	0.069	0.060	0.061	0.065	0.071
	p Value	0.305	0.861	0.124	0.737	0.924	0.139
500 to 749	Effect	-0.193	-0.010	-0.085	-0.052	-0.025	-0.177
	Std. Err.	0.076	0.074	0.065	0.063	0.068	0.072
	p Value	**0.012**	0.895	0.188	0.410	0.715	**0.014**
750 to 999	Effect	-0.334	-0.097	-0.079	-0.041	-0.075	-0.234
	Std. Err.	0.127	0.092	0.073	0.076	0.071	0.077
	p Value	**0.008**	0.293	0.275	0.589	0.296	**0.002**
1,000+	Effect	-0.634	-0.145	-0.024	-0.094	-0.138	-0.158
	Std. Err.	0.147	0.121	0.090	0.073	0.070	0.072
	p Value	**0.000**	0.230	0.790	0.199	**0.049**	**0.029**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.7 Effects of Categorized Cumulative Interview Count on Lifetime Analgesics Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.032	-0.017	0.033	0.041	-0.119	-0.002
	Std. Err.	0.072	0.078	0.080	0.071	0.077	0.077
	p Value	0.653	0.828	0.676	0.563	0.124	0.980
40 to 59	Effect	-0.065	0.017	0.032	-0.077	-0.047	-0.124
	Std. Err.	0.072	0.087	0.077	0.081	0.085	0.088
	p Value	0.363	0.843	0.684	0.341	0.583	0.160
60 to 99	Effect	-0.050	-0.124	0.053	-0.106	-0.065	-0.145
	Std. Err.	0.065	0.072	0.070	0.072	0.072	0.083
	p Value	0.437	0.084	0.450	0.142	0.362	0.081
100 to 249	Effect	-0.164	-0.040	0.040	-0.061	-0.091	-0.136
	Std. Err.	0.058	0.064	0.059	0.061	0.060	0.072
	p Value	**0.004**	0.529	0.498	0.321	0.131	0.058
250 to 499	Effect	-0.220	-0.126	-0.047	-0.046	-0.061	-0.096
	Std. Err.	0.057	0.064	0.056	0.059	0.060	0.070
	p Value	**0.000**	0.051	0.402	0.437	0.313	0.173
500 to 749	Effect	-0.389	-0.175	-0.054	-0.089	-0.139	-0.132
	Std. Err.	0.073	0.068	0.060	0.062	0.062	0.071
	p Value	**0.000**	**0.010**	0.368	0.151	**0.025**	0.062
750 to 999	Effect	-0.457	-0.384	-0.104	-0.105	-0.217	-0.209
	Std. Err.	0.123	0.092	0.071	0.069	0.064	0.072
	p Value	**0.000**	**0.000**	0.144	0.129	**0.001**	**0.004**
1,000+	Effect	-0.472	-0.311	-0.139	-0.189	-0.184	-0.230
	Std. Err.	0.141	0.102	0.085	0.069	0.064	0.071
	p Value	**0.001**	**0.002**	0.100	**0.006**	**0.004**	**0.001**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.8 Effects of Categorized Cumulative Interview Count on Past Year Analgesics Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.058	-0.061	0.100	0.187	-0.190	-0.087
	Std. Err.	0.097	0.111	0.117	0.099	0.110	0.111
	p Value	0.553	0.582	0.393	0.059	0.084	0.433
40 to 59	Effect	-0.065	0.017	0.078	-0.004	-0.018	-0.259
	Std. Err.	0.097	0.118	0.112	0.120	0.116	0.121
	p Value	0.501	0.884	0.490	0.973	0.877	**0.032**
60 to 99	Effect	-0.133	-0.133	0.009	0.014	-0.117	-0.188
	Std. Err.	0.089	0.103	0.106	0.096	0.098	0.110
	p Value	0.133	0.195	0.931	0.881	0.233	0.087
100 to 249	Effect	-0.179	-0.040	0.109	0.050	-0.144	-0.214
	Std. Err.	0.076	0.089	0.086	0.083	0.082	0.094
	p Value	**0.019**	0.653	0.204	0.546	0.079	**0.023**
250 to 499	Effect	-0.231	-0.092	0.072	0.073	-0.138	-0.223
	Std. Err.	0.077	0.089	0.084	0.082	0.083	0.092
	p Value	**0.003**	0.300	0.390	0.375	0.094	**0.015**
500 to 749	Effect	-0.374	-0.159	0.041	0.041	-0.195	-0.231
	Std. Err.	0.093	0.095	0.087	0.083	0.082	0.093
	p Value	**0.000**	0.095	0.633	0.621	**0.018**	**0.013**
750 to 999	Effect	-0.681	-0.378	-0.033	0.050	-0.248	-0.333
	Std. Err.	0.167	0.131	0.095	0.094	0.086	0.095
	p Value	**0.000**	**0.004**	0.727	0.593	**0.004**	**0.000**
1,000+	Effect	-0.559	-0.272	-0.028	-0.107	-0.193	-0.336
	Std. Err.	0.197	0.142	0.119	0.094	0.088	0.094
	p Value	**0.005**	0.056	0.811	0.253	**0.029**	**0.000**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.9 Effects of Categorized Cumulative Interview Count on Lifetime Cocaine Use, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.142	-0.223	-0.059	-0.079	-0.082	-0.125
	Std. Err.	0.087	0.100	0.092	0.087	0.097	0.089
	p Value	0.104	**0.027**	0.520	0.365	0.399	0.162
40 to 59	Effect	-0.178	-0.069	-0.080	-0.194	-0.001	-0.202
	Std. Err.	0.088	0.105	0.095	0.092	0.099	0.094
	p Value	**0.043**	0.513	0.399	**0.035**	0.993	**0.032**
60 to 99	Effect	-0.180	-0.068	-0.069	-0.151	-0.035	-0.132
	Std. Err.	0.078	0.091	0.089	0.087	0.083	0.084
	p Value	**0.021**	0.456	0.439	0.082	0.677	0.116
100 to 249	Effect	-0.186	-0.090	-0.078	-0.122	-0.120	-0.210
	Std. Err.	0.069	0.080	0.069	0.070	0.078	0.075
	p Value	**0.007**	0.263	0.258	0.082	0.121	**0.005**
250 to 499	Effect	-0.204	-0.177	-0.059	-0.038	-0.059	-0.150
	Std. Err.	0.069	0.078	0.067	0.069	0.073	0.074
	p Value	**0.003**	**0.023**	0.380	0.578	0.414	**0.043**
500 to 749	Effect	-0.214	-0.214	-0.099	-0.181	-0.039	-0.178
	Std. Err.	0.088	0.084	0.070	0.071	0.076	0.076
	p Value	**0.014**	**0.011**	0.157	**0.011**	0.606	**0.020**
750 to 999	Effect	-0.388	-0.186	-0.066	-0.095	-0.072	-0.274
	Std. Err.	0.124	0.105	0.078	0.081	0.081	0.079
	p Value	**0.002**	0.077	0.397	0.242	0.375	**0.001**
1,000+	Effect	-0.825	-0.194	-0.284	-0.212	-0.128	-0.184
	Std. Err.	0.168	0.114	0.103	0.083	0.078	0.076
	p Value	**0.000**	0.091	**0.006**	**0.011**	0.101	**0.015**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.10 Effects of Categorized Cumulative Interview Count on Number of Positive Responses to Gate Items, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.043	-0.211	-0.046	-0.051	-0.047	-0.247
	Std. Err.	0.121	0.130	0.121	0.108	0.117	0.119
	p Value	0.724	0.105	0.705	0.636	0.685	**0.039**
40 to 59	Effect	-0.180	0.056	-0.052	-0.069	-0.011	-0.340
	Std. Err.	0.119	0.145	0.126	0.122	0.130	0.132
	p Value	0.129	0.701	0.681	0.573	0.936	**0.010**
60 to 99	Effect	-0.108	-0.051	-0.068	-0.123	0.078	-0.279
	Std. Err.	0.108	0.126	0.116	0.109	0.111	0.125
	p Value	0.321	0.684	0.560	0.261	0.481	**0.026**
100 to 249	Effect	-0.230	-0.101	-0.060	-0.124	-0.118	-0.308
	Std. Err.	0.098	0.112	0.096	0.094	0.092	0.109
	p Value	**0.019**	0.368	0.534	0.185	0.198	**0.005**
250 to 499	Effect	-0.261	-0.155	-0.139	-0.018	-0.015	-0.228
	Std. Err.	0.096	0.109	0.093	0.091	0.091	0.108
	p Value	**0.007**	0.157	0.132	0.845	0.868	**0.036**
500 to 749	Effect	-0.387	-0.248	-0.082	-0.130	-0.052	-0.285
	Std. Err.	0.114	0.116	0.096	0.094	0.094	0.106
	p Value	**0.001**	**0.033**	0.390	0.169	0.582	**0.007**
750 to 999	Effect	-0.632	-0.367	-0.134	-0.188	-0.123	-0.434
	Std. Err.	0.164	0.138	0.109	0.104	0.100	0.111
	p Value	**0.000**	**0.008**	0.222	0.070	0.218	**0.000**
1,000+	Effect	-0.812	-0.391	-0.207	-0.259	-0.186	-0.355
	Std. Err.	0.185	0.157	0.131	0.106	0.095	0.106
	p Value	**0.000**	**0.013**	0.114	**0.015**	**0.052**	**0.001**

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.1.2 Effects of Categorized Cumulative Interview Count on Mental Health Outcomes

As in the preceding tables, ***Tables 3.11***, ***3.12***, and ***3.13*** present estimates of the effect of interviewer experience in each year on three variables related to mental health. In ***Table 3.11***, interviewer experience appears unrelated to reporting of past year major depressive episode (MDE) in 2004 and 2007, but is significantly related in 2005 and 2006.[6] For both years, but especially for 2006, the effect of experience is relatively flat across the experience categories. Normally, one would expect to see coefficients getting larger in absolute size as experience increases, but in this case, there is almost no difference in the effects of the categories as experience increases. The results suggest that in 2006, respondents with FIs with 20 or more interviews were less likely to report past year MDE than interviewers working before their 20th completed interview.

Table 3.11 Effects of Categorized Cumulative Interview Count on Past Year Major Depressive Episode, 2004 to 2007 NSDUHs

Interview		2004	2005	2006	2007
20 to 39	Effect	-0.160	-0.104	-0.227	0.041
	Std. Err.	0.127	0.091	0.099	0.103
	p Value	0.207	0.251	**0.022**	0.691
40 to 59	Effect	-0.173	-0.024	-0.285	-0.006
	Std. Err.	0.130	0.096	0.102	0.106
	p Value	0.182	0.803	**0.005**	0.952
60 to 99	Effect	-0.122	-0.180	-0.215	-0.047
	Std. Err.	0.107	0.088	0.089	0.102
	p Value	0.255	**0.042**	**0.016**	0.643
100 to 249	Effect	-0.046	-0.154	-0.236	0.006
	Std. Err.	0.095	0.071	0.074	0.085
	p Value	0.627	**0.029**	**0.001**	0.947
250 to 499	Effect	-0.154	-0.113	-0.149	0.005
	Std. Err.	0.091	0.069	0.071	0.085
	p Value	0.090	0.102	**0.036**	0.953
500 to 749	Effect	-0.086	-0.180	-0.286	-0.013
	Std. Err.	0.093	0.073	0.077	0.086
	p Value	0.355	**0.013**	**0.000**	0.876
750 to 999	Effect	-0.146	-0.236	-0.246	-0.083
	Std. Err.	0.103	0.081	0.082	0.089
	p Value	0.159	**0.004**	**0.003**	0.348
1,000+	Effect	-0.105	-0.275	-0.229	0.018
	Std. Err.	0.125	0.083	0.081	0.089
	p Value	0.399	**0.001**	**0.005**	0.839

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004 to 2007.

[6] Items about MDE were not asked in the 2002 and 2003 surveys.

Tables 3.12 and *3.13* present the effects of experience categories on the two outcomes based on mental health treatment in the past year. In general, interviewer experience appears to be unrelated to these outcomes.

Table 3.12 Effects of Categorized Cumulative Interview Count on Past Year Specialty Mental Health Treatment among Youths Aged 12 to 17, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.005	-0.050	0.192	0.058	-0.239	-0.128
	Std. Err.	0.149	0.142	0.144	0.132	0.143	0.159
	p Value	0.973	0.727	0.182	0.661	0.093	0.421
40 to 59	Effect	-0.021	-0.021	0.012	0.110	0.041	0.051
	Std. Err.	0.136	0.148	0.151	0.149	0.147	0.159
	p Value	0.879	0.888	0.937	0.458	0.782	0.749
60 to 99	Effect	-0.098	-0.058	0.045	0.147	0.109	0.076
	Std. Err.	0.124	0.130	0.131	0.131	0.128	0.146
	p Value	0.428	0.656	0.731	0.264	0.393	0.603
100 to 249	Effect	-0.063	-0.138	-0.043	0.054	-0.192	0.122
	Std. Err.	0.112	0.113	0.112	0.110	0.105	0.131
	p Value	0.570	0.225	0.703	0.625	0.068	0.352
250 to 499	Effect	-0.119	-0.166	-0.058	0.033	-0.015	0.080
	Std. Err.	0.111	0.110	0.109	0.108	0.100	0.128
	p Value	0.283	0.130	0.598	0.759	0.878	0.532
500 to 749	Effect	-0.088	-0.113	-0.001	0.037	-0.153	0.007
	Std. Err.	0.134	0.118	0.110	0.112	0.110	0.127
	p Value	0.511	0.339	0.995	0.739	0.164	0.956
750 to 999	Effect	-0.035	-0.334	-0.110	0.084	-0.143	-0.032
	Std. Err.	0.197	0.163	0.124	0.121	0.112	0.132
	p Value	0.858	**0.041**	0.376	0.484	0.200	0.808
1,000+	Effect	-0.110	-0.320	-0.142	0.136	-0.210	0.082
	Std. Err.	0.206	0.200	0.153	0.127	0.118	0.126
	p Value	0.592	0.109	0.354	0.283	0.074	0.514

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.13 Effects of Categorized Cumulative Interview Count on Past Year Mental Health Treatment among Adults Aged 18 or Older, 2002 to 2007 NSDUHs

Interview		2002	2003	2004	2005	2006	2007
20 to 39	Effect	-0.047	0.038	-0.141	-0.043	-0.076	-0.110
	Std. Err.	0.100	0.100	0.109	0.107	0.106	0.105
	p Value	0.641	0.708	0.197	0.685	0.470	0.295
40 to 59	Effect	-0.087	0.012	-0.012	0.007	-0.136	0.010
	Std. Err.	0.101	0.114	0.107	0.111	0.115	0.109
	p Value	0.390	0.916	0.914	0.950	0.240	0.928
60 to 99	Effect	-0.032	0.016	-0.091	-0.092	-0.105	-0.249
	Std. Err.	0.087	0.096	0.096	0.102	0.091	0.098
	p Value	0.713	0.865	0.347	0.367	0.246	**0.011**
100 to 249	Effect	-0.081	-0.007	0.040	-0.117	-0.118	-0.213
	Std. Err.	0.079	0.082	0.075	0.085	0.080	0.083
	p Value	0.304	0.932	0.598	0.169	0.138	**0.010**
250 to 499	Effect	-0.063	-0.053	-0.064	-0.064	-0.041	-0.045
	Std. Err.	0.080	0.078	0.074	0.084	0.075	0.080
	p Value	0.435	0.498	0.390	0.448	0.585	0.576
500 to 749	Effect	-0.050	-0.017	-0.107	-0.041	-0.116	-0.122
	Std. Err.	0.096	0.085	0.081	0.087	0.076	0.080
	p Value	0.600	0.837	0.186	0.638	0.126	0.126
750 to 999	Effect	0.038	0.008	-0.211	-0.081	-0.123	-0.188
	Std. Err.	0.137	0.112	0.089	0.093	0.083	0.087
	p Value	0.784	0.940	**0.018**	0.388	0.139	**0.030**
1,000+	Effect	-0.109	-0.019	-0.117	-0.173	-0.155	-0.151
	Std. Err.	0.152	0.127	0.108	0.094	0.081	0.078
	p Value	0.472	0.884	0.279	0.066	0.056	0.053

Note: *p* values less than .05 are in bold.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.1.3 Effects of Continuous Cumulative Interview Count on Substance Use Outcomes

To examine how sensitive the results in the previous section are to how the variable measuring interviewer experience is defined, a continuous measure of interviewer experience is used in this section. ***Table 3.14*** presents the effects of the cumulative interview count operationalized as a continuous measure of experience on measures of substance use for each year. Again, the effect for 2002 is the regression coefficient for the cumulative interview count. For all other years, the effect is the sum of this coefficient added to the interaction term between the cumulative interview count and the survey year. In addition to individual effects, standard errors, and *p* values for each year, the table also provides the Wald F *p* value for the interaction between the cumulative interview count and the survey year. This tests whether the effect of the cumulative interview count on the outcome measure has changed between the years.

- *Lifetime Cigarette Use*: The cumulative interview count has a significant effect only in 2002 and 2007, which is consistent with the effects shown in ***Table 3.1***.
- *Past Year Cigarette Use*: The effect of the cumulative interview count is statistically significant only in 2002, which is generally consistent with ***Table 3.2***, in which there are very few significant effects (of the categorized cumulative interview count).

Table 3.14 Effects of Continuous Interview Experience on Substance Use Outcomes, 2002 to 2007 NSDUHs

Outcome		2002	2003	2004	2005	2006	2007
Cigarettes – Lifetime	Effect	-0.00014	-0.00003	0.00001	-0.00003	-0.00001	-0.00005
	Std. Err.	0.00005	0.00004	0.00004	0.00003	0.00002	0.00002
	p Value	**0.01207**	0.47397	0.79978	0.28939	0.58509	**0.01716**
	Overall interaction Wald F *p* Value			0.2610			
Cigarettes – Past Year	Effect	-0.00014	-0.00003	-0.00001	-0.00006	-0.00001	-0.00003
	Std. Err.	0.00006	0.00005	0.00004	0.00003	0.00003	0.00002
	p Value	**0.01811**	0.51618	0.70960	0.05018	0.72176	0.16683
	Overall interaction Wald F *p* Value			0.3917			
Alcohol – Lifetime	Effect	-0.00017	-0.00011	0.00004	-0.00003	-0.00007	-0.00007
	Std. Err.	0.00007	0.00005	0.00004	0.00003	0.00003	0.00003
	p Value	**0.01240**	**0.03099**	0.34363	0.38083	**0.02628**	**0.01166**
	Overall interaction Wald F *p* Value			0.0767			
Alcohol – Past Year	Effect	-0.00023	-0.00007	-0.00001	-0.00005	-0.00004	-0.00007
	Std. Err.	0.00006	0.00005	0.00004	0.00003	0.00003	0.00002
	p Value	**0.00024**	0.10138	0.72338	0.11350	0.12053	**0.00561**
	Overall interaction Wald F *p* Value			0.1018			
Marijuana – Lifetime	Effect	-0.00022	-0.00012	-0.00005	-0.00006	-0.00003	-0.00007
	Std. Err.	0.00006	0.00005	0.00004	0.00003	0.00003	0.00002
	p Value	**0.00013**	**0.01038**	0.23461	**0.04923**	0.29282	**0.00414**
	Overall interaction Wald F *p* Value			0.0366			
Marijuana – Past Year	Effect	-0.00031	-0.00017	-0.00005	-0.00007	-0.00008	-0.00006
	Std. Err.	0.00007	0.00006	0.00005	0.00004	0.00003	0.00003
	p Value	**0.00001**	**0.00402**	0.31040	0.07029	**0.01266**	**0.03918**
	Overall interaction Wald F *p* Value			0.0087			
Analgesics – Lifetime	Effect	-0.00052	-0.00028	-0.00015	-0.00010	-0.00010	-0.00010
	Std. Err.	0.00007	0.00005	0.00004	0.00004	0.00003	0.00003
	p Value	**0.00000**	**0.00000**	0.00074	**0.00800**	**0.00104**	**0.00044**
	Overall interaction Wald F *p* Value			0.0000			
Analgesics – Past Year	Effect	-0.00057	-0.00022	-0.00009	-0.00009	-0.00009	-0.00013
	Std. Err.	0.00010	0.00007	0.00006	0.00005	0.00004	0.00004
	p Value	**0.00000**	**0.00207**	0.11243	0.05765	**0.03012**	**0.00032**
	Overall interaction Wald F *p* Value			0.0001			
Cocaine – Lifetime	Effect	-0.00031	-0.00016	-0.00010	-0.00008	-0.00004	-0.00005
	Std. Err.	0.00008	0.00006	0.00005	0.00004	0.00004	0.00003
	p Value	**0.00011**	**0.01127**	0.04370	0.08713	0.23033	0.14991
	Overall interaction Wald F *p* Value			0.0329			
Positive Responses to Gate Items	Effect	-0.00058	-0.00033	-0.00013	-0.00014	-0.00012	-0.00012
	Std. Err.	0.00010	0.00008	0.00007	0.00005	0.00004	0.00004
	p Value	**0.00000**	**0.00003**	0.05896	**0.00981**	**0.00598**	**0.00341**
	Overall interaction Wald F *p* Value			0.0002			

Note: Effect for 2002 is the regression coefficient for the cumulative interview count; for all other years, effect is the sum of the coefficient for the cumulative interview count and the respective coefficient for the interaction of the cumulative interview count and the survey year.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

- *Lifetime Alcohol Use*: Effects are statistically significant in 4 of the 6 years (2002, 2003, 2006, and 2007). This is inconsistent with the results in ***Table 3.3*** (in which there is only one statistically significant effect).
- *Past Year Alcohol Use*: The effect of the cumulative interview count is statistically significant only in 2002 and 2007, which is generally consistent with the results in ***Table 3.4*** (with significant effects in 2002, 2006, and 2007, but with only one statistically significant category in 2006 and 2007).
- *Lifetime Marijuana Use*: The effect of the continuous cumulative interview count is statistically significant in 2002, 2003, 2005, and 2007. In ***Table 3.5***, the effect of the categorized cumulative interview count on prevalence appears to be statistically significant only in 2002 and 2007.
- *Past Year Marijuana Use*: The effect of the continuous cumulative interview count on prevalence is statistically significant in 4 of the 6 years (2002, 2003, 2006, and 2007), which is somewhat consistent with the results shown in ***Table 3.6*** for the categorized cumulative interview count (in which there are statistically significant effects in each of these years).
- *Lifetime Pain Reliever (Analgesics) Use*: The effects of the cumulative interview count are statistically significant in all years, which is mostly consistent with the results in ***Table 3.7***.
- *Past Year Pain Reliever (Analgesics) Use*: The negative effect of the cumulative interview count on self-reported past year use of pain relievers is statistically significant effect in 4 of the 6 years (2002, 2003, 2006, and 2007). This is generally consistent with the results shown in ***Table 3.8*** (for the categorized cumulative interview count).
- *Lifetime Cocaine Use*: The effects of the cumulative interview count on self-reports of lifetime cocaine use are statistically significant for 2002, 2003, and 2004, but the effect becomes smaller each year. This is very different from the results for the categorized cumulative interview count in ***Table 3.9*** (statistically significant effects throughout).
- *Positive Responses to Gate Items*: Effects are statistically significant in all years (except 2004), which is consistent with the results shown in ***Table 3.10***, in which there are significant effects in each year except 2004.

In ***Table 3.14***, the effects are largest in 2002, then smaller in subsequent years. However, for most of the outcome measures, the effect of the cumulative interview count is statistically significant in 2007. This result should not be viewed as evidence that the effects of experience on prevalence increased in 2007. The variability of the key predictor (i.e., the cumulative interview count) increases from 2002 to 2007. In general, increases in the variability of a predictor make the effect of that predictor more likely to be statistically significant, holding other factors constant. Thus, the increase in variability between 2002 and 2007 in interviewer experience increased the possibility of a statistically significant effect, even if the magnitude of the effect did not change much. For example, in ***Table 3.14***, the effect of the cumulative interview count on past year alcohol use in 2007 is -0.00007 (p = 0.00561). For 2003, the effect is the same, but the

p value is considerably larger ($p = 0.10138$). The standard deviation for the cumulative interview count in 2003 is 275, while it is 569 in 2007.

For licit substances (alcohol, cigarettes), the effects of the cumulative interview count do not vary significantly over time, although it does appear that the effects of experience have declined. For illicit substances (and responses to positive gate items), there is more evidence that the effect of experience has changed over time.

3.1.4 Effects of the Continuous Cumulative Interview Count on Mental Health Measures

Table 3.15 presents the effects of the continuous measure of interviewer experience on the mental health outcomes for each year. The continuous measure of interviewer experience has a negative effect on reporting past year MDE in 2005, but not in 2006. As noted in the discussion of the effects of the categorical measure of interviewer experience on past year MDE, the effect for 2006 was statistically significant, but flat across the experience categories. This is consistent with the estimate on past year MDE shown in ***Table 3.15***.

Table 3.15 Effects of Interview Experience on Selected Outcomes, 2002 to 2007 NSDUHs: Cumulative Interview Count (Continuous)

Outcome		2002	2003	2004	2005	2006	2007
Major Depressive Episode – Past Year	Effect	n.a.	n.a	-0.00003	-0.00013	-0.00003	-0.00001
	Std. Err.	n.a	n.a	0.00006	0.00004	0.00004	0.00004
	p Value	n.a	n.a	0.67854	**0.00160**	0.43920	0.82669
	Overall interaction Wald F *p* Value			0.1022			
Youth Specialty Mental Health Treatment – Past Year	Effect	-0.00010	-0.00024	-0.00011	0.00001	-0.00011	-0.00004
	Std. Err.	0.00012	0.00010	0.00007	0.00006	0.00006	0.00005
	p Value	0.39834	**0.01238**	0.13812	0.81829	**0.04554**	0.34637
	Overall interaction Wald F *p* Value			0.2456			
Adult Mental Health Treatment – Past Year	Effect	-0.00001	-0.00004	-0.00014	-0.00005	-0.00005	-0.00005
	Std. Err.	0.00009	0.00007	0.00005	0.00004	0.00004	0.00003
	p Value	0.89847	0.51982	**0.00951**	0.22825	0.17651	0.14848
	Overall interaction Wald F *p* Value			0.7175			

Note: Effect for 2002 is the regression coefficient for the cumulative interview count for both youth and adult specialty mental health treatment in the past year; for all other years, effect is the sum of the coefficient for the cumulative interview count and the respective coefficient for the interaction of the cumulative interview count and the survey year. For past year MDE, the baseline is the 2004 survey year.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.1.5 Effects of Experience (as Defined as Total Time on Project) on Substance Use Measures

Tables 3.16 and ***3.17*** present the effects of two other measures of interviewer experience on outcome measures—the number of quarters worked on NSDUH since 1999 and the number of years worked since 1999. The elapsed time is measured with respect to years or quarters with completed interviews. As an example, if an interviewer began work in quarter 1 of 2005 and worked for eight quarters but did not complete any interviews in one of those quarters, his or her count of experience for the first quarter of 2007 would be 7. As with the effects shown for the cumulative interview count in ***Table 3.14***, these effects are sums of the coefficients for the

particular measure of interview experience and the interaction between experience and year. In contrast with the measures based on the cumulative interview count (continuous and categorical), the effects of experience do not decline over time for all measures. For the cumulative interview count measures, the largest negative effects were seen in 2002. For quarters worked and years worked, the largest effects are always in 2002. For example, in ***Table 3.16***, for lifetime cigarette use, the largest negative effect is in 2007 (effect = -0.0222) instead of 2002 (effect = -0.00180). The same holds for lifetime marijuana use (effect = -0.00368 in 2007 vs. -0.00173 in 2002). Similarly, in ***Table 3.17***, the largest effects of experience in years for lifetime marijuana use, past year marijuana use, and past year cigarette use all occur in 2007. However, for most other measures, negative effects in 2002 are usually larger than the effects for other years.

Significance tests for the effects of quarters worked and years worked should be viewed with caution. As with the measure of experience based on the numbers of completed interviews, these measures are less variable in earlier years than in later years, but the constraint on variability is more pronounced. For example, the number of years worked in 2002 is limited to 0, 1, or 2 years of previous experience (since 1999). Similarly, the possible number of previous quarters worked in 2002 (since 1999) ranges from 0 to 11. This difference in the variability of experience measures across years can produce some odd significance testing results in which the estimated effects are similar, but the significance test results are quite different. For example, in ***Table 3.16*** (quarter years worked), the effect for 2002 for past year marijuana use (-0.00351) is larger than the effect for 2007 (-0.00339). The sample sizes should be about the same, but the *p* value for 2002 is 0.20170 while it is 0.00524 for 2007. In ***Table 3.17***, the effect of years worked on past year marijuana use in 2002 (-0.01334) is slightly smaller than the effect in 2007 (-0.01506), but the *p* values are very different ($p = 0.51461$ in 2002 vs. $p = 0.00238$).

3.1.6 Summary – Interviewer Experience

Regardless of which of the four measures of interviewer experience is used, the association between FI experience and self-reporting on substance use still appears to have declined over the time period observed, that is, from 2002 to 2007. This is particularly the case when comparing the earliest years in this study (2002 and 2003) and the last year (2007). However, the strong associations between experience (measured as the cumulative interview count) and self-reporting of substance use in the earlier years are less pronounced than the associations in which length of time on the job (e.g., years or quarters) is used as a measure of experience. That is, with the measures based on numbers of interviews, the declining effects are smoother whereas the pattern of effects for the measures based on elapsed time are more sporadic.

For the mental health measures, interviewer experience does not seem to have any consistent effects on self-reporting of either past year MDE or receiving mental health treatment. Although there were significant associations between the categorical interviewer experience measure and past year MDE in 2006, these effects were not consistent with the idea that higher levels of experience are associated with lower prevalence reports.

Table 3.16 Effects of Interview Experience on Selected Outcomes, 2002 to 2007 NSDUHs: Quarters Worked Since 1999

Outcome		2002	2003	2004	2005	2006	2007
Cigarettes – Lifetime	Effect	-0.00180	-0.00053	0.00107	-0.00087	0.00044	-0.00222
	Std. Err.	0.00228	0.00184	0.00157	0.00117	0.00101	0.00090
	p Value	0.43108	0.77441	0.49670	0.45675	0.66123	**0.01405**
	Overall Interaction Wald F *p* Value			0.3294			
Cigarettes – Past Year	Effect	-0.00017	-0.00082	-0.00008	-0.00055	0.00048	-0.00153
	Std. Err.	0.00229	0.00185	0.00151	0.00118	0.00101	0.00095
	p Value	0.94080	0.65761	0.95706	0.63950	0.63544	0.10813
	Overall Interaction Wald F *p* Value			0.7900			
Alcohol – Lifetime	Effect	-0.00282	-0.00240	0.00400	-0.00169	-0.00098	-0.00288
	Std. Err.	0.00277	0.00209	0.00180	0.00134	0.00121	0.00116
	p Value	0.30794	0.25069	**0.02662**	0.20765	0.41769	**0.01354**
	Overall Interaction Wald F *p* Value			0.0487			
Alcohol – Past Year	Effect	-0.00616	-0.00045	0.00021	-0.00271	-0.00068	-0.00337
	Std. Err.	0.00237	0.00183	0.00157	0.00119	0.00107	0.00102
	p Value	**0.00950**	0.80455	0.89205	**0.02340**	0.52502	**0.00098**
	Overall Interaction Wald F *p* Value			0.0826			
Marijuana – Lifetime	Effect	-0.00173	-0.00327	0.00049	-0.00258	-0.00036	-0.00368
	Std. Err.	0.00233	0.00190	0.00158	0.00128	0.00100	0.00096
	p Value	0.45628	0.08464	0.75407	**0.04368**	0.71802	**0.00012**
	Overall Interaction Wald F *p* Value			0.0018			
Marijuana – Past Year	Effect	-0.00351	-0.00404	-0.00221	-0.00219	-0.00135	-0.00339
	Std. Err.	0.00275	0.00224	0.00185	0.00151	0.00128	0.00121
	p Value	0.20170	0.07078	0.23441	0.14784	0.29204	**0.00524**
	Overall Interaction Wald F *p* Value			0.8493			
Analgesics – Lifetime	Effect	-0.01474	-0.00705	-0.00580	-0.00331	-0.00324	-0.00427
	Std. Err.	0.00271	0.00217	0.00173	0.00137	0.00118	0.00112
	p Value	**0.00000**	**0.00121**	**0.00079**	**0.01590**	**0.00587**	**0.00014**
	Overall Interaction Wald F *p* Value			0.0032			
Analgesics – Past Year	Effect	-0.01655	-0.00258	-0.00469	-0.00210	-0.00358	-0.00494
	Std. Err.	0.00377	0.00291	0.00231	0.00186	0.00160	0.00155
	p Value	**0.00001**	0.37508	**0.04217**	0.25844	**0.02532**	**0.00142**
	Overall Interaction Wald F *p* Value			0.0255			
Cocaine – Lifetime	Effect	-0.00515	-0.00632	-0.00047	-0.00271	-0.00138	-0.00197
	Std. Err.	0.00328	0.00259	0.00204	0.00173	0.00143	0.00133
	p Value	0.11599	**0.01470**	0.81779	0.11752	0.33528	0.13805
	Overall Interaction Wald F *p* Value			0.4487			
Positive Responses to Gate Items	Effect	-0.01145	-0.00901	-0.00345	-0.00390	-0.00309	-0.00515
	Std. Err.	0.00431	0.00328	0.00271	0.00217	0.00184	0.00162
	p Value	**0.00803**	**0.00598**	0.20338	0.07335	0.09325	**0.00151**
	Overall Interaction Wald F *p* Value			0.3875			

Note: Effect for 2002 is the regression coefficient for quarters of experience; for all other years, effect is the sum of the coefficient for quarters of experience and the respective coefficient for the interaction of quarters of experience and survey year.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.17 Effects of Interview Experience on Selected Outcomes, 2002 to 2007 NSDUHs: Years Worked Since 1999

Outcome		2002	2003	2004	2005	2006	2007
Cigarettes – Lifetime	Effect	-0.01299	0.00524	0.00790	-0.00209	0.00208	-0.00922
	Std. Err.	0.01668	0.00795	0.00652	0.00475	0.00417	0.00370
	p Value	0.43639	0.50985	0.22592	0.65965	0.61813	**0.01285**
	Overall Interaction Wald F *p* Value			0.1279			
Cigarettes – Past Year	Effect	-0.00411	-0.00280	0.00180	-0.00042	0.00154	-0.00760
	Std. Err.	0.01654	0.00793	0.00626	0.00483	0.00420	0.00392
	p Value	0.80353	0.72377	0.77403	0.93077	0.71435	0.05258
	Overall Interaction Wald F *p* Value			0.6384			
Alcohol – Lifetime	Effect	-0.00982	-0.00807	0.01864	-0.00585	-0.00244	-0.01155
	Std. Err.	0.01996	0.00906	0.00759	0.00550	0.00498	0.00471
	p Value	0.62284	0.37353	**0.01416**	0.28720	0.62403	**0.01421**
	Overall Interaction Wald F *p* Value			0.0344			
Alcohol – Past Year	Effect	-0.03230	-0.00112	0.00061	-0.01038	-0.00102	-0.01345
	Std. Err.	0.01699	0.00796	0.00662	0.00494	0.00437	0.00416
	p Value	0.05747	0.88774	0.92601	**0.03570**	0.81616	**0.00123**
	Overall Interaction Wald F *p* Value			0.0944			
Marijuana – Lifetime	Effect	-0.01300	-0.01162	0.00585	-0.00970	-0.00175	-0.01614
	Std. Err.	0.01726	0.00846	0.00661	0.00521	0.00412	0.00393
	p Value	0.45159	0.16966	0.37640	0.06245	0.67161	**0.00004**
	Overall Interaction Wald F *p* Value			0.0334			
Marijuana – Past Year	Effect	-0.01334	-0.01250	-0.00490	-0.00691	-0.00478	-0.01506
	Std. Err.	0.02047	0.00974	0.00779	0.00629	0.00521	0.00495
	p Value	0.51461	0.19974	0.52934	0.27269	0.35896	**0.00238**
	Overall Interaction Wald F *p* Value			0.7425			
Analgesics – Lifetime	Effect	-0.09492	-0.02600	-0.01944	-0.01197	-0.01301	-0.01820
	Std. Err.	0.01999	0.00955	0.00721	0.00569	0.00486	0.00458
	p Value	**0.00000**	**0.00654**	**0.00709**	**0.03541**	**0.00752**	**0.00007**
	Overall Interaction Wald F *p* Value			0.0036			
Analgesics – Past Year	Effect	-0.08544	-0.00975	-0.01191	-0.00662	-0.01283	-0.02053
	Std. Err.	0.02726	0.01258	0.00969	0.00775	0.00648	0.00634
	p Value	**0.00175**	0.43873	0.21917	0.39302	**0.04794**	**0.00122**
	Overall Interaction Wald F *p* Value			0.1005			
Cocaine – Lifetime	Effect	-0.03938	-0.02573	-0.00064	-0.01033	-0.00643	-0.00896
	Std. Err.	0.02340	0.01118	0.00861	0.00711	0.00589	0.00540
	p Value	0.09250	**0.02156**	0.94068	0.14634	0.27535	0.09736
	Overall Interaction Wald F *p* Value			0.3791			
Positive Responses to Gate Items	Effect	-0.07215	-0.03109	-0.00721	-0.01260	-0.01229	-0.02247
	Std. Err.	0.03205	0.01453	0.01143	0.00898	0.00760	0.00665
	p Value	**0.02451**	**0.03248**	0.52828	0.16062	0.10600	**0.00074**
	Overall Interaction Wald F *p* Value			0.3136			

Note: Effect for 2002 is the regression coefficient for years of experience; for all other years, effect is the sum of the coefficient for years of experience and the respective coefficient for the interaction of years of experience and survey year.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.2 Effects of Interviewer Hours and Mileage

Interviewer hours and mileage were included as predictors in the models for two reasons. First, these variables may be potential confounders for the relationship between experience and survey outcomes. Second, these variables may be affected by changes in the distribution of interviews geographically or changes in the distribution of interviewer experience. Thus, it is necessary to estimate the effects of these variables on survey measures of interest. For substance use outcomes, it was found that interviews conducted by FIs with higher hours worked were associated with higher frequencies of self-reported substance use for the past year use measures of alcohol, marijuana, and analgesic use. It was also found that interviews done by FIs who had reported greater travel (in terms of reimbursed miles) showed lower self-reported prevalence rates.[7] This was the case for lifetime marijuana, lifetime analgesics, lifetime cocaine, past year alcohol, past year marijuana, and past year analgesics. This information is summarized in ***Table 3.18***. The magnitudes of these effects are shown in ***Tables 3.19*** and ***3.20***, which show the conditional marginals for values of these predictors. As an example of interpreting the conditional marginals, consider past year use of marijuana. The conditional marginal for interviewers who travel more than 1,200 miles per week on average (during a quarter) is 12.2 percent. This is the predicted probability of past year marijuana use assuming 1,200 miles per week traveled and that all other variables in the model are at their means in the overall sample. In contrast, the conditional marginal is 14.6 percent for cases in which the interviewer traveled only 100 miles per week.

For all three mental health outcomes, none of the coefficients for average miles per week during the quarter or average hours per week during the quarter is a statistically significant predictor.

Table 3.18 Summaries of Effects of Average Miles per Week during Quarter and Average Hours per Week during Quarter on Substance Use, 2002 to 2007 NSDUHs

Outcome	Average Miles Per Week during Quarter	Average Hours Per Week during Quarter
Lifetime Cigarettes	n.s.	n.s.
Lifetime Alcohol	n.s.	n.s.
Lifetime Marijuana	Negative	n.s.
Lifetime Analgesics	Negative	n.s.
Lifetime Cocaine	Negative	n.s.
Past Year Cigarettes	n.s.	n.s.
Past Year Alcohol	Negative	Positive
Past Year Marijuana	Negative	Positive
Past Year Analgesics	Negative	Positive
Positive Responses to Gate Questions	Negative	n.s.

n.s. = not significant.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

[7] In preliminary analyses in which separate cross-sectional models were estimated for each survey year, it was found that the effects of interviewer hours and mileage on substance use outcomes did not appear to change much by year. Therefore, no interaction terms were included between these measures of interviewer characteristics and survey outcomes.

Table 3.19 Conditional Marginals for Average Miles per Week during Quarter on Substance Use Measures, 2002 to 2007 NSDUHs: Models Based on the Cumulative Interview Count - Continuous

Average Miles per Week during Quarter	Cigarettes (Lifetime)	Cigarettes (Past Year)	Alcohol (Lifetime)	Alcohol (Past Year)	Marijuana (Lifetime)	Marijuana (Past Year)	Analgesics (Lifetime)	Analgesics (Past Year)	Cocaine (Lifetime)	Positive Responses to Gate Items
100	0.581	0.307	0.787	0.642	0.386	0.146	0.148	0.066	0.082	3.739
200	0.582	0.307	0.786	0.638	0.382	0.144	0.146	0.065	0.081	3.717
300	0.583	0.307	0.785	0.635	0.379	0.141	0.144	0.064	0.079	3.696
400	0.584	0.307	0.784	0.631	0.375	0.139	0.142	0.063	0.078	3.674
500	0.585	0.307	0.784	0.628	0.371	0.137	0.140	0.062	0.076	3.652
600	0.586	0.307	0.783	0.624	0.367	0.135	0.138	0.061	0.075	3.631
700	0.587	0.307	0.782	0.621	0.363	0.132	0.137	0.060	0.074	3.609
800	0.588	0.307	0.781	0.617	0.359	0.130	0.135	0.060	0.072	3.587
900	0.589	0.307	0.780	0.613	0.356	0.128	0.133	0.059	0.071	3.566
1,000	0.590	0.307	0.779	0.610	0.352	0.126	0.131	0.058	0.069	3.544
1,100	0.591	0.307	0.778	0.606	0.348	0.124	0.130	0.057	0.068	3.522
1,200	0.592	0.307	0.777	0.603	0.345	0.122	0.128	0.056	0.067	3.501

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.20 Conditional Marginals for Average Hours per Week during Quarter on Substance Use Measures, 2002 to 2007 NSDUHs: Models Based on Cumulative Interview Count - Continuous

Average Hours per Week during Quarter	Cigarettes (Lifetime)	Cigarettes (Past Year)	Alcohol (Lifetime)	Alcohol (Past Year)	Marijuana (Lifetime)	Marijuana (Past Year)	Analgesics (Lifetime)	Analgesics (Past Year)	Cocaine (Lifetime)	Positive Responses to Gate Items
5	0.584	0.308	0.783	0.625	0.373	0.136	0.140	0.061	0.077	3.669
10	0.584	0.308	0.784	0.628	0.375	0.137	0.142	0.062	0.077	3.678
15	0.583	0.307	0.785	0.631	0.376	0.139	0.143	0.063	0.078	3.686
20	0.583	0.307	0.785	0.634	0.378	0.141	0.144	0.063	0.079	3.695
25	0.582	0.307	0.786	0.637	0.380	0.142	0.145	0.064	0.080	3.704
30	0.582	0.306	0.786	0.639	0.382	0.144	0.146	0.065	0.081	3.713
35	0.581	0.306	0.787	0.642	0.384	0.146	0.147	0.066	0.082	3.722
40	0.581	0.306	0.788	0.645	0.386	0.148	0.148	0.067	0.083	3.730
45	0.580	0.305	0.788	0.648	0.387	0.150	0.150	0.068	0.084	3.739

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Although FI hours and mileage are associated with some measures of substance use, it is not immediately clear how to interpret their effects because they are highly correlated with each other. Each indicator can uniquely affect substance use reporting. The length of time that interviewers actually spend with respondents is a component of interviewer hours that is independent of the miles traveled. The length of time FIs spend with respondents can be thought of in two ways. First, FI hours will reflect the amount of time that must be spent persuading respondents to participate in the survey. Second, FI hours reflect the actual time administering the interview, if the respondent has been selected and has agreed to participate. One explanation for the positive relationship between FI hours per week and self-reporting of substance use could be that respondents who use such substances require more effort to persuade to participate. However, the model already contains an indicator of whether there was ever a refusal at the interview stage. What remains is the amount of time spent on the interview. One factor that increases the amount of time on the interview is the reporting of substance use on the survey. Interviews with "positive" responses to substance use items should run longer than interviews in which the respondent does not report using any substances, if only because more questions are asked of persons who report using substances. Therefore, the positive relationship between hours worked and substance use reporting may simply reflect the greater amount of time needed to administer the survey when the respondent reports using drugs.

What about the negative relationship between miles traveled per week and substance use? Although hours worked and miles traveled are correlated, there are situations where one would expect to find (1) high miles traveled and low hours worked (remote, sparsely populated locations) and (2) low miles traveled and high hours worked (proximate locations, densely populated). Several other factors can contribute to interviewers reporting more hours worked without increasing mileage. For example, FIs chosen to conduct field verifications in urban areas may incur high hours trying to track down cases they are asked to verify. In urban areas, mileage could be low while hours can get very high, particularly if FIs have to verify a lot of cases. Also, for some controlled-access situations, such as dormitories at universities, "Meet Me" letters are often sent to give students an opportunity to meet with FIs in common areas of their dormitories for specified time periods. Sometimes, there are slow periods when FIs do not get many students to stop by, but they must stay for the entire period of time stated in the letters. This procedure is also used in retirement homes and other controlled-access situations.

The negative association between mileage traveled per week and substance use may be reflecting lower rates of substance use in more rural areas and higher rates of substance use in more urban settings. Mileage may be acting as a more precise measure of urbanicity than the indicator of urban/rural status in the model, metropolitan statistical area (MSA) status. MSA status has only three levels: MSA with 1 million or more persons, MSA with fewer than 1 million persons, and non-MSA. There are also some segment-level indicators in the model, but these are aggregates that are not precisely defined around the neighborhood of the respondent.[8]

[8] To examine whether the effects of mileage on substance use reporting varies by MSA status would require estimating models with interaction terms between mileage and MSA status.

3.3 Effects of Other FI Characteristics (Age, Gender, and Race/Ethnicity)

In addition to being able to determine the relationship between interviewer experience and substance use prevalence rates, the models also permit an analysis of the relationship between prevalence rates and FI demographic characteristics, including age, gender, and race/ethnicity. These were included as predictors in the models along with interaction terms for each with the respondent's matching demographic measure (e.g., an interaction between the gender of the interviewer and the gender of the respondent). This was done not only to serve as a control for models estimating the association between interviewer experience and prevalence, but also to develop a global understanding of the field-related factors associated with prevalence rates. In general, not much evidence was found that the interviewer's age or gender had any effect on the relationships between respondent characteristics and outcome measures.

In contrast to age and gender, evidence was found of significant interaction effects between FI race/ethnicity and respondent race/ethnicity on respondent self-reports from substance use measures. In particular, Hispanic respondents were less likely to report substance use, past year MDE, or the use of mental health treatment services when interviewed by an Hispanic FI than when interviewed by a non-Hispanic FI. It is possible that in many of these cases, the interview was done in Spanish. In such situations, the respondents may be less willing to report these and other sensitive behaviors for cultural reasons. This can be seen in the conditional marginal plots in ***Figures B2.1*** through ***B2.13*** in Appendix B.

3.4 Projections for Interviewers on Travel Status and Traveling Field Interviewers

In the preceding analyses, interviews worked by interviewers on travel status were excluded because it was felt that their miles traveled would, by definition, be outliers compared with the rest of the sample. However, the goal of the research is to examine the relationships between interviewer characteristics and substance use outcomes broadly. Thus, the next research question was to see whether the model could be used to predict prevalence rates for interviews done by FIs who were on travel status during the week of the interview. To carry this out, the estimated regression coefficients from the data on interviews done by FIs not on travel status during the week of the interview were applied to interviews done by FIs on travel status. The predicted prevalence rates for interviews done by FIs on travel status were then computed and compared with the observed rates to see how well the model could predict the latter.

Two types of FIs on travel status were considered: (1) FIs hired at the beginning of the quarter by field supervisors (FSs) to work as traveling field interviewers (TFIs) and (2) FIs on travel status but not TFIs. The latter group includes "borrowed" FIs.[9] In some cases, FIs reported hours and mileage associated with being on travel status and not being on travel status during the same week. That is, an FI may have been on travel status part of the week and not on travel status the rest of the week. For such cases, it cannot be determined which days during the week an FI was on travel status and which days he or she was not. Interviews done by such interviewers have been excluded from the regression analyses in this report. Interviews done by

[9] "Borrowed" status refers to FIs who are available to work in other regions under a different FS than they are normally assigned to. Also see Section 1.2 in Chapter 1.

interviewers who were on travel and nontravel status during the same week were included as part of the target group for comparing the predicted and observed prevalence rates.

3.4.1 Methodology for Applying Regression Results to Travel Cases

To carry out the computations for this analysis, miles per week during the quarter for TFIs needed to be imputed. For over half of the interviews conducted by TFIs, it was found that the mileage for the week was 0. In contrast, for nontravel FIs, only 1.4 percent of the interviews had a value of 0 miles. For the other travel cases, the FI mileage was 0 in only 6.1 percent of the cases. TFIs often rely on rental cars, and this type of mileage is not recorded in the production, time, and expense (PTE) system because it is not reimbursed. In addition, when examining the data for mileage recorded by TFIs, it was noticed that for a given FI, the particular value or an exact multiple of that number would often appear as they entered mileage. This might be the result of TFIs using their own vehicles (in which case, mileage is reimbursed) to get to an airport and back. Thus, the mileage recorded for TFIs was not considered to be consistent with that for nontravel cases and the other travel cases.

An ordinary least squares (OLS) regression model was used to impute mileage for the TFI cases. For the nontravel and other travel cases, the data were collapsed down to FI quarters, then the average miles per week during the quarter was regressed on (1) average hours per week during the quarter, (2) number of interviews completed by the FI during the quarter, and (3) the survey year.[10] The model estimates were then applied to the TFI cases to produce predicted values of miles per week during the quarter for the TFI cases. ***Table 3.21*** provides descriptive statistics for the average miles per week during the quarter, before and after imputation, for the three types of cases with respect to travel status. Typically, there are about 10 to 12 TFIs during the year and about 200 to 250 FIs who completed at least one interview while "borrowed." About 12 percent of interviews are completed by FIs on travel status.

Table 3.21 Summary Statistics for Average Miles per Week

	Nontravel Cases	TFI Cases	Other Travel Cases
Total Number of Interviews	357,481	10,161	38,483
Average Hours per Week during Quarter	21	48	32
Average Hours per Interview	5.82	7.34	6.84
Percent of Cases with 0 Miles (Pre-Imputation)	1.4	52.9	6.1
Average Miles per Week during Quarter (Pre-Imputation)	245	114	374
Average Miles per Week (Post-Imputation)	197.0	573.3	338.0
Miles per Interview (Post-Imputation)	67.3	86.6	80.7

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.4.2 Comparisons between Model-Adjusted and Observed Prevalences for "Long-Term Interviewers"

Table 3.22 shows the predicted and observed percentages for all of the outcome measures (except for the positive number of gate items) for interviews conducted by FIs who were on

[10] The coefficient of determination, R^2, for the imputation model was .424.

travel status during the week of the interview. Two sets of predicted values are shown—one for models that used the continuous measure of experience and one for models that used the categorical measure of experience. The predicted values from the model appear quite close to the observed estimates. Because the regression models were unweighted, the observed percentages are also unweighted.

Table 3.22 Predicted versus Observed Outcomes for Interviews Done by FIs on Travel Status

Measure	Predicted - Continuous Experience	Predicted - Categorical Experience	Observed
Cigarettes – Lifetime	0.5714	0.5712	0.5700
Cigarettes – Past Year	0.3212	0.3210	0.3261
Alcohol – Lifetime	0.7339	0.7340	0.7326
Alcohol – Past Year	0.6218	0.6218	0.6193
Marijuana – Lifetime	0.3941	0.3941	0.3901
Marijuana – Past Year	0.1709	0.1708	0.1688
Analgesics – Lifetime	0.1558	0.1555	0.1525
Analgesics – Past Year	0.0756	0.0755	0.0741
Cocaine – Lifetime	0.1186	0.1183	0.1174
Positive Responses to Gate Items	3.6401	3.6372	3.6045
Major Depressive Episode – Past Year	0.0814	0.0811	0.0801
Youth Specialty Mental Health Treatment – Past Year	0.1371	0.1367	0.1303
Adult Mental Health Treatment – Past Year	0.1236	0.1232	0.1219

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

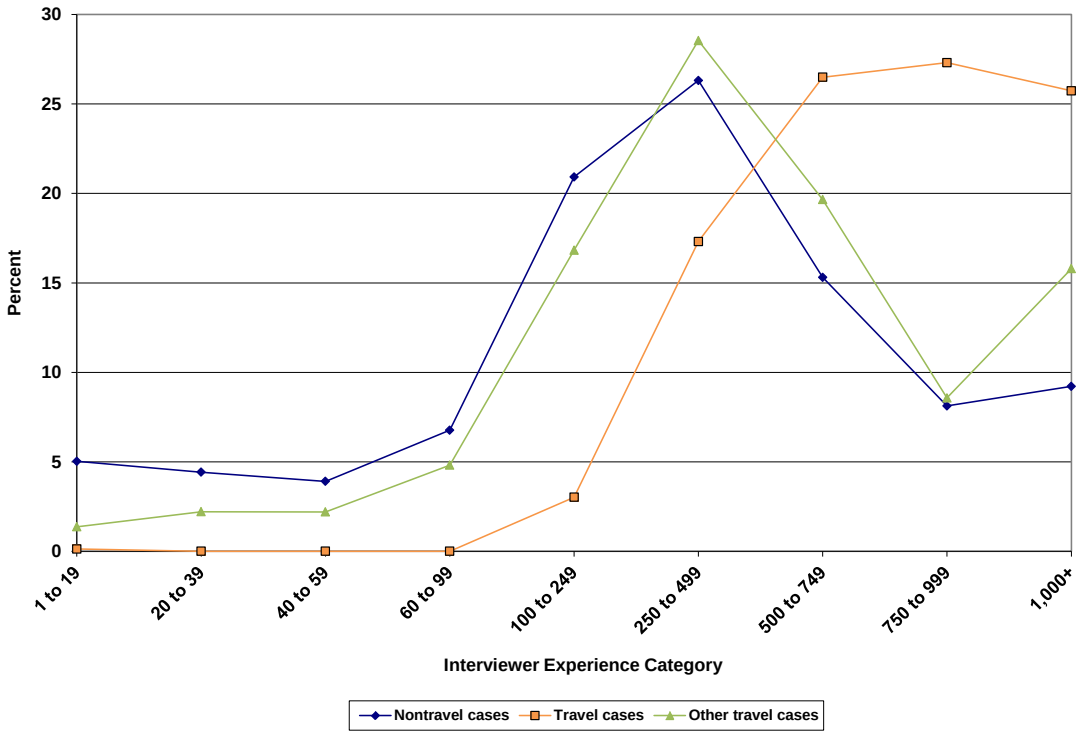
These comparisons were then run by TFI versus other travel status cases. TFIs have higher levels of experience than non-TFIs on travel status, who in turn are somewhat more experienced that non-TFIs on nontravel status. ***Figure 3.1*** shows the distribution of interviews by categorical interviewer experience for the two types of travel status cases (i.e., TFI cases and other travel status cases) and for the nontravel status cases. For example, almost 26 percent of the interviews done by TFIs are being done by FIs in the 1,000+ experience category versus about 16 percent of the interviews done by non-TFIs on travel status and 9 percent of the interviews done by FIs not on travel status.

Table 3.23 shows comparisons between predicted and observed outcomes, controlling for the type of travel status (TFIs vs. other travel cases). Because experience is correlated with lower prevalence rates, one would expect to see lower observed rates for TFIs than for the other travel cases. As ***Table 3.23*** indicates, the observed prevalences for interviews done by TFIs are comparable in many cases with those done by other travel cases. However, for most of the outcomes examined, the observed prevalences for TFI interviews are higher than for other travel cases. Predicted rates for TFI cases are usually larger than the predicted rates for other travel cases, at least partially because of their higher experience levels.

Overall, the model did fairly well in predicting the observed prevalence rates for the interviews done by FIs on travel status. However, it should be noted that for TFIs, a group of interviewers with a very different distribution of interviewer experience from the interviewers used in the estimation model (FIs not on travel status), the model produced estimates lower than observed. This suggests that the exclusion of interviews conducted by TFIs from the models

predicting substance use may slightly overstate the effects of experience. TFIs are generally very experienced, yet the observed prevalence rates for their interviews are slightly higher than the model predicted rates. However, only about 2.5 percent of all interviews are completed by TFIs.

Figure 3.1 Distribution of Interviewer Experience, by Travel Status



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 3.23 Predicted versus Observed Outcomes for Interviews Done by TFI Cases and Other Travel Cases (Models with Continuous Interviewer Experience)

	TFI Cases		Other Travel Cases	
Measure	**Predicted**	**Observed**	**Predicted**	**Observed**
Cigarettes – Lifetime	0.5597	0.5652	0.5746	0.5713
Cigarettes – Past Year	0.3083	0.3228	0.3248	0.3270
Alcohol – Lifetime	0.7284	0.7368	0.7354	0.7315
Alcohol – Past Year	0.6230	0.6345	0.6215	0.6151
Marijuana – Lifetime	0.3983	0.4148	0.3930	0.3833
Marijuana – Past Year	0.1707	0.1773	0.1710	0.1665
Analgesics – Lifetime	0.1517	0.1652	0.1569	0.1491
Analgesics – Past Year	0.0725	0.0782	0.0765	0.0729
Cocaine – Lifetime	0.1199	0.1292	0.1182	0.1142
Positive Responses to Gate Items	3.5589	3.6853	3.6624	3.5823
Major Depressive Episode – Past Year	0.0808	0.0892	0.0834	0.0802
Youth Specialty Mental Health Treatment – Past Year	0.1491	0.1398	0.1337	0.1275
Adult Mental Health Treatment – Past Year	0.1244	0.1343	0.1234	0.1186

TFI = traveling field interviewer.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

3.5 Summary

The effect of FI experience on self-reporting on substance use appears to have declined between 2002 and 2007, particularly between the earlier years (2002 and 2003) and the later years. Depending on the measure of interviewer experience used and the measure of substance use, the decline is not always gradual. However, for the three mental health measures that were examined (i.e., use of specialty mental health treatment in the past year for youths aged 12 to 17, use of any mental health treatment in the past year among adults 18 or older, and past year MDE), interviewer experience does not seem to have any consistent effects on self-reporting. Although there were significant associations between the categorical interviewer experience measure and past year MDE in 2006, these effects were not consistent with the idea that increasing levels of experience are associated with lower self-reports.

The impacts of other FI characteristics besides experience on survey outcomes were also assessed. It was found that higher mileage is associated with lower prevalence rates and that increased hours worked per week is associated with higher prevalence rate reporting only for several past year measures of substance use and not for lifetime use reports.

There was little evidence that the effect of the respondent's age on the selected substance use and mental health outcome measures varies by the age of the FI. Similarly, the effect of the respondent's gender on outcomes does not vary by the FI's gender. This suggests that matching FIs to respondents based on demographic characteristics would not have an impact on survey outcomes. There was evidence of significant interaction effects between FI race/ethnicity and respondent race/ethnicity. Hispanic respondents were less likely to report substance use, past year MDE, or the use of mental health treatment services when interviewed by Hispanic FIs.

Finally, it was determined that the estimated models could be used to accurately predict outcomes for interviews done by FIs who were on travel status during the week of the interview. Predictions from the model were quite close to observed outcomes when all interviews done by FIs on travel status during the week of the interview were examined. Therefore, the models can be used to project prevalence rates for survey outcome measures under different assumptions about the distribution of interviewer characteristics, such as experience.

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4. Cohort Analyses

Results from the regression analyses presented in the previous chapters show that observed average prevalence rates appear to decrease with the experience of the interviewer after controlling for other possible factors (such as the characteristics of the sampled person and segment characteristics). There remains a question of the degree to which this association is due to either (1) experience itself or (2) other characteristics of interviewers who stay with the survey and thus gain experience (after adjusting for the nature of caseloads and some personal characteristics).

To investigate this question, two cohort analyses were conducted. That is to say, the data from a set (a "cohort") of field interviewers (FIs) with similar experience patterns were analyzed jointly. In the first, the observed and model-predicted prevalence rates in 2002 were compared for the cohort of 28 FIs who first started working on the National Survey on Drug Use and Health (NSDUH) in 2002 and continued working at least through the 2007 survey (the starting cohort in the dataset having the longest tenure). If the observed prevalences differed systematically from what the model predicted, then there would be evidence that something in the nature of these interviewers had an effect on prevalences that was not captured by the model.

The results of the first analysis to be discussed suggest the possibility that, after controlling for other factors, FIs who eventually gain experience tend to collect lower prevalences than those who do not. As a result, in the second analysis, model-adjusted prevalence estimates were examined for all interviewers who began working in either 2002 or 2003 in an attempt to determine the degree to which estimates changed due to experience at the time of the interview on the one hand and to eventual experience (i.e., experience at the end of the end of 2007) on the other.

4.1 Long-Term Interviewers in the 2002 NSDUH

The first cohort analysis focused on 28 FIs who started working on NSDUH in 2002 and worked in each survey year through 2007. On average, these FIs worked 21.5 quarters during that time (not all of them began working in the first quarter of 2002), with 22 of them working 21 or more quarters. Because they continued to work on NSDUH for a number of years, these workers may be viewed as "long-term" interviewers. A plausible explanation for the previous results (that average prevalence rates appear to decrease with the experience of the interviewer) is that these long-term interviewers and the circumstances that led them to being long-term, rather than their experience level per se, are what produces lower prevalence rates. It may be, for example, that long-term interviewers are simply better at dealing with sampled individuals than FIs who terminate their employment more quickly. As a result, they remain interviewers longer and solicit responses from sampled respondents with less interest in NSDUH because they have little interest in drug use.

In this analysis, prevalence rates for items in the 2002 survey from samples worked by the cohort of long-term interviewers who started in 2002 were compared with the predicted prevalence rates from the previously fit experience model of nontraveling interviewers described in the preceding chapters. The idea behind the analysis is that long-term interviewers are being

observed when they are just starting to work on the survey (i.e., when they are inexperienced). The regression models predict that their prevalences should be comparatively high at this point because a negative association has been observed between experience and prevalence (i.e., the lower the experience, the higher the prevalence). If the observed prevalence rates are much lower than the predicted prevalence rates for these cases, that may suggest that some of the association between experience and prevalence is due not to experience but to the characteristics of (or circumstances surrounding) long-term interviewers that are not included in the regression models.

Overall, 1,231 interviews from the 2002 NSDUH were done by these long-term interviewers. The models used here are the same ones reported in the preceding chapters. The analyses were carried out using predicted prevalences from two different sets of models—one using the categorical measure of interview experience and the other using a continuous measure. Both measures conceptualize FI interview experience as the cumulative interview count, and the results are very similar. Only results for the categorical measure are shown in ***Table 4.1***. As a basis for comparison, ***Table 4.1*** also shows the differences in the conditional marginals between the least and most experienced interviewers in 2002 and 2007 using the same regressions.

In general, observed prevalences for interviews done by long-term interviewers are lower than the model-predicted prevalences, although not all of the differences are statistically significant. Differences for past year cigarette use, lifetime alcohol use, past year alcohol use, lifetime marijuana use, and past year marijuana use are statistically significant, but these significance tests were carried out under the assumption of simple random sampling. If clustering of interviews by FI had been accounted for, some of these differences may not be statistically significant. On the other hand, differences of about 3 percentage points in prevalences may be substantively important, and the small sample size makes it more difficult to achieve statistical significance.

Differences between the model-predicted and observed prevalences for long-term interviewers are generally smaller than the differences in the conditional marginals between the least and most experienced interviewers for 2002, but they are about the same size or larger than the differences in the conditional marginals for 2007. Long-term interviewers who began working in 2002 only account for 337 of the 12,057 interviews done in 2007 by FIs with 1,000+ interviews.

Although there was evidence in this first cohort analysis that some of the relationship between experience and lower reported prevalences was due to the nature of the interviewers who gain experience, experience at the time of the interview could still have played a meaningful role. To try to disentangle the two causes, a second cohort analysis was carried out.

4.2 Impact of Removing Long-Term Interviewer and Other Possible Cohort Effects from the Effect of Field Interviewer Experience

The second cohort analysis attempted to isolate the impact of estimates of increasing FI experience from the impact of the individual FIs who eventually gained experience. Two distinct *starting-year cohorts* of NSDUH FIs are the focus of this analysis—those who began

Table 4.1 Predicted versus Observed Outcomes for Interviews Done by Long-Term Interviewers in 2002 (Based on Models Using Categorized Cumulative Interview Count)

Measure	Prevalences Rates for 2002 – Long-Term Interviewers (n = 1,231) [1]			Conditional Marginals for 2002 (n = 59,442) [1]			Conditional Marginals for 2007 (n = 57,776) [1]		
	Predicted	Observed	Difference	1 to 19 Interviews	1,000+ Interviews	Difference	1 to 19 Interviews	1,000+ Interviews	Difference
Cigarettes – Lifetime	0.5829	0.5646	0.0183	0.6345	0.5899	0.0446	0.5776	0.5456	0.0319*
Cigarettes – Past Year	0.3217	0.2933	0.0284*	0.3277	0.2562	0.0715*	0.3184	0.2963	0.0222
Alcohol – Lifetime	0.7249	0.6946	0.0303*	0.8009	0.7603	0.0406	0.7824	0.7653	0.0171
Alcohol – Past Year	0.6079	0.5743	0.0336*	0.6627	0.5743	0.0883*	0.6436	0.6150	0.0286*
Marijuana – Lifetime	0.4058	0.3794	0.0264*	0.4158	0.3280	0.0879*	0.3914	0.3634	0.0280*
Marijuana – Past Year	0.1860	0.1568	0.0292*	0.1662	0.0956	0.0706*	0.1519	0.1327	0.0192*
Analgesics – Lifetime	0.1615	0.1576	0.0039	0.1559	0.1033	0.0526*	0.1666	0.1371	0.0295*
Analgesics – Past Year	0.0787	0.0829	-0.0042	0.0742	0.0438	0.0304*	0.0805	0.0589	0.0216*
Cocaine – Lifetime	0.1288	0.1300	-0.0012	0.0943	0.0436	0.0507*	0.0950	0.0803	0.0147*
Positive Responses to Gate Items	3.7236	3.5289	0.1947	4.0033	3.1914	0.8119*	3.8962	3.5417	0.3545*
Youth Specialty Mental Health Treatment – Past Year	0.1234	0.1084	0.0150	0.1234	0.1120	0.0115	0.1240	0.1333	-0.0092
Adult Mental Health Treatment – Past Year	0.1209	0.1335	-0.0126	0.1198	0.1087	0.0110	0.1331	0.0165	0.0165

* Difference is statistically significant at .05 level. Significance test results for conditional marginals are based on the p value of the coefficient for 1,000+ interviews.

[1] Sample sizes are shown for substance use measures (including Positive Responses to Gate Items); sample sizes are smaller for Youth Specialty Mental Health Treatment – Past Year and Adult Mental Health Treatment – Past Year.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 and 2007.

interviewing in 2002 and those who began in 2003. Two different starting cohorts were investigated to make sure the results generalized beyond FIs who started in 2002.

Each starting-year cohort was further broken into eight *experience cohorts* measured by the number of interviews (including those done while on travel status) an interviewer in the cohort completed from 2002 (or 2003) to 2007. The eight *eventual-experience* cohorts are displayed in the table shell shown as ***Exhibit 4.1***. Observe that an analogous row denotes the number of interviews completed at the end of the completed interview (*experience at the end of the interview*). For a given NSDUH outcome variable and cohort year, unweighted reported prevalence estimates, *corrected for potentially confounding factors* (e.g., FI and segment characteristics) in a manner to be described in the next subsection, were computed for each "×" in the exhibit.

Exhibit 4.1 Table Shell for a Year Cohort

Number of Interviews Completed at the Time of the Interview	**Eventual Experience: Number of Interviews Completed by the End of 2007**							
	1-19	20-39	40-59	60-99	100-249	250-499	500-749	750+
1 to 19	×	×	×	×	×	×	×	×
20 to 39		×	×	×	×	×	×	×
40 to 59			×	×	×	×	×	×
60 to 99				×	×	×	×	×
100 to 249					×	×	×	×
250 to 499						×	×	×
500 to 749							×	×
750+								×

Note: The number "750+" was made the last column (and row) in this study because there were five interviewers in this category in the 2002 cohort and four in the 2003 cohort. Had 1,000+ been made the last column, there would have been only two interviewers in each year's final category. Parallel analyses were conducted with a ninth column and row, with only seven columns and rows, and, in all cases, with the data from the last column and row omitted. No additional insights resulted.

Noting the direction of changes down the rows within a column allows one to assess the impact that experience has on the reported prevalences collected by a cohort of FIs similar in the number of interviews they completed from 2002 to 2007 (or from 2003 to 2007). To a lesser extent, noting the direction of changes across the columns within a row permits one to assess the impact that eventual experience has on the reported prevalences collected by FIs, regardless of an FI's experience at the time of the interview. Here, however, the FIs change across the columns (they do not change *within* columns). Moreover, experience counts end in 2007. Some FIs in the last few columns continued to interview after 2007, but that information is not captured in this analysis. Note, too, that the end of 2007 occurred more "quickly" for FIs who started in 2003 than for those who started in 2002; in other words, the period for measuring experience for those who started in 2002 is longer than that for those who started in 2003.

For this analysis, the same 12 outcome measures were used as discussed in Chapter 3, except for past year major depressive episode (MDE), which was not measured in all 7 of the years used in this study. The numbers of increases and decreases across rows and columns were computed and assessed for statistical significance.

In addition, a linear regression was conducted for each of the 12 outcome measures and for both starting-year cohorts. The regression used the entries in the tables as the outcome variables to assess the "row" (end-of-the-interview experience) and "column" (eventual experience) impacts on reported prevalences after controlling for other factors (including real-time experience when assessing the impact of eventual experience and vice versa).

Some key findings to be deduced from the tables are as follows:

- The 2002 and 2003 cohorts are very different, especially for the marijuana use variables.
- There appears to be a slight tendency for eventual experience to reduce average reported prevalences for most variables in the 2002 cohort and for real-time experience (measured at the end of the interview) to reduce reported prevalence estimates in both year cohorts.
- In both year cohorts, there appears to be a tendency for real-time experience to reduce average reported prevalences of past year use of analgesics and, to a lesser extent, lifetime use of analgesics.
- Eventual experience appears to have a tendency to increase average reported prevalences of past year use of analgesics in the 2002 cohort.
- For most drug variables, the tendency for average reported prevalences to decrease with real-time experience at the end of the interview is most pronounced when moving from the 1 to 19 interview category to the 20 to 39 interview category.

4.2.1 Corrected (for Confounding Factors) Prevalence Rates

To remove the impact of potentially confounding factors from the analysis, such as yearly changes in the prevalence rate and the FI and segment characteristics, the 2002 to 2007 NSDUH data collected by FIs for each variable were fit to a logistic model containing a large number of covariates (a linear model was fit for the number of gate items answered "yes"). The same covariates used in the regressions presented in Chapter 3 were used in this analysis, except that the two variables associated with interviewer experience (main effect term and interaction term with survey year) were removed because these were *not* confounding factors.[11]

A logistic regression model for an outcome variable has this mathematical form:

$$y_k = \left[1 + \exp(\mathbf{x}_k\,'\mathbf{b})\right]^{-1} + u_k = p(\mathbf{x}_k\,'\mathbf{b}) + u_k = p_k + u_k, \tag{1}$$

where the components of the vector $\mathbf{x}_k$ are the covariates listed above.[12] Focusing on data from the 2002 (or 2003) cohort, the following could have been calculated:

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[11] Yearly dummies were used to remove the impact of annual changes in the prevalence rate.

[12] In the linear regression for the number of positive responses to gate items, $p(\mathbf{x}_k\,'\mathbf{b}) = p_k$ is replaced by $\mathbf{x}_k\,'\mathbf{b} = p_k$.

$$y_k^* = y_k - p_k + \bar{y}, \tag{2}$$

where $\bar{y}$ is the simple average of y values collected by interviewers who began interviewing in 2002 (or 2003) across all the survey years covered by the data, y_k is the observed value of y for respondent k, and p_k is the predicted value of y for respondent k from equation (1). The quantity y_k^* is a possible *corrected* value for the individual reported prevalence of respondent k because the impact of the potentially confounding covariates in $\mathbf{x}_k$ have been removed. Observe that $E(y_k^*) = \bar{y}$ when $E(y_k) = p_k$.

Although y_k^* in equation (2) is a serviceable corrected individual-reported prevalence (0/1) measure for record k with the effects of the potentially confounding covariates removed (essentially by subtracting $p_k - \bar{y}$ from y_k), y_k^* can be below 0 or above 1. As a result, an alternative corrected value, $\tilde{y}_k$, ranging between 0 and 1, was created with this algorithm:

$$\begin{aligned}
&\text{When } p_k = \bar{y}, \quad \tilde{y}_k = y_k. \\
&\text{When } p_k > \bar{y}, \; \tilde{y}_k = y_k \frac{\bar{y}}{p_k}. \\
&\text{When } p_k < \bar{y}, \quad \tilde{y}_k = y_k + (1 - y_k)\frac{\bar{y} - p_k}{1 - p_k}.
\end{aligned} \tag{3}$$

Observe that in all three cases, $E(\tilde{y}_k) = \bar{y}$ when $E(y_k) = p_k$. These were the corrected values used to compute the averages that populate the tables in Appendix C.

4.2.2 Results

Tables were created and placed in Appendix C as described earlier for each of the 12 NSDUH outcome variables analyzed (see ***Tables C1.1*** to ***C1.12*** for the 2002 cohort and Tables ***C2.1*** to ***C2.12*** for the 2003 cohort). ***Tables 4.2a*** and ***4.2b*** attempt to summarize changes due to experience at the end of the interview by focusing on year cohorts and roughly holding eventual experience constant (i.e., row changes within columns).

There were 28 row changes within columns for each outcome variable (7 changes in the second row to the first, 6 in the third to the second, 5 in the fourth to the third, 4 in the fifth to the fourth, 3 in the sixth to the fifth, 2 in the seventh to the sixth, and 1 in the eighth to the seventh). To put every change on an equal footing, logits were taken of every cell in Appendix C's tables, [logit(z) = log(z) – log(1 - z)]. Thus, for example, the estimated mean change in the log-odds of the probability that an individual-recorded lifetime alcohol use caused by moving one row to the right within a column for the 2003 cohort is .012806 (the median change is .026486).

"Sign" is half the number of increases minus the number of decreases. The p value for median is the probability that the median attains a value as high as it is when the true median value is 0. The p value for sign is the probability of an analogous-ranked sign test, and the

Table 4.2a Summary of Differences and Sign Changes Due to Experience at the End of the Interview, 2002 Cohort

Measure	*N*	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	28	0.0073	0.0015	0	0.7297	1.0000	0.6733
Cigarettes – Past Year	28	0.0198	-0.0021	-1	0.5011	0.8506	0.6571
Alcohol – Lifetime	28	0.0049	0.0095	2	0.7022	0.5716	0.7394
Alcohol – Past Year	28	-0.0042	0.0029	2	0.8517	0.5716	0.7902
Marijuana – Lifetime	28	0.0008	-0.0072	-1	0.9753	0.8506	0.7061
Marijuana – Past Year	28	0.0085	0.0159	1	0.7894	0.8506	0.9118
Analgesics – Lifetime	28	-0.0170	-0.0231	-1	0.5646	0.8506	0.5484
Analgesics – Past Year	28	-0.0201	-0.0325	-2	0.6630	0.5716	0.7732
Cocaine – Lifetime	28	-0.0127	-0.0492	-4	0.7676	0.1849	0.1997
Positive Responses to Gate Items	28	0.0067	-0.0097	-3	0.6668	0.3449	0.7902
Youth Specialty Mental Health Treatment – Past Year	28	0.0440	-0.0188	0	0.7086	1.0000	0.8074
Adult Mental Health Treatment – Past Year	28	0.0182	-0.0110	-1	0.6819	0.8506	0.7562
Total	364	0.0047	-0.0058	-10	0.6923	0.3193	0.6721

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 4.2b Summary of Differences and Sign Changes Due to Experience at the End of the Interview, 2003 Cohort

Measure	*N*	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	28	-0.0110	0.0204	1	0.7137	0.8506	0.8942
Cigarettes – Past Year	28	-0.0229	-0.0395	-4	0.4825	0.1849	0.2722
Alcohol – Lifetime	28	0.0128	0.0265	2	0.6115	0.5716	0.4624
Alcohol – Past Year	28	0.0102	0.0199	5	0.6892	0.0872	0.3142
Marijuana – Lifetime	28	-0.0031	-0.0105	-1	0.9273	0.8506	0.8767
Marijuana – Past Year	28	-0.0022	0.0004	0	0.9563	1.0000	0.8593
Analgesics – Lifetime	28	-0.0229	-0.0319	-3	0.5802	0.3449	0.2623
Analgesics – Past Year	28	-0.0439	-0.0258	-2	0.4934	0.5716	0.3719
Cocaine – Lifetime	28	-0.0251	-0.0106	-1	0.4522	0.8506	0.4355
Positive Responses to Gate Items	28	-0.0045	0.0007	1	0.8258	0.8506	0.7732
Youth Specialty Mental Health Treatment – Past Year	28	-0.0496	-0.0534	-1	0.6177	0.8506	0.4488
Adult Mental Health Treatment – Past Year	28	-0.0236	-0.0334	-2	0.7347	0.5716	0.6252
Total	364	-0.0155	-0.0046	-7	0.2221	0.4957	0.2182

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

p value for the mean is for a *t*-test that the true mean is 0. Because the sample sizes are so small, nothing is statistically significant.

Tables 4.3a and ***4.3b*** are analogous summary tables of changes due entirely to changes in eventual experience (i.e., experience by 2007) by focusing on a year cohort and roughly holding the interviews completed at the end of the interview constant. There were 28 column changes within rows for each outcome variable (1 change in the second column to the first, 2 in the third to second, etc.).

Although nothing is statistically significant, there does appear to be a tendency in both year cohorts for estimated reported prevalences to decrease with experience at the end of the interview. The eventual-experience downward impact on reported prevalences is even stronger in the 2002 cohort,[13] but disappears in the 2003 cohort.

It is interesting to observe when the apparent downward trends in prevalences occur. ***Table 4.4*** provides some insight into the impact of the experience at the time of the interview. It occurs strikingly as experience increases from below to above 20 interviews, that is, moving from the first row to the second. The apparent reversal moving from the second to the third row is perplexing, but not statistically significant.[14]

Other trends are also hard to explain, such as the different direction of the changes between the fifth and sixth row categories and between the seventh and eighth row categories in the 2002 and 2003 cohorts. The latter may be because the last row category is not quite the same thing for FIs who started in 2002 and those who started in 2003 (the end of 2007 being closer to 2003 than to 2002).

Tables 4.5a and ***4.5b*** show which variables have the largest negative tendencies in reported prevalences as the number of completed interviews at the end of the interview rises from the 1 to 19 interview category to the 20 to 39 interview category. Because seven experience cohorts are involved, the highest possible value for the sign is 3.5. Observe that lifetime cocaine use and the gate question have sign values of -2.5 for both year cohorts. Also, -1.5 or less for both year cohorts are lifetime marijuana and the two analgesic variables. The reader should note that the probability that the sign is -2.5 for both year cohorts by chance alone is .125 × .125 = .015. Other joint test statistics can be computed analogously. The joint ranked sign test for lifetime marijuana use is of particular note (.031 × .219 = .007).

As a last piece of analysis, the logits of the average reported prevalences in the cells of each appendix table were regressed on two covariates: (1) the average number of completed interviews at the end of the interview (in 100s) in the cell's row and (2) and the average number

[13] The sign test across all variables is significantly negative at the 0.1 level. Treating the variables as independent, however, is questionable because they are reported by the same respondents. Thus, a "significant" result may not be as significant as it appears.

[14] As indicated in the prior footnote, significant tests that combine information across variables, as the ones in ***Table 4.4*** do, are problematic.

Table 4.3a Summary of Differences and Sign Changes Due to Eventual Experience, 2002 Cohort

Measure	*N*	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	28	-0.0146	-0.0145	-2	0.5513	0.5716	0.5634
Cigarettes – Past Year	28	-0.0146	-0.0185	-1	0.6434	0.8506	0.5189
Alcohol – Lifetime	28	-0.0127	-0.0034	-1	0.3608	0.8506	0.4762
Alcohol – Past Year	28	-0.0231	-0.0115	-3	0.3297	0.3449	0.4094
Marijuana – Lifetime	28	-0.0131	-0.0321	-3	0.5812	0.3449	0.5189
Marijuana – Past Year	28	-0.0223	-0.0279	-3	0.5131	0.3449	0.2927
Analgesics – Lifetime	28	0.0215	0.0113	1	0.4361	0.8506	0.5484
Analgesics – Past Year	28	0.0557	0.0146	0	0.2456	1.0000	0.4094
Cocaine – Lifetime	28	-0.0123	0.0099	0	0.7519	1.0000	0.8942
Positive Responses to Gate Items	28	-0.0120	-0.0315	-3	0.3773	0.3449	0.1838
Youth Specialty Mental Health Treatment – Past Year	28	-0.0540	0.0524	1	0.6159	0.8506	0.9823
Adult Mental Health Treatment – Past Year	28	-0.0587	-0.0004	0	0.3362	1.0000	0.4903
Total	364	-0.0133	-0.0098	-17	0.2568	0.0836	0.2684

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 4.3b Summary of Differences and Sign Changes Due to Eventual Experience, 2003 Cohort

Measure	*N*	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	28	0.0184	0.0094	2	0.4010	0.5716	0.5335
Cigarettes – Past Year	28	0.0214	0.0171	2	0.4293	0.5716	0.7227
Alcohol – Lifetime	28	-0.0096	-0.0141	-3	0.6569	0.3449	0.5045
Alcohol – Past Year	28	-0.0078	0.0118	1	0.7267	0.8506	0.7902
Marijuana – Lifetime	28	0.0037	0.0177	1	0.8739	0.8506	0.8074
Marijuana – Past Year	28	0.0143	0.0114	1	0.6128	0.8506	0.6095
Analgesics – Lifetime	28	-0.0063	-0.0053	-1	0.8437	0.8506	0.8246
Analgesics – Past Year	28	0.0206	-0.0174	-1	0.7056	0.8506	0.8074
Cocaine – Lifetime	28	0.0000	-0.0102	-3	0.9997	0.3449	0.8767
Positive Responses to Gate Items	28	-0.0008	-0.0135	-1	0.9586	0.8506	0.5335
Youth Specialty Mental Health Treatment – Past Year	28	0.0687	-0.1121	-1	0.4993	0.8506	0.8074
Adult Mental Health Treatment – Past Year	28	0.0399	0.0861	3	0.4730	0.3449	0.3842
Total	364	0.0135	-0.0011	0	0.2317	1.0000	0.5593

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table 4.4 Location of Sign Changes Due to Experience at the End of the Interview

Year	From	To	*N*	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
2002	1 to 19	20 to 39	84	0.0044	-0.0496	-12	0.8989	0.0116	0.0946
2003	1 to 19	20 to 39	84	-0.0688	-0.0660	-13	0.0059	0.0060	0.0099
2002	20 to 39	40 to 59	72	0.0324	0.0308	7	0.3077	0.1249	0.2280
2003	20 to 39	40 to 59	72	0.0781	0.0485	5	0.0512	0.2888	0.0089
2002	40 to 59	60 to 99	60	-0.0454	-0.0069	-5	0.0884	0.2451	0.0935
2003	40 to 59	60 to 99	60	-0.0849	-0.0489	-6	0.0403	0.1550	0.0104
2002	60 to 99	100 to 249	48	0.0087	0.0316	5	0.7307	0.1934	0.1127
2003	60 to 99	100 to 249	48	-0.0051	0.0043	2	0.7865	0.6655	0.9839
2002	100 to 249	250 to 499	36	-0.0043	-0.0249	-10	0.8354	0.0012	0.0154
2003	100 to 249	250 to 499	36	0.0193	0.0244	7	0.2064	0.0288	0.0393
2002	250 to 499	500 to 749	24	0.0092	0.0170	2	0.4971	0.5413	0.2742
2003	250 to 499	500 to 749	24	0.0063	0.0319	3	0.8458	0.3075	0.2870
2002	500 to 749	750+	12	0.0924	0.0784	5	0.0003	0.0064	0.0010
2003	500 to 749	750+	12	-0.0458	-0.0600	-3	0.1885	0.1460	0.1099

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

of eventual completed interviews (in 100s) in the cell's column.[15] This was done separately for each starting-year cohort and for the combined data. The results are displayed in ***Tables 4.6a*** and ***4.6b***. They show, for example, that eventual experience had a statistically significant negative impact on lifetime and past year alcohol prevalences for the 2002 starting-year cohort (*p* values of .025 and .041). The result did not extend to the 2003 starting-year cohort or to the combined data.

Although there are more statistically significant results with this analysis than in earlier ones, the results are not very clear and are often inconsistent across the two starting-year cohorts (especially for the marijuana variables). Still, it needs to be noted that real-time experience tends to reduce noticeably average reported prevalences of past year use of analgesics and, to a lesser extent, lifetime use.

4.3 Summary of Cohort Analyses

By focusing only on FIs who began their NSDUH work in a particular year (either 2002 or 2003) and considering categories of *eventual* experience along with categories of experience at the end of the interview, additional confounding effects could be removed from the relationship between interviewer experience and reported prevalences that could not be removed in previous logistic regression analyses. The within-1-year attrition rate for the 2002 starting-year cohort was 51 percent; for 2003, it was 36 percent. From 2004 to 2009, these rates ranged between 44 and 53 percent. Thus, the 2002 cohort had a relatively large number of interviewers leave after the first year, while the 2003 cohort had a relatively small number.

[15] An attempt also was made to use cell values rather than their logits as the dependent variable and row and column position rather than the interview averages associated with the row and column as the covariates. The fits described in the text appeared to convey the most information.

Table 4.5a Changes from 1 to 19 Completed Interviews at the End of the Interview to 20 to 39 Completed Interviews, 2002 Cohort

Outcome	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	0.0194	-0.0167	-0.5	0.7746	1.0000	0.8125
Cigarettes – Past Year	0.0262	-0.0586	-0.5	0.8100	1.0000	0.9375
Alcohol – Lifetime	-0.0212	-0.0422	-0.5	0.5586	1.0000	0.5781
Alcohol – Past Year	-0.0414	-0.0681	-0.5	0.6105	1.0000	0.5781
Marijuana – Lifetime	-0.0964	-0.1237	-2.5	0.0084	0.1250	0.0313
Marijuana – Past Year	-0.0777	-0.1151	-0.5	0.2872	1.0000	0.3750
Analgesics – Lifetime	-0.0451	-0.0920	-1.5	0.3055	0.4531	0.2969
Analgesics – Past Year	0.0227	-0.0754	-1.5	0.7913	0.4531	0.9375
Cocaine – Lifetime	-0.1341	-0.1771	-2.5	0.0565	0.1250	0.0781
Positive Responses to Gate Items	-0.0247	-0.0318	-2.5	0.1895	0.1250	0.2188
Youth Specialty Mental Health Treatment – Past Year	0.3355	0.0429	0.5	0.3723	1.0000	0.5781
Adult Mental Health Treatment – Past Year	0.0899	0.1513	0.5	0.4634	1.0000	0.5781

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 4.5b Changes from 1 to 19 Completed Interviews at the End of the Interview to 20 to 39 Completed Interviews, 2003 Cohort

Outcome	Mean	Median	Sign	*p* Value (Mean)	*p* Value (Median)	*p* Value (Sign)
Cigarettes – Lifetime	-0.0842	-0.0697	-1.5	0.1251	0.4531	0.1094
Cigarettes – Past Year	-0.0709	-0.0622	-1.5	0.2348	0.4531	0.2188
Alcohol – Lifetime	0.0683	0.0549	0.5	0.2464	1.0000	0.2969
Alcohol – Past Year	0.0414	0.0575	1.5	0.4595	0.4531	0.5781
Marijuana – Lifetime	-0.0692	-0.1357	-1.5	0.2605	0.4531	0.2188
Marijuana – Past Year	0.0142	-0.1029	-0.5	0.8794	1.0000	0.9375
Analgesics – Lifetime	-0.0894	-0.0968	-1.5	0.3709	0.4531	0.3750
Analgesics – Past Year	-0.2020	-0.3226	-1.5	0.1723	0.4531	0.0781
Cocaine – Lifetime	-0.1523	-0.1348	-2.5	0.0427	0.1250	0.0469
Positive Responses to Gate Items	-0.0754	-0.0878	-2.5	0.0556	0.1250	0.0781
Youth Specialty Mental Health Treatment – Past Year	-0.1005	-0.0388	-0.5	0.3967	1.0000	0.6875
Adult Mental Health Treatment – Past Year	-0.1061	-0.0369	-1.5	0.5134	0.4531	0.6875

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table 4.6a Regression Analysis of Table Cells in Appendix C, Effect of Eventual Experience

Measure	Combined Cohorts			2002 Cohort			2003 Cohort		
	Beta	Std. Error[1]	*p* Value	Beta	Std. Error[1]	*p* Value	Beta	Std. Error[1]	*p* Value
Cigarettes – Lifetime	0.0030	0.0048	0.5410	-0.0068	0.0049	0.1710	0.0133	0.0071	0.0660
Cigarettes – Past Year	-0.0008	0.0056	0.8940	-0.0077	0.0072	0.2900	0.0066	0.0080	0.4170
Alcohol – Lifetime	-0.0020	0.0031	0.5110	-0.0060	0.0026	0.0250	0.0021	0.0052	0.6850
Alcohol – Past Year	-0.0041	0.0044	0.3610	-0.0114	0.0055	0.0410	0.0037	0.0059	0.5370
Marijuana – Lifetime	-0.0014	0.0053	0.7990	-0.0056	0.0074	0.4520	0.0031	0.0073	0.6760
Marijuana – Past Year	-0.0020	0.0072	0.7800	-0.0124	0.0091	0.1780	0.0089	0.0101	0.3810
Analgesics – Lifetime	0.0027	0.0061	0.6590	0.0079	0.0061	0.1970	-0.0029	0.0104	0.7810
Analgesics – Past Year	0.0210	0.0092	0.0250	0.0272	0.0109	0.0150	0.0143	0.0146	0.3290
Cocaine – Lifetime	-0.0059	0.0071	0.4110	-0.0062	0.0122	0.6130	-0.0055	0.0068	0.4220
Positive Responses to Gate Items	-0.0020	0.0034	0.5620	-0.0048	0.0045	0.2840	0.0010	0.0049	0.8310
Youth Specialty Mental Health Treatment – Past Year	-0.0019	0.0214	0.9290	-0.0299	0.0289	0.3050	0.0275	0.0261	0.2960
Adult Mental Health Treatment – Past Year	0.0098	0.0122	0.4220	-0.0102	0.0129	0.4350	0.0309	0.0179	0.0880

[1] Standard errors are heteroscedastic-resistant.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table 4.6b Regression Analysis of Table Cells in Appendix C, Effect of Experience at End of Interview

Measure	Combined Cohorts			2002 Cohort			2003 Cohort		
	Beta	Std. Error[1]	*p* Value	Beta	Std. Error[1]	*p* Value	Beta	Std. Error[1]	*p* Value
Cigarettes – Lifetime	0.0009	0.0068	0.8930	0.0110	0.0070	0.1230	-0.0095	0.0092	0.3090
Cigarettes – Past Year	0.0036	0.0073	0.6270	0.0174	0.0089	0.0530	-0.0107	0.0090	0.2410
Alcohol – Lifetime	0.0006	0.0044	0.8890	0.0088	0.0037	0.0210	-0.0077	0.0067	0.2490
Alcohol – Past Year	0.0012	0.0061	0.8470	0.0120	0.0069	0.0830	-0.0100	0.0079	0.2110
Marijuana – Lifetime	0.0062	0.0073	0.3960	0.0137	0.0093	0.1470	-0.0014	0.0095	0.8810
Marijuana – Past Year	0.0063	0.0108	0.5610	0.0266	0.0118	0.0270	-0.0145	0.0118	0.2220
Analgesics – Lifetime	-0.0145	0.0082	0.0820	-0.0092	0.0081	0.2600	-0.0198	0.0125	0.1190
Analgesics – Past Year	-0.0299	0.0124	0.0180	-0.0236	0.0129	0.0720	-0.0362	0.0177	0.0450
Cocaine – Lifetime	0.0077	0.0090	0.3940	0.0066	0.0151	0.6650	0.0088	0.0096	0.3630
Positive Responses to Gate Items	0.0031	0.0044	0.4790	0.0064	0.0059	0.2860	-0.0003	0.0058	0.9610
Youth Specialty Mental Health Treatment – Past Year	-0.0161	0.0277	0.5630	0.0275	0.0369	0.4600	-0.0609	0.0336	0.0740
Adult Mental Health Treatment – Past Year	-0.0025	0.0150	0.8660	0.0200	0.0157	0.2070	-0.0259	0.0202	0.2050

[1] Standard errors are heteroscedastic-resistant.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Unfortunately, the analyses conducted for this study did not yield many statistically significant results. This may be due as much to the small sample sizes as to the lack of underlying trends. The analyses were further limited by the truncated nature of the eventual-interview categories.

Despite this limitation and despite the different compositions of the two starting-year cohorts, there was a slight tendency for increasing experience at the end of the interview to depress reported prevalences of drug variables. This could be seen in ***Tables 4.2a*** and ***4.2b***, although nothing there was statistically significant, and in ***Tables 4.6a*** and ***4.6b*** where the results were fairly consistent and sometimes significant for the two analgesic variables. The tendency for increasing experience at the end of the interview to depress reported prevalences was most pronounced when an interviewer moved from completing between 1 and 19 interviews at the end of the interview to completing between 20 and 39 interviews, especially for lifetime cocaine use, lifetime marijuana use, and the lifetime gate question (***Tables 4.4***, ***4.5a***, and ***4.5b***).

5. Conclusions

The analyses of the relationships between several interviewer characteristics and various survey outcomes, including response rates and respondent self-reports on substance use and mental health indicators, have for the most part provided additional evidence in support of prior work in this area. Interviewer experience remains positively correlated with response rates and negatively associated with self-reported substance use. However, evidence suggests that the association between experience and substance use reporting has declined over time. Furthermore, the pattern of declining effects is more pronounced with measures based on the cumulative interview count than with quarters or years of experience. Analyses in which interviewer experience was measured by a length of time on the job, such as quarters or years worked on the National Survey on Drug Use and Health (NSDUH) since 1999, yielded different results. Measures based on the cumulative interview count produced statistically significant effects on substance use outcomes in the earlier years of the study, whereas the duration-based experience measures (quarter worked, years worked) were not statistically significant predictors for as many outcomes. For the 10 substance use measures examined in this study, the effects of a continuous measure of the cumulative interview count were statistically significant in 2002, and the largest effects (in terms of magnitude) were observed in that year than in any other year. In contrast, the effects of the quarter-based measure of experience were statistically significant for only four measures, and the effects of the year-based measure were statistically significant for only three measures in 2002.

It is not known if the negative relationship between interviewer experience and substance use reporting is due to interviewers actually changing behavior over time in such a way that respondent answers are affected. A preliminary set of analyses was designed and conducted to discriminate between two potential explanations of the causal mechanism behind the negative correlation between interviewer experience and respondent reports of substance use. One explanation is that the observed cross-sectional association reflects changes over time for individual interviewers—that substance use reports actually become less frequent as an interviewer gains experience. The other explanation is that the observed cross-sectional association between experience and substance use reporting is an artifact of higher interviewer turnover rates in areas where self-reports of substance use happen to be higher. In general, strong evidence was not found in support of one explanation over another, primarily because of the small sample sizes available in these analyses.

Not much evidence was found that other interviewer characteristics (e.g., demographics) and characteristics of their work (e.g., hours worked and miles traveled) were related to substance use and mental health outcomes in ways that suggest changes in the distribution of these characteristics among interviewers would affect resulting survey estimates. Neither the interviewer's gender nor age were associated with respondent self-reports of substance use and mental health indicators. Hispanic respondents were less likely to report substance use when interviewed by Hispanic interviewers than by non-Hispanic interviewers. Finally, negative relationships between mileage traveled per week and respondent reports of substance may be an artifact of lower rates of self-reported substance use in more rural areas versus higher rates in

more urban settings. Urbanicity was controlled for, but the measure used was very coarse, with only three levels.

The results of this study can be used to produce predictions of self-reported prevalence rates if a change in the sample design can be expressed in terms of the change in the distribution of a characteristic of interviewers. At the most basic level, one can assume that a design change, such as a reduction in the overall NSDUH sample size, will result in a change in the distribution of interviewer experience. These hypothetical distributions can then be used to produce predictions on self-reported prevalence rates. Projections based on alternative sample designs were produced in Appendix B of the report titled *Sample Redesign Issues and Methodological Studies* (Center for Behavioral Health Statistics and Quality, 2012). Information from ***Tables 1.3*** and ***3.6*** in the current report were used to produce those projections. Additional information on the projection methodology and assumptions needed to produce the projections are included in that report. However, the models in Chapter 3 involve a considerable number of variables. Unless one is sure (or willing to live with the assumption) that the effects of an interviewer characteristic of interest are essentially independent of the effects of the other variables in the model, one also needs to assume values for all the other variables in the models.

Several limitations to the findings in this study have implications for using the model results to produce predictions about self-reported prevalence rates if the sample design and collective field interviewer (FI) characteristics change. First, the results have not been able to determine the degree to which the cross-sectional correlation between interviewer experience and self-reported substance use is related to different causal mechanisms. It may be that interviewer behavior changes over time in some way that leads to lower self-reports from their interviews. Also, the point-in-time correlation between experience and substance use reporting is a product of interviewers who started work at different time points and the interviewers who remain on the study after a number of years; these interviewers are not a random sample of those who started interviewing at the same time. As noted earlier, two cohort analyses were conducted in an attempt to sort out these possibilities, but the small sample sizes were limiting. One way to address this would be to extend the period of study back in time to 1999 and repeat the cohort analyses. It should be noted that the largest cross-sectional associations (in terms of magnitude) occurred in the analysis of data from 2002. The most experienced interviewers in 2002 would have started working in 1999 or even earlier. They would not have started in 2002, which was the starting point for the cohort analyses in this report. However the larger number of questionnaire and survey design changes that were implemented at 2002 might not make it possible to use data prior to 2002.

In addition, the observation that more experienced interviewers achieve higher response rates suggests another possible explanation for the negative relationship between interviewer experience and substance use reporting. It is possible that variability in substance use reporting between interviewers may be due to nonresponse error variance among interviewers (West & Olson, 2010). If more experienced interviewers achieve higher response rates among those who do not report using substances and lower response rates among those who do report substance use (and less experienced interviewers achieve a different result), this could also lead to the observed negative relationship between experience and substance use reporting. Unfortunately, this possibility cannot be examined because interviews would have to be assigned to interviewers randomly to determine the extent to which this is occurring.

Second, the estimates in this study and particularly the standard errors used for statistical hypothesis testing do not take into account the clustering of observations by interviewers. It is likely that the standard errors are underestimated, and some of the statistically significant differences would not be statistically significant if the study had correctly accounted for this. In addition, the underestimation of uncertainty in the estimates needs to be accounted for when producing predictions of prevalence rates under different assumptions about the sample design.

Finally, the results here are limited to the time period covered, and, as such, it may be risky to use them to make projections outside of this time period. The cross-sectional associations between prevalence and experienced changed over this time period. If the estimated parameters from the 2002 model had been applied to the distribution of experience for the 2007 survey, the study would have predicted large declines in prevalence rates, all else being equal. Without knowing more about whether the correlation between experience and prevalence is causal or simply a result of selection effects, it will be difficult to determine how stable these correlations will be.

If the causal mechanism by which interviewer characteristics, such as experience, affect survey outcomes is not understood and the differences in these estimates are considered substantively important, introducing changes in field procedures to reduce the potential for interviewer effects should be undertaken cautiously. One possible means of reducing the potential of interviewer effects is to use computer audio-recorded interviewing (CARI). CARI can be used to verify interviews for authenticity, monitor question delivery for key items that are administered by computer-assisted personal interviewing (CAPI, i.e., content monitoring), monitor the interviewer-respondent interactions and comments/concerns expressed by the respondent, and monitor the FI for any violations of interview guidelines and protocols. CARI is also an economical and practical way to deter and detect falsification by FIs. Furthermore, it is an effective way to monitor newly trained interviewers and provide them with performance feedback. An important limitation to note with CARI is that information on the process in which the respondent actually answers questions on substance use and mental health would be minimal due to the use of audio computer-assisted self-interviewing (ACASI) for these questions.

Another method of reducing the potential for interviewer effects is to reduce the involvement of the interviewer in conducting the survey. Administration of the survey using ACASI removes much of the influence of the interviewer during the survey. One of the few areas in which the interviewer can have an effect on the administration of the ACASI portion is when the respondent is prompted by the instrument to request that the interviewer show pill cards of prescription drugs during the modules on nonmedical use of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives). It is possible that interviewers differ in their practice in providing the pill cards, with some simply handing the booklet over to the respondent and letting him or her find the images. Furthermore, the cohort analysis noted a small tendency for experience at the end of the interview to have a negative effect on prevalence for the lifetime and past year measures of nonmedical use of pain relievers. The potential for introducing error due to inconsistent use of the pill cards can be reduced by making the pill images electronically available to respondents as part of the computer-assisted interviewing (CAI) instrument. This was introduced in the 2012 Questionnaire Field Test and used in the 2013 Dress Rehearsal.

The role of the interviewer during the ACASI portion of the interview is already fairly low. However, interviewers can still have an effect on survey estimates if their actions differ in gaining cooperation from respondents. Even subtle hints during the recruitment process that the length of the survey is reduced if the respondent limits his or her reports of substance use may affect reporting. One means of addressing this would be to administer respondent debriefing questions or through in-person field verifications, both with questions designed to see if the interviewer followed project protocols. In addition, it is possible that the use of CARI could detect departures from protocols during the interviewer-administered elements of the interview.

Finally, it may be possible to introduce an intervention, such as a phone certification process, with each FI when he or she reaches a threshold number of completed interviews. The threshold point would be based on the observed relationship between experience and prevalence. For example, in the case of past year marijuana use, it was observed that the effects of experience are fairly flat after the 39th interview. FIs at that point could go through a certification of their abilities to administer the screener and interview according to all study procedures and protocols. However, in looking at the effects of interviewer experience categories on the outcomes for 2007, there does not appear to be a universal threshold point at which it would be optimal to implement such a process. Also, it was noted that the association between experience and self-reports of survey outcomes has changed over time. What appears to be an optimal threshold at one point in time may not be optimal just a year later.

References

Brantley, J., Cunningham, D., Granger, R., & Perkins, J. (2005, March 11). *2004 National Survey on Drug Use and Health: Full-year field observation report – Final* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 283-03-9028, Deliverable No. 36, RTI 08726). Research Triangle Park, NC: RTI International.

Caviness, L. L., Coffey, L. E., Cunningham, D. B., Griffin, A. B., Liu, S., Martin, P. , McKamey, A. C., Morton, K. B., Myers, S. K., Piper, L. L., Riggsbee, B. H., & Zelko, H. E. (2008, August). Data collection final report. In *2007 National Survey on Drug Use and Health: Methodological resource book* (Section 8, prepared for the Substance Abuse and Mental Health Services Administration under Contract No. 283-2004-00022, RTI/0209009). Research Triangle Park, NC: RTI International.

Center for Behavioral Health Statistics and Quality. (2012, March). *Sample redesign issues and methodological studies* (prepared by RTI International for the Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, under Contract Nos. 283-2004-00022 and HHSS283200800004C, RTI 0209009.486.001 and RTI 0211838.108.006.005). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Chromy, J. R., Eyerman, J., Odom, D., McNeeley, M. E., & Hughes, A. (2005). Association between interviewer experience and substance use prevalence rates in NSDUH. In J. Kennet & J. Gfroerer (Eds.), *Evaluating and improving methods used in the National Survey on Drug Use and Health* (HHS Publication No. SMA 05-4044, Methodology Series M-5, pp. 59-88). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Clark, C., Cohen, L., Johnson, I., & McHenry, G. (2010, February). *2009 National Survey on Drug Use and Health: Full-year field observation report – Draft* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 283-2004-00022, RTI 0209009). Research Triangle Park, NC: RTI International.

Flicker, L., & Wang, K. (2005a). *An examination of interviewer experience and observed protocol errors on drug use reporting by respondents* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 283-98-9008, RTI 07190). Research Triangle Park, NC: RTI International.

Flicker, L., & Wang, K. (2005b). *Effects of interviewer errors on reported substance use in the National Survey on Drug Use and Health*. Paper presented at the annual conference of the Southern Association for Public Opinion Research, Raleigh, NC.

Graubard, B. I., & Korn, E. L. (1999). Predictive margins with survey data. *Biometrics, 55*, 652-659. doi: 10.1111/j.0006-341X.1999.00652.x

Hughes, A., Chromy, J., Giacoletti, K., & Odom, D. (2002). Impact of interviewer experience on respondent reports of substance use. In J. Gfroerer, J. Eyerman, & J. Chromy (Eds.), *Redesigning an ongoing national household survey: Methodological issues* (HHS Publication No. SMA 03-3768, pp. 161-184). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Hughes, A., Sathe, N., & Spagnola, K. (2009). *State estimates of substance use from the 2006-2007 National Surveys on Drug Use and Health* (HHS Publication No. SMA 09-4362, NSDUH Series H-35). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Murphy, J., & Eyerman, J. (2005). *Nonresponse among sample members 50 and older in the NSDUH: Methodological Improvement Protocol (MIP) final report* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 238-98-9008, RTI 07190). Research Triangle Park, NC: RTI International.

Office of Applied Studies. (2001a). *National Household Survey on Drug Abuse: 1999 nonresponse analysis report*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2001b). *Summary of findings from the 2000 National Household Survey on Drug Abuse* (HHS Publication No. SMA 01-3549, NHSDA Series H-13). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Odom, D., Aldworth, J., & Wright, D. (2005, May). *2002 National Survey on Drug Use and Health: Summary of UEAT analysis of field interventions* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 238-98-9008, RTI 07190). Research Triangle Park, NC: RTI International.

Olson, K., & Peytchev, A. (2007). Effect of interviewer experience on interview pace and interviewer attitudes. *Public Opinion Quarterly, 71*, 273-286. doi:10.1093/poq/nfm007

RTI International. (2008). *SUDAAN® language manual, Release 10.0*. Research Triangle Park, NC: Author.

Safir, A., Murphy, J., Park, H., & Wang, K. (2006, December). *National Survey on Drug Use and Health: Field Interviewer Behavior and Response Rate Analysis (FIBRRA) – Final report* (prepared for the Office of Applied Studies, Substance Abuse and Mental Health Services Administration). Research Triangle Park, NC: RTI International.

Turner, C. F., Lessler, J. T., & Devore, J. W. (1992). Effects of mode of administration and wording on reporting of drug use. In C. F. Turner, J. T. Lessler, & J. C. Gfroerer (Eds.), *Survey measurement of drug use: Methodological studies* (HHS Publication No. ADM 92-1929, pp. 177-219). Rockville, MD: National Institute on Drug Abuse.

Vorburger, M., & Wang, K. (2005). *Replication of estimates from Appendix B, 2000 Summary of Findings: Impact of field interviewer experience on the 2002 and 2003 CAI estimates* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 283-03-9028, RTI 028726). Research Triangle Park, NC: RTI International.

Wang, K., & Baxter, R. (2005). *Interviewer effects in the 2002 and 2003 National Survey on Drug Use and Health: Analyses of potential confounding variables* (prepared for the Substance Abuse and Mental Health Services Administration, Contract No. 283-03-9028, RTI 028726). Research Triangle Park, NC: RTI International.

Wang, K., Murphy, J., Baxter, R., & Aldworth, J. (2005). *Are two feet in the door better than one? Using process data to examine interviewer effort and nonresponse bias*. Paper presented at the Federal Committee on Statistical Methodology Research Conference, Washington, DC.

West, B. T., & Olson, K. (2010). How much of interviewer variance is really nonresponse error variance? *Public Opinion Quarterly, 74*, 1004-1026. doi:10.1093/poq/nfq061

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Appendix A: Subset of Regression Results for Chapters 2 and 3

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Appendix A: Subset of Regression Results for Chapters 2 and 3

This appendix presents the results for the logistic regression analyses in Chapters 2 and 3 on screener contact, screener cooperation, interviewer cooperation, and measures of substance use and mental health. This appendix's tables are a subset of the tables in this report's accompanying document:

> RTI International. (2013, October 24). *Assessing the relationship between interviewer effects and NSDUH data quality: Regression results tables* (prepared for the Substance Abuse and Mental Health Services Administration, Contract Nos. HHSS283200800004C and HHSS283201000003C, RTI Project Nos. 0211838.108.006.020 and 0212800.001.108.006.020). Research Triangle Park, NC: Author.

Dependent Variables

Survey Participation Measures

- *Screener contact*. Among eligible households, final screening result codes of 11 (no one home after repeated visits), 12 (screening respondent unavailable – repeated visits), and 21 (denied access – building/complex) were coded as noncontacts on the screener; all other final screener result codes were coded as contacts.
- *Screener cooperation*. This measure involved completed screeners among contacted households.
- *Interview cooperation*. Among contacted persons selected for the interview, final interview result codes of 70 (interview complete), 73 (breakoff – partial interview), and 93 (completed interview, verification revealed that the interviewer did not follow correct procedures) were coded as completed interviews.

Substance Use Measures

- *Lifetime use of cigarettes*,
- *Past year use of cigarettes*,
- *Lifetime use of alcohol*,
- *Past year use of alcohol*,
- *Lifetime use of marijuana*,
- *Past year use of marijuana*,
- *Lifetime use of analgesics (prescription pain relievers)*,
- *Past year use of analgesics*,
- *Lifetime use of cocaine*, and

- *Number of positive responses* ("yes") to 47 lifetime gate questions in the core substance use modules was used as an outcome. A gate question is one that asks whether the respondent has ever used a particular substance; if the response to the question is affirmative, follow-up questions are then asked about the substance in question.

Mental Health Measures

- *Past year major depressive episode (MDE)*. This has been available only since the 2004 NSDUH.
- *Past year mental health specialty treatment (for youths)*. This indicates whether a youth aged 12 to 17 reported receiving specialty mental health services in the past year from any inpatient or outpatient specialty sources for problems with behavior or emotions not caused by substance use.
- *Past year mental health treatment (for adults)*. This refers to the receipt by an adult aged 18 or older of inpatient or outpatient mental health services or the use of prescription medication in the past year.

Predictors

Characteristics of Interviewers

- *Cumulative interview count.* This is the cumulative number of interviews completed by the interviewer since 1999, up to and including the current interview. There are two versions of this measure: a continuous one and a categorized version with the following categories (1 to 19, 20 to 39, 40 to 59, 60 to 99, 100 to 249, 250 to 499, 500 to 749, 750 to 999, 1,000+).
- *Interviewer hours worked during the week*. These are the number of hours from the weekly interviewer timesheet submission matched to the corresponding week the screener or interview was attempted (1.00 to 18.00 hours, 18.25 to 26.00 hours, 26.25 to 35.75 hours, and 36.00 or more hours)
- *Interviewer miles traveled during the week*. These are the number of reimbursed miles from the weekly interviewer timesheet submission matched to the corresponding week the screener or interview was attempted (0 to 135 miles, 136 to 250 miles, 251 to 415 miles, and 416 or more miles)
- *Average hours worked per week during the quarter*. These are the average hours per week for the quarter was computed, based on the number of weeks that the interviewer worked during the quarter.
- *Average miles per week during the quarter*. These are the average number of miles per week for the quarter was computed, based on the number of weeks the interviewer worked during the quarter.
- *Interviewer gender*.

- *Interviewer race/ethnicity* (white, non-Hispanic; black, non-Hispanic; other, non-Hispanic; Hispanic).
- *Interviewer age* (40 or younger, 41 to 50, 51 to 60, 61+).

Indicators of Interview "Effort"

- *Interview nonresponse adjustment factor*. This variable takes on higher values for cases with lower response propensities as measured by variables used in the interview nonresponse weighting adjustment.
- *Ever refused interview at the interview level*.

Respondent Characteristics

- *Respondent race/ethnicity* (white, non-Hispanic; black, non-Hispanic; other, non-Hispanic; Hispanic),
- *Respondent gender*,
- *Respondent age group* (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50+),
- *Income* (less than $20,000; $20,000 to $49,999; $50,000 to $74,999; and $75,000+),
- *Selected person's relationship to householder* (householder or spouse, child, other relative, nonrelative), and
- *Group quarters indicator* (college dormitory, other group quarters, nongroup quarters).

Interactions between Respondent and FI Characteristics

- *Interaction between FI gender and respondent gender*,
- *Interaction between FI age and respondent age*, and
- *Interaction between FI race/ethnicity and respondent race/ethnicity*.

Segment-Level and Other Area Characteristic Measures

- *Percent population 65+ in block group*,
- *Percent population 25 to 34 in block group*,
- *Percent population 35 to 44 in block group*,
- *Percent blacks in block group*,
- *Percent other race in block group*,
- *Percent female head of household, no spouse, child > 18*,
- *Drug sale/manufacture arrest rate*,
- *Serious crime rate*,
- *Percent persons 16 to 64 with a work disability*,

- *Percent* households with public assistance income,
- *Percent housing units rented*,
- *Median rents*,
- *Metropolitan statistical area (MSA) status* (1 million or more persons in an MSA, less than 1 million persons in an MSA, non-MSA),
- *Census region*,
- *Percent of owner-occupied units – segment lev*el (less than 10 percent, 10 to 49 percent, 50 percent or more),
- *Percent black, non-Hispanic – segment level* (less than 10 percent, 10 to 49 percent, 50 percent or more),
- *Percent Hispanic – segment level* (less than 10 percent, 10 to 49 percent, 50 percent or more), and
- *Median rent / median housing value quintiles – segment level*.

Table A.1.1 Unweighted Logistic Regression of Screener Contact: 2002

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	3.22	0.20	0.0000	24.93	16.85	36.89
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.10	0.06	0.0987	0.90	0.80	1.02
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.29	0.08	0.0001	0.74	0.64	0.86
Other, Non-Hispanic	0.20	0.17	0.2537	1.22	0.87	1.72
Hispanic	-0.38	0.10	0.0003	0.68	0.56	0.84
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.02	0.07	0.7616	0.98	0.86	1.12
251 to 415	0.07	0.07	0.3325	1.07	0.93	1.23
416+	-0.05	0.10	0.6461	0.95	0.78	1.17
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.03	0.07	0.6299	1.03	0.91	1.18
26.25 to 35.75	0.14	0.08	0.0559	1.16	1.00	1.34
36+	0.14	0.10	0.1470	1.15	0.95	1.39
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.22	0.13	0.0880	0.80	0.63	1.03
40 to 59	-0.02	0.12	0.8827	0.98	0.77	1.25
60 to 99	-0.07	0.13	0.5931	0.93	0.73	1.20
100 to 249	0.14	0.10	0.1341	1.15	0.96	1.39
250 to 499	0.05	0.10	0.6138	1.05	0.86	1.29
500 to 749	0.06	0.20	0.7823	1.06	0.71	1.57
750 to 999	0.22	0.24	0.3592	1.25	0.78	1.99
1,000+	0.49	0.34	0.1498	1.62	0.84	3.14

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002.

Table A.1.2 Unweighted Logistic Regression of Screener Contact: 2003

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	3.88	0.21	0.0000	48.21	31.95	72.76
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.11	0.07	0.1333	0.90	0.78	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.27	0.11	0.0102	0.76	0.62	0.94
Other, Non-Hispanic	-0.31	0.21	0.1397	0.73	0.48	1.11
Hispanic	-0.35	0.19	0.0572	0.70	0.49	1.01
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.01	0.12	0.9260	0.99	0.78	1.25
251 to 415	-0.09	0.12	0.4545	0.91	0.72	1.16
416+	-0.35	0.16	0.0290	0.70	0.51	0.96
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.12	0.11	0.3010	1.12	0.90	1.40
26.25 to 35.75	0.17	0.13	0.1928	1.18	0.92	1.52
36+	0.40	0.17	0.0212	1.49	1.06	2.09
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.11	0.20	0.5865	0.90	0.61	1.32
40 to 59	-0.46	0.18	0.0089	0.63	0.44	0.89
60 to 99	-0.06	0.15	0.6688	0.94	0.70	1.25
100 to 249	-0.08	0.13	0.5540	0.93	0.72	1.19
250 to 499	0.19	0.12	0.1151	1.21	0.95	1.54
500 to 749	0.04	0.16	0.8181	1.04	0.76	1.42
750 to 999	0.35	0.21	0.1074	1.41	0.93	2.15
1,000+	0.56	0.25	0.0235	1.76	1.08	2.86

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003.

Table A.1.3 Unweighted Logistic Regression of Screener Contact: 2004

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	3.81	0.26	0.0000	45.30	27.32	75.11
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.07	0.09	0.4565	0.93	0.78	1.12
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.46	0.15	0.0021	0.63	0.47	0.85
Other, Non-Hispanic	-0.34	0.27	0.2102	0.71	0.42	1.21
Hispanic	-0.42	0.17	0.0122	0.66	0.47	0.91
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.16	0.14	0.2401	1.17	0.90	1.53
251 to 415	-0.05	0.14	0.7218	0.95	0.72	1.26
416+	-0.23	0.19	0.2277	0.80	0.55	1.15
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.01	0.10	0.8882	1.01	0.83	1.23
26.25 to 35.75	0.10	0.12	0.4162	1.10	0.87	1.40
36+	0.09	0.14	0.5026	1.10	0.84	1.44
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.06	0.30	0.8361	0.94	0.53	1.68
40 to 59	-0.23	0.31	0.4528	0.79	0.43	1.45
60 to 99	0.05	0.18	0.7601	1.06	0.74	1.50
100 to 249	-0.18	0.14	0.2029	0.83	0.63	1.10
250 to 499	-0.11	0.15	0.4525	0.89	0.66	1.20
500 to 749	-0.00	0.13	0.9737	1.00	0.77	1.29
750 to 999	0.26	0.16	0.0909	1.30	0.96	1.77
1,000+	0.59	0.26	0.0231	1.81	1.08	3.01

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004.

Table A.1.4 Unweighted Logistic Regression of Screener Contact: 2005

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	4.85	0.27	0.0000	127.59	75.59	215.37
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.13	0.08	0.0933	0.87	0.75	1.02
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.55	0.11	0.0000	0.58	0.47	0.71
Other, Non-Hispanic	-0.13	0.24	0.6040	0.88	0.55	1.42
Hispanic	-0.47	0.13	0.0003	0.62	0.48	0.80
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.05	0.09	0.5320	1.06	0.89	1.25
251 to 415	0.05	0.13	0.7010	1.05	0.82	1.35
416+	-0.08	0.15	0.5838	0.92	0.68	1.24
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.03	0.10	0.7456	1.03	0.85	1.25
26.25 to 35.75	0.11	0.11	0.2981	1.12	0.90	1.39
36+	0.30	0.16	0.0637	1.34	0.98	1.84
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.27	0.16	0.0846	0.76	0.56	1.04
40 to 59	-0.27	0.21	0.1922	0.76	0.51	1.14
60 to 99	-0.38	0.25	0.1324	0.68	0.42	1.12
100 to 249	-0.11	0.14	0.4225	0.89	0.68	1.18
250 to 499	-0.31	0.14	0.0238	0.73	0.56	0.96
500 to 749	-0.03	0.14	0.8178	0.97	0.74	1.27
750 to 999	-0.35	0.21	0.0960	0.71	0.47	1.06
1,000+	0.27	0.17	0.1137	1.30	0.94	1.81

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2005.

Table A.1.5 Unweighted Logistic Regression of Screener Contact: 2006

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	3.65	0.28	0.0000	38.30	22.23	65.98
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.27	0.10	0.0098	1.30	1.07	1.59
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.22	0.12	0.0571	0.80	0.64	1.01
Other, Non-Hispanic	0.13	0.28	0.6417	1.14	0.66	1.97
Hispanic	-0.23	0.11	0.0377	0.80	0.64	0.99
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.18	0.11	0.0862	1.20	0.97	1.48
251 to 415	0.14	0.13	0.2727	1.15	0.89	1.49
416+	0.28	0.12	0.0242	1.32	1.04	1.69
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.04	0.12	0.7759	0.97	0.76	1.23
26.25 to 35.75	0.02	0.13	0.8893	1.02	0.79	1.32
36+	0.09	0.12	0.4698	1.09	0.86	1.39
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.06	0.17	0.7344	1.06	0.75	1.49
40 to 59	0.19	0.19	0.3275	1.21	0.83	1.77
60 to 99	-0.17	0.18	0.3280	0.84	0.59	1.19
100 to 249	0.09	0.15	0.5334	1.10	0.82	1.47
250 to 499	-0.06	0.15	0.7153	0.95	0.70	1.28
500 to 749	0.19	0.16	0.2409	1.21	0.88	1.67
750 to 999	0.11	0.16	0.4949	1.11	0.82	1.52
1,000+	0.25	0.16	0.1035	1.29	0.95	1.75

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2006.

Table A.1.6 Unweighted Logistic Regression of Screener Contact: 2007

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.81	0.36	0.0000	16.53	8.11	33.67
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.12	0.10	0.2379	1.13	0.92	1.38
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.23	0.10	0.0257	0.80	0.65	0.97
Other, Non-Hispanic	-0.40	0.27	0.1346	0.67	0.40	1.13
Hispanic	-0.27	0.12	0.0253	0.77	0.61	0.97
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.18	0.10	0.0719	1.19	0.98	1.44
251 to 415	0.23	0.13	0.0670	1.26	0.98	1.62
416+	0.11	0.16	0.4686	1.12	0.83	1.52
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.05	0.13	0.6880	0.95	0.74	1.22
26.25 to 35.75	0.09	0.13	0.4642	1.10	0.86	1.41
36+	0.15	0.14	0.2552	1.17	0.89	1.52
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.19	0.17	0.2813	1.21	0.86	1.70
40 to 59	0.22	0.20	0.2679	1.24	0.85	1.82
60 to 99	0.20	0.18	0.2465	1.23	0.87	1.73
100 to 249	0.10	0.17	0.5645	1.10	0.79	1.53
250 to 499	-0.06	0.18	0.7607	0.95	0.66	1.35
500 to 749	0.24	0.16	0.1269	1.27	0.93	1.73
750 to 999	0.20	0.18	0.2731	1.22	0.86	1.73
1,000+	0.19	0.18	0.2823	1.21	0.85	1.73

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007.

Table A.2.1 Unweighted Logistic Regression of Screener Cooperation: 2002

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.45	0.13	0.0000	11.61	9.05	14.91
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.15	0.04	0.0000	1.16	1.08	1.24
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.05	0.5738	1.03	0.93	1.14
Other, Non-Hispanic	-0.03	0.09	0.7488	0.97	0.82	1.16
Hispanic	-0.31	0.08	0.0002	0.74	0.63	0.87
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.20	0.04	0.0000	1.22	1.12	1.32
251 to 415	0.26	0.05	0.0000	1.29	1.18	1.42
416+	0.30	0.06	0.0000	1.35	1.21	1.50
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.10	0.04	0.0248	0.91	0.84	0.99
26.25 to 35.75	-0.16	0.04	0.0003	0.85	0.78	0.93
36+	-0.13	0.05	0.0062	0.88	0.80	0.96
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.13	0.08	0.1098	1.14	0.97	1.33
40 to 59	-0.01	0.08	0.8940	0.99	0.85	1.16
60 to 99	0.04	0.07	0.5552	1.04	0.91	1.20
100 to 249	0.15	0.06	0.0188	1.16	1.02	1.31
250 to 499	0.31	0.06	0.0000	1.36	1.20	1.54
500 to 749	0.67	0.09	0.0000	1.95	1.63	2.33
750 to 999	0.70	0.17	0.0000	2.01	1.45	2.77
1,000+	0.70	0.15	0.0000	2.01	1.49	2.72

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002.

Table A.2.2 Unweighted Logistic Regression of Screener Cooperation: 2003

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.48	0.10	0.0000	11.98	9.82	14.62
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.19	0.03	0.0000	1.20	1.13	1.28
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.02	0.05	0.6781	1.02	0.92	1.13
Other, Non-Hispanic	-0.14	0.11	0.1868	0.87	0.71	1.07
Hispanic	0.02	0.07	0.7333	1.02	0.90	1.17
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.10	0.04	0.0117	1.10	1.02	1.19
251 to 415	0.18	0.05	0.0001	1.19	1.09	1.30
416+	0.23	0.05	0.0000	1.26	1.14	1.41
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.08	0.04	0.0742	0.93	0.85	1.01
26.25 to 35.75	-0.10	0.05	0.0348	0.91	0.83	0.99
36+	-0.09	0.06	0.0902	0.91	0.81	1.02
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.00	0.08	0.9735	1.00	0.85	1.17
40 to 59	0.02	0.09	0.8258	1.02	0.86	1.21
60 to 99	0.01	0.07	0.8840	1.01	0.88	1.16
100 to 249	0.16	0.06	0.0034	1.18	1.06	1.31
250 to 499	0.28	0.06	0.0000	1.33	1.19	1.48
500 to 749	0.37	0.07	0.0000	1.45	1.27	1.66
750 to 999	0.49	0.10	0.0000	1.63	1.34	1.98
1,000+	0.84	0.13	0.0000	2.32	1.79	3.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003.

Table A.2.3 Unweighted Logistic Regression of Screener Cooperation: 2004

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.69	0.11	0.0000	14.80	11.90	18.41
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.20	0.03	0.0000	1.22	1.15	1.30
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.10	0.06	0.0762	0.90	0.81	1.01
Other, Non-Hispanic	-0.32	0.09	0.0005	0.72	0.60	0.87
Hispanic	-0.04	0.06	0.5727	0.97	0.85	1.09
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.06	0.04	0.1545	1.06	0.98	1.14
251 to 415	0.12	0.05	0.0088	1.13	1.03	1.24
416+	0.24	0.06	0.0000	1.27	1.14	1.41
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.06	0.04	0.1610	0.94	0.87	1.02
26.25 to 35.75	-0.11	0.05	0.0147	0.89	0.82	0.98
36+	-0.12	0.06	0.0367	0.89	0.80	0.99
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.26	0.08	0.0021	1.29	1.10	1.53
40 to 59	0.09	0.08	0.2782	1.09	0.93	1.28
60 to 99	0.04	0.08	0.6000	1.04	0.89	1.21
100 to 249	-0.02	0.06	0.7709	0.98	0.88	1.10
250 to 499	0.20	0.06	0.0004	1.22	1.09	1.37
500 to 749	0.20	0.06	0.0008	1.23	1.09	1.38
750 to 999	0.38	0.08	0.0000	1.46	1.25	1.70
1,000+	0.61	0.10	0.0000	1.84	1.51	2.24

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004.

Table A.2.4 Unweighted Logistic Regression of Screener Cooperation: 2005

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.45	0.12	0.0000	11.64	9.14	14.84
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.12	0.04	0.0013	1.13	1.05	1.21
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.04	0.05	0.4486	0.96	0.86	1.07
Other, Non-Hispanic	-0.37	0.13	0.0036	0.69	0.53	0.88
Hispanic	-0.21	0.06	0.0007	0.81	0.72	0.92
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.08	0.04	0.0395	1.09	1.00	1.18
251 to 415	0.21	0.04	0.0000	1.23	1.13	1.34
416+	0.23	0.05	0.0000	1.26	1.13	1.40
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.06	0.04	0.1182	0.94	0.87	1.02
26.25 to 35.75	-0.13	0.05	0.0057	0.88	0.80	0.96
36+	-0.04	0.05	0.4828	0.96	0.87	1.07
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.11	0.08	0.1823	0.89	0.76	1.05
40 to 59	0.07	0.09	0.4835	1.07	0.89	1.28
60 to 99	0.06	0.07	0.4074	1.06	0.92	1.22
100 to 249	0.06	0.06	0.3070	1.06	0.94	1.20
250 to 499	0.10	0.06	0.0915	1.10	0.98	1.24
500 to 749	0.22	0.06	0.0003	1.25	1.11	1.41
750 to 999	0.29	0.07	0.0001	1.34	1.15	1.55
1,000+	0.51	0.08	0.0000	1.67	1.44	1.94

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2005.

Table A.2.5 Unweighted Logistic Regression of Screener Cooperation: 2006

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.10	0.13	0.0000	8.17	6.38	10.47
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.13	0.03	0.0001	1.14	1.07	1.22
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.01	0.06	0.9152	0.99	0.89	1.11
Other, Non-Hispanic	0.21	0.11	0.0493	1.24	1.00	1.53
Hispanic	-0.19	0.05	0.0000	0.83	0.76	0.91
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.08	0.04	0.0268	1.09	1.01	1.17
251 to 415	0.15	0.04	0.0008	1.16	1.06	1.26
416+	0.21	0.05	0.0001	1.24	1.12	1.37
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.04	0.04	0.2975	0.96	0.88	1.04
26.25 to 35.75	-0.04	0.04	0.4145	0.96	0.88	1.05
36+	0.03	0.05	0.5547	1.03	0.93	1.14
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.01	0.08	0.8479	1.01	0.87	1.18
40 to 59	0.08	0.08	0.3266	1.08	0.93	1.26
60 to 99	0.03	0.07	0.6237	1.03	0.90	1.18
100 to 249	0.13	0.06	0.0296	1.14	1.01	1.27
250 to 499	0.10	0.06	0.0669	1.11	0.99	1.24
500 to 749	0.32	0.06	0.0000	1.38	1.23	1.56
750 to 999	0.27	0.06	0.0000	1.31	1.15	1.48
1,000+	0.41	0.06	0.0000	1.51	1.34	1.72

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2006.

Table A.2.6 Unweighted Logistic Regression of Screener Cooperation: 2007

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.29	0.11	0.0000	9.91	7.96	12.33
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.11	0.03	0.0008	1.12	1.05	1.20
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.25	0.05	0.0000	0.78	0.71	0.86
Other, Non-Hispanic	0.00	0.11	0.9694	1.00	0.81	1.24
Hispanic	-0.16	0.05	0.0006	0.85	0.78	0.93
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	0.11	0.04	0.0020	1.12	1.04	1.20
251 to 415	0.20	0.04	0.0000	1.22	1.12	1.32
416+	0.29	0.05	0.0000	1.34	1.21	1.48
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	-0.06	0.04	0.0990	0.94	0.87	1.01
26.25 to 35.75	-0.14	0.04	0.0009	0.87	0.80	0.94
36+	-0.07	0.05	0.1676	0.94	0.85	1.03
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.05	0.07	0.4492	1.06	0.92	1.22
40 to 59	0.05	0.07	0.5112	1.05	0.91	1.21
60 to 99	0.15	0.06	0.0169	1.17	1.03	1.32
100 to 249	0.16	0.05	0.0043	1.17	1.05	1.30
250 to 499	0.19	0.05	0.0006	1.21	1.08	1.34
500 to 749	0.31	0.06	0.0000	1.37	1.22	1.52
750 to 999	0.36	0.06	0.0000	1.43	1.28	1.60
1,000+	0.47	0.06	0.0000	1.60	1.42	1.79

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007.

Table A.3.1 Unweighted Logistic Regression of Interview Cooperation: 2002

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.56	0.13	0.0000	12.88	9.96	16.65
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.43	0.04	0.0000	0.65	0.60	0.70
26 to 34	-0.94	0.06	0.0000	0.39	0.35	0.44
35 to 49	-1.11	0.05	0.0000	0.33	0.30	0.37
50+	-1.65	0.06	0.0000	0.19	0.17	0.22
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.23	0.02	0.0000	1.25	1.20	1.31
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.22	0.08	0.0049	0.80	0.69	0.93
Other, Non-Hispanic	-0.29	0.09	0.0023	0.75	0.62	0.90
Hispanic	-0.22	0.10	0.0227	0.80	0.66	0.97
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.10	0.03	0.0026	1.11	1.04	1.19
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.11	0.5249	1.07	0.87	1.32
Other, Non-Hispanic	0.69	0.65	0.2890	2.00	0.55	7.22
Hispanic	-0.19	0.22	0.3930	0.83	0.54	1.27
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.07	0.04	0.1320	0.94	0.86	1.02
251 to 415	-0.14	0.05	0.0039	0.87	0.80	0.96
416+	-0.28	0.05	0.0000	0.75	0.68	0.84
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.22	0.04	0.0000	1.24	1.15	1.35
26.25 to 35.75	0.32	0.04	0.0000	1.38	1.26	1.50
36+	0.52	0.05	0.0000	1.67	1.51	1.85
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.21	0.09	0.0164	1.23	1.04	1.45
40 to 59	0.02	0.08	0.8414	1.02	0.86	1.20
60 to 99	0.10	0.08	0.2030	1.10	0.95	1.28
100 to 249	0.22	0.07	0.0007	1.25	1.10	1.42
250 to 499	0.30	0.07	0.0000	1.34	1.18	1.53
500 to 749	0.31	0.09	0.0004	1.36	1.15	1.61
750 to 999	0.42	0.15	0.0046	1.52	1.14	2.03
1,000+	0.44	0.14	0.0015	1.56	1.19	2.05

(continued)

Table A.3.1 Unweighted Logistic Regression of Interview Cooperation: 2002 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.02	0.12	0.9002	0.98	0.77	1.26
Black, Non-Hispanic; Other Non-Hispanic	-0.37	0.21	0.0822	0.69	0.45	1.05
Black, Non-Hispanic; Hispanic	0.25	0.17	0.1501	1.29	0.91	1.81
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.70	0.66	0.2895	0.49	0.13	1.82
Other, Non-Hispanic; Other Non-Hispanic	-0.39	0.71	0.5804	0.68	0.17	2.71
Other, Non-Hispanic; Hispanic	-0.18	0.72	0.8027	0.83	0.20	3.44
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	0.14	0.24	0.5492	1.15	0.72	1.83
Hispanic; Other Non-Hispanic	-0.16	0.30	0.5957	0.85	0.47	1.54
Hispanic; Hispanic	0.40	0.24	0.0974	1.49	0.93	2.38

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002.

Table A.3.2 Unweighted Logistic Regression of Interview Cooperation: 2003

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.73	0.13	0.0000	15.35	11.98	19.66
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.48	0.04	0.0000	0.62	0.57	0.67
26 to 34	-1.00	0.05	0.0000	0.37	0.33	0.41
35 to 49	-1.16	0.05	0.0000	0.31	0.28	0.35
50+	-1.65	0.06	0.0000	0.19	0.17	0.21
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.20	0.02	0.0000	1.22	1.17	1.28
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.17	0.07	0.0229	0.85	0.73	0.98
Other, Non-Hispanic	-0.32	0.09	0.0005	0.73	0.61	0.87
Hispanic	-0.19	0.09	0.0278	0.82	0.69	0.98
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.03	0.03	0.4075	1.03	0.96	1.10
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.19	0.11	0.0736	1.21	0.98	1.50
Other, Non-Hispanic	1.36	0.72	0.0598	3.90	0.95	16.13
Hispanic	-0.44	0.15	0.0033	0.64	0.48	0.86
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.14	0.04	0.0005	0.87	0.80	0.94
251 to 415	-0.23	0.05	0.0000	0.80	0.73	0.87
416+	-0.30	0.06	0.0000	0.74	0.66	0.82
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.28	0.04	0.0000	1.32	1.22	1.44
26.25 to 35.75	0.42	0.04	0.0000	1.53	1.40	1.67
36+	0.49	0.06	0.0000	1.62	1.46	1.81
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.07	0.09	0.4427	0.93	0.78	1.12
40 to 59	-0.24	0.09	0.0109	0.79	0.65	0.95
60 to 99	-0.13	0.08	0.1119	0.88	0.75	1.03
100 to 249	-0.08	0.07	0.2462	0.92	0.80	1.06
250 to 499	-0.02	0.07	0.7353	0.98	0.85	1.12
500 to 749	0.20	0.08	0.0120	1.22	1.04	1.41
750 to 999	0.19	0.10	0.0633	1.21	0.99	1.48
1,000+	0.42	0.12	0.0004	1.52	1.21	1.92

(continued)

Table A.3.2 Unweighted Logistic Regression of Interview Cooperation: 2003 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.18	0.13	0.1688	0.83	0.64	1.08
Black, Non-Hispanic; Other Non-Hispanic	-0.10	0.22	0.6306	0.90	0.59	1.38
Black, Non-Hispanic; Hispanic	0.15	0.17	0.3956	1.16	0.82	1.63
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-1.12	0.71	0.1165	0.33	0.08	1.32
Other, Non-Hispanic; Other Non-Hispanic	-0.99	0.77	0.1991	0.37	0.08	1.69
Other, Non-Hispanic; Hispanic	-0.02	0.74	0.9805	0.98	0.23	4.19
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	0.21	0.17	0.1971	1.24	0.89	1.71
Hispanic; Other Non-Hispanic	-0.11	0.21	0.5986	0.90	0.60	1.34
Hispanic; Hispanic	0.56	0.18	0.0019	1.74	1.23	2.47

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003.

Table A.3.3 Unweighted Logistic Regression of Interview Cooperation: 2004

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.56	0.12	0.0000	12.88	10.20	16.26
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.29	0.04	0.0000	0.75	0.70	0.80
26 to 34	-0.66	0.05	0.0000	0.52	0.47	0.57
35 to 49	-0.86	0.04	0.0000	0.42	0.39	0.46
50+	-1.23	0.04	0.0000	0.29	0.27	0.32
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.18	0.02	0.0000	1.19	1.14	1.24
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.19	0.07	0.0047	0.82	0.72	0.94
Other, Non-Hispanic	-0.31	0.09	0.0005	0.74	0.62	0.87
Hispanic	-0.15	0.08	0.0781	0.86	0.73	1.02
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.10	0.03	0.0013	1.11	1.04	1.18
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.38	0.11	0.0008	1.46	1.17	1.81
Other, Non-Hispanic	0.07	0.45	0.8807	1.07	0.44	2.61
Hispanic	0.13	0.18	0.4816	1.13	0.80	1.61
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.12	0.04	0.0012	0.88	0.82	0.95
251 to 415	-0.18	0.04	0.0000	0.84	0.77	0.91
416+	-0.34	0.05	0.0000	0.71	0.64	0.79
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.11	0.04	0.0028	1.12	1.04	1.20
26.25 to 35.75	0.22	0.04	0.0000	1.25	1.15	1.36
36+	0.33	0.05	0.0000	1.39	1.26	1.54
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.09	0.09	0.3477	0.92	0.76	1.10
40 to 59	-0.15	0.09	0.0975	0.86	0.72	1.03
60 to 99	-0.09	0.08	0.2571	0.92	0.79	1.07
100 to 249	-0.14	0.06	0.0256	0.87	0.77	0.98
250 to 499	-0.03	0.06	0.6264	0.97	0.86	1.10
500 to 749	0.07	0.07	0.2741	1.07	0.94	1.22
750 to 999	0.10	0.08	0.1950	1.11	0.95	1.30
1,000+	0.17	0.09	0.0530	1.19	1.00	1.42

(continued)

Table A.3.3 Unweighted Logistic Regression of Interview Cooperation: 2004 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.32	0.13	0.0100	0.72	0.57	0.93
Black, Non-Hispanic; Other Non-Hispanic	-0.36	0.21	0.0879	0.70	0.47	1.05
Black, Non-Hispanic; Hispanic	-0.32	0.17	0.0563	0.72	0.52	1.01
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.04	0.45	0.9293	0.96	0.39	2.34
Other, Non-Hispanic; Other Non-Hispanic	0.01	0.53	0.9870	1.01	0.36	2.84
Other, Non-Hispanic; Hispanic	-0.33	0.55	0.5473	0.72	0.24	2.12
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.36	0.19	0.0553	0.70	0.48	1.01
Hispanic; Other Non-Hispanic	-0.47	0.23	0.0403	0.62	0.40	0.98
Hispanic; Hispanic	-0.03	0.19	0.8935	0.98	0.67	1.41

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004.

Table A.3.4 Unweighted Logistic Regression of Interview Cooperation: 2005

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.66	0.13	0.0000	14.33	11.21	18.33
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.37	0.04	0.0000	0.69	0.64	0.74
26 to 34	-0.92	0.05	0.0000	0.40	0.36	0.44
35 to 49	-1.05	0.05	0.0000	0.35	0.32	0.38
50+	-1.46	0.05	0.0000	0.23	0.21	0.26
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.22	0.02	0.0000	1.25	1.20	1.30
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.37	0.07	0.0000	0.69	0.60	0.80
Other, Non-Hispanic	-0.46	0.09	0.0000	0.63	0.53	0.75
Hispanic	-0.33	0.09	0.0002	0.72	0.60	0.85
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.11	0.03	0.0004	1.12	1.05	1.19
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.10	0.11	0.3581	1.10	0.89	1.36
Other, Non-Hispanic	-0.80	0.47	0.0914	0.45	0.18	1.14
Hispanic	-0.05	0.14	0.7176	0.95	0.72	1.25
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.08	0.04	0.0368	0.92	0.85	0.99
251 to 415	-0.16	0.04	0.0003	0.85	0.78	0.93
416+	-0.24	0.05	0.0000	0.78	0.71	0.87
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.17	0.04	0.0000	1.19	1.10	1.28
26.25 to 35.75	0.30	0.04	0.0000	1.35	1.24	1.48
36+	0.33	0.05	0.0000	1.39	1.26	1.53
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.06	0.09	0.4992	0.94	0.80	1.12
40 to 59	-0.05	0.09	0.5415	0.95	0.80	1.13
60 to 99	-0.12	0.08	0.1211	0.89	0.77	1.03
100 to 249	-0.10	0.07	0.1237	0.90	0.79	1.03
250 to 499	-0.09	0.06	0.1789	0.92	0.81	1.04
500 to 749	-0.07	0.07	0.2817	0.93	0.82	1.06
750 to 999	0.13	0.08	0.0950	1.14	0.98	1.32
1,000+	0.11	0.08	0.1617	1.11	0.96	1.29

(continued)

Table A.3.4 Unweighted Logistic Regression of Interview Cooperation: 2005 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.13	0.13	0.3312	0.88	0.68	1.14
Black, Non-Hispanic; Other Non-Hispanic	-0.35	0.21	0.0928	0.70	0.47	1.06
Black, Non-Hispanic; Hispanic	0.14	0.17	0.4046	1.15	0.83	1.60
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.33	0.51	0.5157	1.39	0.52	3.75
Other, Non-Hispanic; Other Non-Hispanic	0.45	0.47	0.3464	1.56	0.62	3.96
Other, Non-Hispanic; Hispanic	1.24	0.58	0.0312	3.46	1.12	10.72
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.00	0.15	0.9916	1.00	0.74	1.35
Hispanic; Other Non-Hispanic	-0.06	0.18	0.7336	0.94	0.66	1.34
Hispanic; Hispanic	0.21	0.16	0.1779	1.24	0.91	1.69

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2005.

Table A.3.5 Unweighted Logistic Regression of Interview Cooperation: 2006

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.10	0.11	0.0000	8.15	6.53	10.19
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.44	0.03	0.0000	0.64	0.60	0.69
26 to 34	-0.90	0.05	0.0000	0.40	0.37	0.44
35 to 49	-1.01	0.05	0.0000	0.37	0.33	0.40
50+	-1.33	0.05	0.0000	0.27	0.24	0.29
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.19	0.02	0.0000	1.21	1.17	1.26
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.23	0.06	0.0001	0.79	0.70	0.89
Other, Non-Hispanic	-0.35	0.08	0.0000	0.70	0.60	0.82
Hispanic	-0.17	0.08	0.0267	0.85	0.73	0.98
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.08	0.03	0.0108	1.08	1.02	1.15
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.03	0.09	0.7572	0.97	0.81	1.17
Other, Non-Hispanic	-1.83	0.71	0.0099	0.16	0.04	0.64
Hispanic	-0.01	0.14	0.9484	0.99	0.75	1.31
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.12	0.04	0.0015	0.88	0.82	0.95
251 to 415	-0.26	0.04	0.0000	0.77	0.71	0.84
416+	-0.36	0.05	0.0000	0.69	0.63	0.76
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.20	0.04	0.0000	1.22	1.13	1.32
26.25 to 35.75	0.31	0.04	0.0000	1.36	1.26	1.47
36+	0.42	0.05	0.0000	1.52	1.39	1.66
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.09	0.07	0.2322	1.09	0.94	1.27
40 to 59	0.00	0.08	0.9608	1.00	0.86	1.17
60 to 99	0.05	0.07	0.4644	1.05	0.92	1.20
100 to 249	0.09	0.05	0.1028	1.09	0.98	1.22
250 to 499	0.07	0.05	0.1610	1.08	0.97	1.20
500 to 749	0.12	0.06	0.0374	1.12	1.01	1.25
750 to 999	0.06	0.06	0.2879	1.06	0.95	1.19
1,000+	0.28	0.06	0.0000	1.32	1.17	1.50

(continued)

Table A.3.5 Unweighted Logistic Regression of Interview Cooperation: 2006 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	0.05	0.12	0.6754	1.05	0.83	1.34
Black, Non-Hispanic; Other Non-Hispanic	-0.17	0.19	0.3718	0.84	0.58	1.23
Black, Non-Hispanic; Hispanic	0.21	0.18	0.2483	1.23	0.87	1.74
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	1.54	0.73	0.0358	4.68	1.11	19.78
Other, Non-Hispanic; Other Non-Hispanic	1.93	0.75	0.0105	6.88	1.57	30.12
Other, Non-Hispanic; Hispanic	2.20	0.76	0.0038	9.07	2.04	40.26
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.21	0.15	0.1604	0.81	0.60	1.09
Hispanic; Other Non-Hispanic	-0.29	0.20	0.1420	0.75	0.51	1.10
Hispanic; Hispanic	0.08	0.16	0.6312	1.08	0.79	1.48

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2006.

Table A.3.6 Unweighted Logistic Regression of Interview Cooperation: 2007

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	2.04	0.12	0.0000	7.71	6.10	9.75
Respondent Age (Screener)						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.45	0.03	0.0000	0.64	0.60	0.68
26 to 34	-0.81	0.05	0.0000	0.44	0.40	0.49
35 to 49	-0.96	0.04	0.0000	0.38	0.35	0.42
50+	-1.31	0.05	0.0000	0.27	0.24	0.30
Respondent Gender (Screener)						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.18	0.02	0.0000	1.20	1.16	1.25
Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.27	0.06	0.0000	0.76	0.67	0.86
Other, Non-Hispanic	-0.31	0.08	0.0001	0.73	0.63	0.85
Hispanic	-0.14	0.07	0.0535	0.87	0.75	1.00
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.06	0.03	0.0521	1.06	1.00	1.13
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.21	0.10	0.0323	1.23	1.02	1.49
Other, Non-Hispanic	1.20	0.71	0.0930	3.32	0.82	13.51
Hispanic	0.23	0.15	0.1152	1.26	0.94	1.69
Average Miles per Week during the Quarter						
0 to 135 (RC)	0.00	0.00		1.00	1.00	1.00
136 to 250	-0.08	0.04	0.0251	0.92	0.86	0.99
251 to 415	-0.17	0.04	0.0000	0.84	0.78	0.91
416+	-0.35	0.05	0.0000	0.71	0.64	0.78
Average Hours per Week during the Quarter						
1 to 18 (RC)	0.00	0.00		1.00	1.00	1.00
18.25 to 26	0.18	0.04	0.0000	1.20	1.12	1.29
26.25 to 35.75	0.32	0.04	0.0000	1.37	1.27	1.48
36+	0.49	0.05	0.0000	1.63	1.49	1.79
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.04	0.08	0.6381	0.96	0.83	1.12
40 to 59	-0.16	0.08	0.0433	0.85	0.72	1.00
60 to 99	0.02	0.07	0.7494	1.02	0.89	1.18
100 to 249	-0.04	0.06	0.5397	0.96	0.86	1.08
250 to 499	-0.00	0.06	0.9373	1.00	0.88	1.12
500 to 749	0.00	0.06	0.9469	1.00	0.89	1.13
750 to 999	0.04	0.07	0.5040	1.04	0.92	1.19
1,000+	0.15	0.06	0.0189	1.16	1.02	1.31

(continued)

Table A.3.6 Unweighted Logistic Regression of Interview Cooperation: 2007 (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Race/Ethnicity by Respondent Race/Ethnicity (Screener)						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.29	0.12	0.0133	0.75	0.59	0.94
Black, Non-Hispanic; Other Non-Hispanic	-0.46	0.22	0.0371	0.63	0.41	0.97
Black, Non-Hispanic; Hispanic	-0.01	0.16	0.9517	0.99	0.72	1.36
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-1.10	0.73	0.1349	0.33	0.08	1.41
Other, Non-Hispanic; Other Non-Hispanic	-1.43	0.75	0.0570	0.24	0.06	1.04
Other, Non-Hispanic; Hispanic	-1.47	0.77	0.0573	0.23	0.05	1.05
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.36	0.16	0.0261	0.70	0.51	0.96
Hispanic; Other Non-Hispanic	-0.56	0.20	0.0051	0.57	0.38	0.84
Hispanic; Hispanic	-0.11	0.17	0.5213	0.90	0.65	1.25

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007.

Table A.4.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-0.75	0.12	0.0000	0.47	0.37	0.60
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.67	0.03	0.0000	5.30	4.96	5.66
26 to 34	1.74	0.05	0.0000	5.71	5.20	6.26
35 to 49	1.97	0.04	0.0000	7.19	6.59	7.85
50+	1.63	0.05	0.0000	5.11	4.59	5.68
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.21	0.02	0.0000	0.81	0.78	0.84
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.71	0.02	0.0000	0.49	0.48	0.51
Other, Non-Hispanic	-0.35	0.02	0.0000	0.71	0.68	0.74
Hispanic	-0.27	0.02	0.0000	0.77	0.74	0.79
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.01	0.03	0.8206	0.99	0.94	1.05
51 to 60	-0.04	0.03	0.1297	0.96	0.91	1.01
61+	-0.07	0.03	0.0089	0.93	0.88	0.98
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.9809	1.00	0.97	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.02	0.03	0.4483	1.02	0.97	1.07
Other, Non-Hispanic	-0.04	0.04	0.4027	0.96	0.88	1.05
Hispanic	0.05	0.03	0.0994	1.05	0.99	1.11
Average Miles per Week during the Quarter	0.00	0.00	0.4077	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.5862	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.06	0.04	0.1334	1.06	0.98	1.15
41 to 50; 26 to 34	0.11	0.06	0.0462	1.12	1.00	1.25
41 to 50, 35 to 49	0.04	0.05	0.4305	1.04	0.94	1.15
41 to 50; 50+	0.21	0.06	0.0009	1.24	1.09	1.40
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.09	0.04	0.0190	1.09	1.01	1.17
51 to 60; 26 to 34	0.23	0.05	0.0000	1.26	1.13	1.40
51 to 60, 35 to 49	0.12	0.05	0.0142	1.13	1.02	1.24
51 to 60; 50+	0.18	0.06	0.0021	1.20	1.07	1.35
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.14	0.04	0.0001	1.15	1.07	1.24
61+; 26 to 34	0.23	0.05	0.0000	1.26	1.13	1.40
61+; 35 to 49	0.15	0.05	0.0024	1.16	1.05	1.28
61+; 50+	0.26	0.06	0.0000	1.29	1.15	1.45
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.02	0.02	0.3081	0.98	0.94	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.04	0.04	0.2734	0.96	0.90	1.03
Black, Non-Hispanic; Other Non-Hispanic	-0.25	0.07	0.0001	0.78	0.68	0.88
Black, Non-Hispanic; Hispanic	-0.30	0.05	0.0000	0.74	0.67	0.82
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.19	0.16	0.2603	0.83	0.60	1.15
Other, Non-Hispanic; Other Non-Hispanic	-0.14	0.08	0.0662	0.87	0.74	1.01
Other, Non-Hispanic; Hispanic	-0.00	0.10	0.9893	1.00	0.82	1.21
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.31	0.05	0.0000	0.73	0.66	0.81
Hispanic; Other Non-Hispanic	-0.41	0.06	0.0000	0.66	0.59	0.75
Hispanic; Hispanic	-0.60	0.04	0.0000	0.55	0.51	0.59
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.02	0.07	0.7672	0.98	0.86	1.12
40 to 59	-0.11	0.07	0.0938	0.90	0.79	1.02
60 to 99	-0.08	0.06	0.1932	0.93	0.83	1.04
100 to 249	-0.12	0.05	0.0234	0.89	0.80	0.98
250 to 499	-0.08	0.05	0.1297	0.92	0.83	1.02
500 to 749	-0.19	0.06	0.0024	0.83	0.73	0.94
750 to 999	-0.20	0.09	0.0279	0.82	0.69	0.98
1,000+	-0.19	0.12	0.1060	0.83	0.66	1.04

(continued)

Table A.4.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.19	0.14	0.1677	0.82	0.63	1.09
2004	-0.24	0.13	0.0816	0.79	0.61	1.03
2005	-0.23	0.14	0.1027	0.79	0.60	1.05
2006	0.00	0.15	0.9878	1.00	0.75	1.34
2007	-0.12	0.15	0.4539	0.89	0.66	1.21
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	-0.01	0.10	0.9143	0.99	0.82	1.20
2003; 40 to 59	0.11	0.10	0.2443	1.12	0.93	1.35
2003; 60 to 99	0.01	0.09	0.8799	1.01	0.85	1.20
2003; 100 to 249	0.13	0.07	0.0893	1.13	0.98	1.31
2003; 250 to 499	0.06	0.07	0.4380	1.06	0.92	1.23
2003; 500 to 749	0.17	0.08	0.0423	1.18	1.01	1.39
2003; 750 to 999	0.17	0.12	0.1346	1.19	0.95	1.49
2003; 1,000+	0.13	0.15	0.3990	1.13	0.85	1.52
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.05	0.09	0.5803	1.05	0.88	1.27
2004; 40 to 59	0.13	0.10	0.1803	1.14	0.94	1.37
2004; 60 to 99	0.04	0.09	0.6059	1.04	0.88	1.24
2004; 100 to 249	0.16	0.07	0.0260	1.17	1.02	1.35
2004; 250 to 499	0.09	0.07	0.1917	1.10	0.95	1.26
2004; 500 to 749	0.21	0.08	0.0083	1.24	1.06	1.45
2004; 750 to 999	0.20	0.11	0.0748	1.22	0.98	1.51
2004; 1,000+	0.26	0.13	0.0494	1.30	1.00	1.68
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.02	0.09	0.8538	1.02	0.85	1.22
2005; 40 to 59	0.06	0.10	0.5651	1.06	0.87	1.28
2005; 60 to 99	0.04	0.08	0.6035	1.04	0.89	1.23
2005; 100 to 249	0.13	0.07	0.0786	1.14	0.99	1.31
2005; 250 to 499	0.07	0.07	0.2992	1.08	0.94	1.24
2005; 500 to 749	0.17	0.08	0.0364	1.18	1.01	1.38
2005; 750 to 999	0.19	0.11	0.0731	1.21	0.98	1.49
2005; 1,000+	0.12	0.13	0.3535	1.13	0.88	1.45
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.09	0.09	0.3189	0.91	0.76	1.10
2006; 40 to 59	-0.01	0.10	0.9294	0.99	0.82	1.20
2006; 60 to 99	0.11	0.09	0.1815	1.12	0.95	1.33
2006; 100 to 249	0.02	0.07	0.7594	1.02	0.89	1.18
2006; 250 to 499	0.06	0.07	0.4417	1.06	0.92	1.22

(continued)

Table A.4.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 500 to 749	0.14	0.08	0.0876	1.15	0.98	1.34
2006; 750 to 999	0.15	0.10	0.1591	1.16	0.94	1.42
2006; 1,000+	0.12	0.13	0.3585	1.12	0.88	1.44
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.08	0.09	0.3762	0.92	0.77	1.10
2007; 40 to 59	0.05	0.10	0.5831	1.05	0.87	1.27
2007; 60 to 99	-0.03	0.09	0.7257	0.97	0.82	1.15
2007; 100 to 249	0.03	0.08	0.6999	1.03	0.89	1.19
2007; 250 to 499	-0.04	0.07	0.5872	0.96	0.83	1.11
2007; 500 to 749	0.08	0.08	0.3430	1.08	0.92	1.27
2007; 750 to 999	0.06	0.11	0.5956	1.06	0.86	1.30
2007; 1,000+	0.06	0.13	0.6483	1.06	0.83	1.36

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-1.50	0.13	0.0000	0.22	0.17	0.29
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.32	0.04	0.0000	3.76	3.50	4.03
26 to 34	0.97	0.05	0.0000	2.64	2.40	2.90
35 to 49	0.87	0.04	0.0000	2.39	2.20	2.60
50+	-0.09	0.06	0.1325	0.91	0.81	1.03
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.19	0.02	0.0000	0.82	0.80	0.85
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.70	0.02	0.0000	0.50	0.48	0.52
Other, Non-Hispanic	-0.16	0.02	0.0000	0.86	0.82	0.89
Hispanic	-0.30	0.02	0.0000	0.74	0.71	0.76
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.03	0.03	0.3216	0.97	0.91	1.03
51 to 60	0.02	0.03	0.6091	1.02	0.96	1.08
61+	-0.01	0.03	0.8593	0.99	0.93	1.06
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.00	0.02	0.8200	1.00	0.97	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.2049	1.03	0.98	1.09
Other, Non-Hispanic	-0.05	0.04	0.2369	0.95	0.88	1.03
Hispanic	0.06	0.03	0.0407	1.06	1.00	1.13
Average Miles per Week during the Quarter	-0.00	0.00	0.9934	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.6493	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.07	0.04	0.1133	1.07	0.98	1.16
41 to 50; 26 to 34	0.15	0.06	0.0107	1.16	1.03	1.29
41 to 50, 35 to 49	0.03	0.05	0.5192	1.03	0.94	1.14
41 to 50; 50+	0.15	0.07	0.0318	1.16	1.01	1.34
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.03	0.04	0.3803	1.04	0.96	1.12
51 to 60; 26 to 34	0.06	0.05	0.2204	1.07	0.96	1.18
51 to 60, 35 to 49	-0.06	0.05	0.2101	0.94	0.86	1.03
51 to 60; 50+	0.07	0.07	0.3325	1.07	0.94	1.22
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.07	0.04	0.0621	1.08	1.00	1.17
61+; 26 to 34	0.09	0.05	0.0942	1.09	0.98	1.21
61+; 35 to 49	-0.08	0.05	0.0987	0.92	0.84	1.02
61+; 50+	0.07	0.07	0.3223	1.07	0.94	1.22
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.6383	0.99	0.95	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.04	0.04	0.3129	0.96	0.89	1.04
Black, Non-Hispanic; Other Non-Hispanic	-0.34	0.07	0.0000	0.71	0.63	0.81
Black, Non-Hispanic; Hispanic	-0.31	0.05	0.0000	0.73	0.66	0.81
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.01	0.19	0.9501	0.99	0.68	1.43
Other, Non-Hispanic; Other Non-Hispanic	-0.16	0.07	0.0267	0.85	0.74	0.98
Other, Non-Hispanic; Hispanic	-0.03	0.09	0.7720	0.97	0.81	1.17
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.28	0.06	0.0000	0.76	0.68	0.84
Hispanic; Other Non-Hispanic	-0.37	0.06	0.0000	0.69	0.61	0.78
Hispanic; Hispanic	-0.48	0.04	0.0000	0.62	0.57	0.67
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.03	0.06	0.6536	0.97	0.86	1.10
40 to 59	-0.05	0.06	0.3541	0.95	0.84	1.06
60 to 99	-0.05	0.05	0.3393	0.95	0.86	1.06
100 to 249	-0.07	0.05	0.1123	0.93	0.85	1.02
250 to 499	-0.05	0.05	0.2477	0.95	0.87	1.04
500 to 749	-0.09	0.06	0.1099	0.91	0.81	1.02
750 to 999	-0.13	0.10	0.1962	0.88	0.73	1.07
1,000+	-0.35	0.13	0.0099	0.71	0.54	0.92

(continued)

Table A.4.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.00	0.16	0.9852	1.00	0.73	1.38
2004	0.01	0.14	0.9374	1.01	0.77	1.34
2005	0.08	0.15	0.5951	1.08	0.81	1.45
2006	0.24	0.16	0.1370	1.28	0.93	1.76
2007	0.24	0.17	0.1573	1.27	0.91	1.77
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.04	0.09	0.6447	1.04	0.87	1.24
2003; 40 to 59	0.09	0.09	0.3381	1.09	0.91	1.31
2003; 60 to 99	-0.03	0.08	0.7556	0.97	0.83	1.15
2003; 100 to 249	0.07	0.07	0.3289	1.07	0.93	1.23
2003; 250 to 499	0.02	0.07	0.7491	1.02	0.89	1.17
2003; 500 to 749	0.08	0.08	0.3097	1.09	0.93	1.27
2003; 750 to 999	0.12	0.12	0.3163	1.13	0.89	1.44
2003; 1,000+	0.25	0.16	0.1326	1.28	0.93	1.76
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.11	0.09	0.2228	1.12	0.93	1.34
2004; 40 to 59	0.08	0.09	0.3714	1.09	0.90	1.31
2004; 60 to 99	0.02	0.09	0.8073	1.02	0.86	1.21
2004; 100 to 249	0.13	0.07	0.0805	1.14	0.98	1.31
2004; 250 to 499	0.08	0.07	0.2322	1.09	0.95	1.25
2004; 500 to 749	0.07	0.08	0.3733	1.08	0.92	1.26
2004; 750 to 999	0.12	0.11	0.3132	1.12	0.90	1.41
2004; 1,000+	0.41	0.15	0.0060	1.50	1.12	2.01
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.02	0.09	0.8577	1.02	0.85	1.21
2005; 40 to 59	-0.00	0.09	0.9595	1.00	0.83	1.19
2005; 60 to 99	0.04	0.08	0.6605	1.04	0.88	1.22
2005; 100 to 249	0.09	0.07	0.2053	1.09	0.95	1.26
2005; 250 to 499	0.07	0.07	0.2987	1.07	0.94	1.23
2005; 500 to 749	0.07	0.08	0.3468	1.08	0.92	1.26
2005; 750 to 999	0.14	0.11	0.2066	1.16	0.92	1.45
2005; 1,000+	0.23	0.15	0.1158	1.26	0.94	1.67
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.14	0.10	0.1407	0.87	0.72	1.05
2006; 40 to 59	-0.10	0.10	0.3163	0.91	0.75	1.10
2006; 60 to 99	-0.00	0.08	0.9675	1.00	0.84	1.18
2006; 100 to 249	-0.05	0.07	0.4372	0.95	0.82	1.09
2006; 250 to 499	-0.02	0.07	0.7424	0.98	0.85	1.12

(continued)

Table A.4.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 500 to 749	0.02	0.08	0.7714	1.02	0.88	1.19
2006; 750 to 999	0.03	0.11	0.7948	1.03	0.83	1.28
2006; 1,000+	0.24	0.14	0.0931	1.27	0.96	1.69
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.03	0.09	0.7130	0.97	0.81	1.16
2007; 40 to 59	-0.04	0.09	0.6806	0.96	0.80	1.16
2007; 60 to 99	-0.08	0.09	0.3697	0.92	0.78	1.10
2007; 100 to 249	-0.02	0.07	0.7740	0.98	0.85	1.13
2007; 250 to 499	-0.04	0.07	0.6296	0.97	0.84	1.11
2007; 500 to 749	0.02	0.08	0.7695	1.02	0.87	1.20
2007; 750 to 999	-0.02	0.11	0.8923	0.98	0.79	1.23
2007; 1,000+	0.24	0.15	0.0944	1.28	0.96	1.70

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-0.66	0.13	0.0000	0.52	0.40	0.68
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.22	0.04	0.0000	9.17	8.47	9.92
26 to 34	2.43	0.06	0.0000	11.35	10.03	12.86
35 to 49	2.67	0.06	0.0000	14.38	12.81	16.15
50+	1.89	0.06	0.0000	6.59	5.87	7.40
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.12	0.02	0.0000	0.89	0.85	0.92
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.50	0.02	0.0000	0.61	0.58	0.64
Other, Non-Hispanic	-0.51	0.02	0.0000	0.60	0.57	0.63
Hispanic	-0.22	0.02	0.0000	0.80	0.77	0.83
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.00	0.02	0.8642	1.00	0.96	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.03	0.0243	1.07	1.01	1.14
Other, Non-Hispanic	-0.05	0.05	0.2762	0.95	0.86	1.04
Hispanic	0.07	0.03	0.0616	1.07	1.00	1.14
Average Miles per Week during the Quarter	-0.00	0.00	0.2118	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.5776	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.04	0.05	0.4675	1.04	0.94	1.14
41 to 50; 26 to 34	0.18	0.08	0.0194	1.20	1.03	1.39
41 to 50, 35 to 49	-0.07	0.07	0.2811	0.93	0.81	1.06
41 to 50; 50+	0.07	0.07	0.3558	1.07	0.93	1.23
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.15	0.05	0.0012	1.16	1.06	1.27
51 to 60; 26 to 34	0.41	0.07	0.0000	1.50	1.30	1.73
51 to 60, 35 to 49	0.24	0.07	0.0003	1.27	1.12	1.45
51 to 60; 50+	0.22	0.06	0.0005	1.25	1.10	1.42
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 18 to 25	0.17	0.05	0.0003	1.18	1.08	1.29
61+; 26 to 34	0.33	0.07	0.0000	1.39	1.20	1.61
61+; 35 to 49	0.19	0.07	0.0045	1.21	1.06	1.37
61+; 50+	0.26	0.07	0.0001	1.30	1.14	1.48

(continued)

Table A.4.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.5587	0.99	0.95	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.05	0.04	0.2265	0.95	0.87	1.03
Black, Non-Hispanic; Other Non-Hispanic	-0.13	0.08	0.1185	0.88	0.75	1.03
Black, Non-Hispanic; Hispanic	-0.24	0.05	0.0000	0.79	0.71	0.88
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.21	0.14	0.1421	0.81	0.61	1.07
Other, Non-Hispanic; Other Non-Hispanic	-0.16	0.09	0.0784	0.86	0.72	1.02
Other, Non-Hispanic; Hispanic	-0.10	0.12	0.4094	0.91	0.72	1.15
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.22	0.06	0.0004	0.81	0.71	0.91
Hispanic; Other Non-Hispanic	-0.39	0.07	0.0000	0.68	0.59	0.78
Hispanic; Hispanic	-0.47	0.04	0.0000	0.62	0.57	0.68
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	0.05	0.08	0.5133	1.05	0.91	1.22
40 to 59	0.01	0.07	0.9382	1.01	0.88	1.15
60 to 99	-0.03	0.06	0.6470	0.97	0.86	1.10
100 to 249	-0.07	0.06	0.2244	0.93	0.83	1.04
250 to 499	-0.02	0.06	0.7041	0.98	0.88	1.09
500 to 749	-0.10	0.07	0.1668	0.91	0.79	1.04
750 to 999	-0.13	0.11	0.2118	0.88	0.71	1.08
1,000+	-0.24	0.16	0.1408	0.79	0.57	1.08
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.27	0.14	0.0653	1.31	0.98	1.73
2004	0.13	0.15	0.3900	1.14	0.85	1.52
2005	0.10	0.15	0.5044	1.10	0.83	1.47
2006	0.14	0.17	0.4065	1.16	0.82	1.62
2007	0.26	0.18	0.1521	1.29	0.91	1.84

(continued)

Table A.4.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.05	0.11	0.6253	1.05	0.86	1.30
2003; 40 to 59	0.09	0.11	0.4342	1.09	0.87	1.36
2003; 60 to 99	0.07	0.09	0.4462	1.07	0.89	1.29
2003; 100 to 249	0.08	0.08	0.3338	1.08	0.92	1.28
2003; 250 to 499	0.05	0.08	0.5608	1.05	0.89	1.23
2003; 500 to 749	0.08	0.10	0.4164	1.08	0.90	1.31
2003; 750 to 999	0.15	0.14	0.2611	1.16	0.89	1.52
2003; 1,000+	0.12	0.19	0.5071	1.13	0.79	1.63
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	-0.01	0.11	0.9102	0.99	0.80	1.23
2004; 40 to 59	0.09	0.11	0.4389	1.09	0.88	1.36
2004; 60 to 99	0.04	0.10	0.7155	1.04	0.85	1.26
2004; 100 to 249	0.14	0.09	0.1011	1.15	0.97	1.36
2004; 250 to 499	0.08	0.08	0.3293	1.08	0.92	1.28
2004; 500 to 749	0.24	0.10	0.0114	1.27	1.06	1.54
2004; 750 to 999	0.20	0.13	0.1265	1.22	0.95	1.58
2004; 1,000+	0.27	0.18	0.1338	1.31	0.92	1.86
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	-0.04	0.10	0.7042	0.96	0.79	1.17
2005; 40 to 59	0.10	0.11	0.3631	1.10	0.90	1.35
2005; 60 to 99	0.03	0.09	0.7317	1.03	0.86	1.23
2005; 100 to 249	0.09	0.08	0.2555	1.09	0.94	1.28
2005; 250 to 499	-0.01	0.08	0.8939	0.99	0.85	1.15
2005; 500 to 749	0.09	0.09	0.3142	1.09	0.92	1.30
2005; 750 to 999	0.13	0.12	0.3169	1.13	0.89	1.45
2005; 1,000+	0.23	0.17	0.1832	1.26	0.90	1.76
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	0.02	0.11	0.8319	1.02	0.83	1.26
2006; 40 to 59	0.04	0.11	0.7054	1.04	0.85	1.28
2006; 60 to 99	0.11	0.10	0.2501	1.12	0.93	1.35
2006; 100 to 249	-0.00	0.08	0.9682	1.00	0.85	1.17
2006; 250 to 499	0.01	0.08	0.9328	1.01	0.86	1.18
2006; 500 to 749	0.12	0.09	0.2021	1.13	0.94	1.35
2006; 750 to 999	0.09	0.12	0.4798	1.09	0.86	1.39
2006; 1,000+	0.19	0.17	0.2676	1.21	0.86	1.70
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	0.00	0.11	0.9761	1.00	0.81	1.25
2007; 40 to 59	-0.07	0.11	0.5187	0.93	0.75	1.15
2007; 60 to 99	0.00	0.10	0.9707	1.00	0.83	1.22

(continued)

Table A.4.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2007; 100 to 249	0.04	0.09	0.6219	1.05	0.88	1.25
2007; 250 to 499	-0.04	0.09	0.6130	0.96	0.81	1.14
2007; 500 to 749	0.07	0.10	0.4715	1.07	0.89	1.29
2007; 750 to 999	0.10	0.13	0.4470	1.10	0.86	1.42
2007; 1,000+	0.14	0.17	0.4216	1.15	0.82	1.62

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-1.10	0.12	0.0000	0.33	0.26	0.43
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.04	0.04	0.0000	7.65	7.11	8.24
26 to 34	1.90	0.05	0.0000	6.70	6.09	7.37
35 to 49	1.77	0.04	0.0000	5.87	5.38	6.40
50+	0.96	0.05	0.0000	2.62	2.38	2.88
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.12	0.02	0.0000	0.89	0.86	0.92
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.52	0.02	0.0000	0.59	0.57	0.62
Other, Non-Hispanic	-0.46	0.02	0.0000	0.63	0.61	0.66
Hispanic	-0.26	0.02	0.0000	0.77	0.74	0.80
Total Family Income						
<$20,000 (RC)	0.00	0.00		1.00	1.00	1.00
$20,000 to $49,999	0.17	0.01	0.0000	1.19	1.16	1.22
$50,000 to $74,999	0.27	0.02	0.0000	1.30	1.27	1.34
≥$75,000	0.38	0.02	0.0000	1.46	1.41	1.50
Any Interview Refusals?						
Yes	-0.08	0.02	0.0015	0.93	0.88	0.97
No (RC)	0.00	0.00		1.00	1.00	1.00
Person-Level Nonresponse Adjustment Factor	-0.04	0.01	0.0098	0.96	0.94	0.99
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.01	0.03	0.7958	1.01	0.95	1.06
51 to 60	-0.06	0.03	0.0238	0.94	0.89	0.99
61+	-0.04	0.03	0.1367	0.96	0.91	1.01
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.01	0.02	0.6767	0.99	0.96	1.02
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.03	0.0093	1.07	1.02	1.13
Other, Non-Hispanic	-0.07	0.04	0.1068	0.93	0.86	1.01
Hispanic	0.03	0.03	0.3793	1.03	0.97	1.09
Average Miles per Week during the Quarter	-0.00	0.00	0.0003	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0059	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
41 to 50, 18 to 25	0.01	0.04	0.8797	1.01	0.92	1.10
41 to 50; 26 to 34	0.13	0.06	0.0291	1.14	1.01	1.27
41 to 50, 35 to 49	-0.09	0.05	0.0724	0.91	0.83	1.01
41 to 50; 50+	0.03	0.06	0.5546	1.03	0.93	1.16
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.13	0.04	0.0019	1.14	1.05	1.24
51 to 60; 26 to 34	0.25	0.06	0.0000	1.28	1.15	1.43
51 to 60, 35 to 49	0.06	0.05	0.2063	1.06	0.97	1.17
51 to 60; 50+	0.06	0.05	0.2938	1.06	0.95	1.17
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 18 to 25	0.12	0.04	0.0051	1.12	1.04	1.22
61+; 26 to 34	0.16	0.06	0.0052	1.17	1.05	1.31
61+; 35 to 49	0.05	0.05	0.3150	1.05	0.95	1.16
61+; 50+	0.06	0.05	0.2519	1.06	0.96	1.18
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.02	0.02	0.2431	0.98	0.94	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.05	0.04	0.1641	0.95	0.88	1.02
Black, Non-Hispanic; Other Non-Hispanic	-0.17	0.07	0.0119	0.84	0.74	0.96
Black, Non-Hispanic; Hispanic	-0.23	0.05	0.0000	0.79	0.72	0.87
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.20	0.13	0.1210	0.82	0.63	1.06
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.08	0.0404	0.86	0.74	0.99
Other, Non-Hispanic; Hispanic	-0.19	0.11	0.0809	0.83	0.67	1.02
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.13	0.05	0.0138	0.88	0.79	0.97
Hispanic; Other Non-Hispanic	-0.27	0.06	0.0000	0.76	0.67	0.86
Hispanic; Hispanic	-0.39	0.04	0.0000	0.68	0.63	0.73

(continued)

Table A.4.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.04	0.07	0.5807	0.96	0.84	1.10
40 to 59	-0.06	0.06	0.3176	0.94	0.83	1.06
60 to 99	-0.04	0.06	0.4422	0.96	0.86	1.07
100 to 249	-0.13	0.05	0.0123	0.88	0.80	0.97
250 to 499	-0.07	0.05	0.1837	0.94	0.85	1.03
500 to 749	-0.15	0.06	0.0134	0.86	0.76	0.97
750 to 999	-0.27	0.10	0.0048	0.76	0.63	0.92
1,000+	-0.38	0.15	0.0107	0.69	0.51	0.92
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.20	0.13	0.1120	1.22	0.95	1.57
2004	0.18	0.14	0.2053	1.20	0.90	1.60
2005	0.06	0.15	0.6832	1.06	0.80	1.41
2006	0.20	0.15	0.1945	1.22	0.90	1.63
2007	0.19	0.16	0.2198	1.21	0.89	1.64
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.15	0.10	0.1228	1.16	0.96	1.41
2003; 40 to 59	0.09	0.10	0.3701	1.10	0.89	1.35
2003; 60 to 99	0.05	0.09	0.5695	1.05	0.89	1.24
2003; 100 to 249	0.14	0.08	0.0676	1.15	0.99	1.34
2003; 250 to 499	0.09	0.08	0.2277	1.10	0.94	1.27
2003; 500 to 749	0.16	0.09	0.0758	1.17	0.98	1.39
2003; 750 to 999	0.26	0.13	0.0414	1.29	1.01	1.66
2003; 1,000+	0.25	0.17	0.1459	1.28	0.92	1.80
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.04	0.10	0.7034	1.04	0.86	1.26
2004; 40 to 59	0.06	0.10	0.5323	1.07	0.87	1.30
2004; 60 to 99	0.02	0.09	0.8514	1.02	0.86	1.21
2004; 100 to 249	0.15	0.08	0.0542	1.16	1.00	1.34
2004; 250 to 499	0.03	0.07	0.7181	1.03	0.89	1.19
2004; 500 to 749	0.22	0.09	0.0115	1.24	1.05	1.47
2004; 750 to 999	0.28	0.12	0.0171	1.32	1.05	1.66
2004; 1,000+	0.29	0.17	0.0795	1.34	0.97	1.85
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.07	0.09	0.4711	1.07	0.89	1.28
2005; 40 to 59	0.17	0.09	0.0770	1.18	0.98	1.42
2005; 60 to 99	-0.01	0.08	0.9500	0.99	0.85	1.17

(continued)

Table A.4.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2005; 100 to 249	0.12	0.07	0.1088	1.12	0.97	1.29
2005; 250 to 499	-0.00	0.07	0.9533	1.00	0.87	1.14
2005; 500 to 749	0.11	0.08	0.1585	1.12	0.96	1.31
2005; 750 to 999	0.23	0.11	0.0384	1.26	1.01	1.57
2005; 1,000+	0.31	0.16	0.0460	1.37	1.01	1.86
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	0.09	0.10	0.3449	1.10	0.91	1.33
2006; 40 to 59	0.09	0.09	0.3227	1.10	0.91	1.31
2006; 60 to 99	0.18	0.09	0.0360	1.20	1.01	1.43
2006; 100 to 249	0.10	0.07	0.1790	1.10	0.96	1.28
2006; 250 to 499	0.07	0.07	0.3528	1.07	0.93	1.24
2006; 500 to 749	0.20	0.08	0.0170	1.22	1.04	1.44
2006; 750 to 999	0.28	0.11	0.0136	1.32	1.06	1.65
2006; 1,000+	0.38	0.16	0.0157	1.46	1.07	1.99
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	0.05	0.10	0.6123	1.05	0.87	1.27
2007; 40 to 59	0.01	0.09	0.8873	1.01	0.85	1.21
2007; 60 to 99	0.00	0.08	0.9746	1.00	0.85	1.18
2007; 100 to 249	0.07	0.07	0.3314	1.07	0.93	1.24
2007; 250 to 499	-0.04	0.07	0.5951	0.96	0.83	1.11
2007; 500 to 749	0.11	0.08	0.1672	1.12	0.95	1.32
2007; 750 to 999	0.18	0.11	0.1035	1.20	0.96	1.50
2007; 1,000+	0.25	0.16	0.1049	1.29	0.95	1.75

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.05	0.12	0.0000	0.13	0.10	0.16
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.63	0.04	0.0000	5.08	4.72	5.47
26 to 34	1.51	0.05	0.0000	4.52	4.13	4.96
35 to 49	1.75	0.04	0.0000	5.77	5.31	6.28
50+	0.31	0.06	0.0000	1.36	1.22	1.52
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.21	0.02	0.0000	0.81	0.78	0.84
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.34	0.02	0.0000	0.72	0.69	0.74
Other, Non-Hispanic	-0.40	0.02	0.0000	0.67	0.64	0.70
Hispanic	-0.38	0.02	0.0000	0.69	0.66	0.71
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.07	0.03	0.0469	1.07	1.00	1.14
51 to 60	-0.01	0.03	0.7682	0.99	0.93	1.06
61+	-0.02	0.03	0.6134	0.98	0.92	1.05
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.03	0.02	0.0930	1.03	1.00	1.06
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.02	0.0031	1.08	1.03	1.13
Other, Non-Hispanic	0.01	0.04	0.7982	1.01	0.93	1.10
Hispanic	0.06	0.03	0.0281	1.06	1.01	1.13
Average Miles per Week during the Quarter	-0.00	0.00	0.0001	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0954	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.02	0.04	0.6982	0.98	0.90	1.07
41 to 50; 26 to 34	-0.00	0.06	0.9895	1.00	0.90	1.11
41 to 50, 35 to 49	-0.05	0.05	0.3229	0.95	0.87	1.05
41 to 50; 50+	0.05	0.06	0.4267	1.05	0.93	1.20
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.04	0.04	0.3581	1.04	0.96	1.13
51 to 60; 26 to 34	0.14	0.05	0.0084	1.15	1.04	1.28
51 to 60, 35 to 49	0.10	0.05	0.0324	1.11	1.01	1.21
51 to 60; 50+	0.06	0.06	0.3217	1.06	0.94	1.20
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.07	0.04	0.0804	1.08	0.99	1.17
61+; 26 to 34	0.14	0.05	0.0098	1.15	1.03	1.27
61+; 35 to 49	0.11	0.05	0.0198	1.12	1.02	1.22
61+; 50+	0.10	0.06	0.1184	1.10	0.98	1.24
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.07	0.02	0.0002	0.93	0.90	0.97
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.10	0.04	0.0073	0.90	0.84	0.97
Black, Non-Hispanic; Other Non-Hispanic	-0.37	0.07	0.0000	0.69	0.61	0.79
Black, Non-Hispanic; Hispanic	-0.27	0.05	0.0000	0.76	0.69	0.84
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.11	0.12	0.3904	0.90	0.71	1.14
Other, Non-Hispanic; Other Non-Hispanic	-0.21	0.08	0.0084	0.81	0.69	0.95
Other, Non-Hispanic; Hispanic	-0.21	0.11	0.0546	0.81	0.66	1.00
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.37	0.05	0.0000	0.69	0.62	0.77
Hispanic; Other Non-Hispanic	-0.57	0.06	0.0000	0.57	0.50	0.64
Hispanic; Hispanic	-0.87	0.04	0.0000	0.42	0.39	0.45
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.06	0.07	0.3583	0.94	0.83	1.07
40 to 59	-0.07	0.07	0.2781	0.93	0.82	1.06
60 to 99	-0.09	0.06	0.1196	0.91	0.82	1.02
100 to 249	-0.12	0.05	0.0212	0.88	0.80	0.98
250 to 499	-0.09	0.05	0.0981	0.92	0.83	1.02
500 to 749	-0.20	0.07	0.0033	0.82	0.72	0.94
750 to 999	-0.27	0.09	0.0048	0.77	0.64	0.92
1,000+	-0.38	0.12	0.0013	0.69	0.55	0.86

(continued)

Table A.4.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.04	0.13	0.7889	0.97	0.75	1.25
2004	0.05	0.14	0.7468	1.05	0.79	1.39
2005	-0.11	0.14	0.4333	0.89	0.67	1.18
2006	-0.07	0.14	0.6217	0.93	0.71	1.23
2007	-0.05	0.15	0.7291	0.95	0.71	1.27
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	-0.01	0.10	0.9335	0.99	0.82	1.20
2003; 40 to 59	0.11	0.10	0.2717	1.12	0.92	1.36
2003; 60 to 99	0.11	0.09	0.1885	1.12	0.95	1.33
2003; 100 to 249	0.16	0.08	0.0554	1.17	1.00	1.37
2003; 250 to 499	0.07	0.08	0.3649	1.07	0.92	1.26
2003; 500 to 749	0.15	0.09	0.1035	1.16	0.97	1.39
2003; 750 to 999	0.18	0.12	0.1390	1.20	0.94	1.53
2003; 1,000+	0.27	0.15	0.0818	1.31	0.97	1.76
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.04	0.09	0.6701	1.04	0.86	1.25
2004; 40 to 59	0.10	0.10	0.3099	1.11	0.91	1.34
2004; 60 to 99	0.08	0.09	0.3604	1.08	0.91	1.29
2004; 100 to 249	0.17	0.08	0.0266	1.18	1.02	1.38
2004; 250 to 499	0.09	0.07	0.2441	1.09	0.94	1.26
2004; 500 to 749	0.25	0.09	0.0042	1.28	1.08	1.51
2004; 750 to 999	0.28	0.11	0.0120	1.33	1.06	1.65
2004; 1,000+	0.29	0.14	0.0326	1.34	1.02	1.75
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.03	0.09	0.7538	1.03	0.86	1.23
2005; 40 to 59	0.07	0.09	0.4491	1.07	0.89	1.29
2005; 60 to 99	0.09	0.08	0.2853	1.09	0.93	1.29
2005; 100 to 249	0.07	0.07	0.3536	1.07	0.93	1.24
2005; 250 to 499	0.04	0.07	0.5800	1.04	0.90	1.20
2005; 500 to 749	0.15	0.08	0.0771	1.16	0.98	1.37
2005; 750 to 999	0.20	0.11	0.0810	1.22	0.98	1.51
2005; 1,000+	0.26	0.13	0.0430	1.30	1.01	1.68
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	0.07	0.09	0.4539	1.07	0.89	1.29
2006; 40 to 59	0.07	0.10	0.4526	1.08	0.89	1.31
2006; 60 to 99	0.08	0.09	0.3531	1.08	0.92	1.28
2006; 100 to 249	0.05	0.07	0.4746	1.05	0.91	1.22
2006; 250 to 499	0.11	0.07	0.1365	1.12	0.97	1.29

(continued)

Table A.4.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 500 to 749	0.20	0.09	0.0199	1.22	1.03	1.44
2006; 750 to 999	0.22	0.11	0.0440	1.25	1.01	1.55
2006; 1,000+	0.33	0.13	0.0099	1.39	1.08	1.79
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.03	0.09	0.7745	0.97	0.81	1.17
2007; 40 to 59	0.04	0.10	0.7096	1.04	0.86	1.26
2007; 60 to 99	0.04	0.09	0.6536	1.04	0.88	1.23
2007; 100 to 249	0.03	0.08	0.6631	1.03	0.89	1.20
2007; 250 to 499	0.01	0.08	0.8519	1.01	0.87	1.18
2007; 500 to 749	0.13	0.09	0.1340	1.14	0.96	1.35
2007; 750 to 999	0.06	0.11	0.5791	1.06	0.86	1.32
2007; 1,000+	0.26	0.13	0.0450	1.29	1.01	1.67

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-1.99	0.14	0.0000	0.14	0.10	0.18
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.76	0.04	0.0000	2.14	1.98	2.32
26 to 34	-0.03	0.06	0.6165	0.97	0.86	1.10
35 to 49	-0.52	0.06	0.0000	0.59	0.53	0.67
50+	-2.17	0.15	0.0000	0.11	0.08	0.15
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.33	0.02	0.0000	0.72	0.69	0.75
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.27	0.02	0.0000	0.77	0.73	0.80
Other, Non-Hispanic	-0.25	0.02	0.0000	0.78	0.75	0.82
Hispanic	-0.30	0.02	0.0000	0.74	0.71	0.77
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.04	0.04	0.2831	1.04	0.97	1.12
51 to 60	0.02	0.04	0.6514	1.02	0.95	1.09
61+	0.06	0.03	0.0672	1.07	1.00	1.14
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.02	0.02	0.3072	1.02	0.98	1.06
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.08	0.03	0.0039	1.09	1.03	1.15
Other, Non-Hispanic	0.01	0.06	0.8767	1.01	0.90	1.13
Hispanic	0.04	0.03	0.2579	1.04	0.97	1.11
Average Miles per Week during the Quarter	-0.00	0.00	0.0003	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0111	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.03	0.05	0.5392	1.03	0.94	1.13
41 to 50; 26 to 34	0.04	0.07	0.5678	1.04	0.90	1.20
41 to 50, 35 to 49	-0.01	0.07	0.8835	0.99	0.86	1.14
41 to 50; 50+	0.33	0.17	0.0513	1.39	1.00	1.93
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.03	0.05	0.5127	1.03	0.94	1.13
51 to 60; 26 to 34	0.04	0.07	0.5192	1.05	0.91	1.20
51 to 60, 35 to 49	0.01	0.07	0.8733	1.01	0.88	1.16
51 to 60; 50+	0.14	0.17	0.3949	1.15	0.83	1.60
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.03	0.05	0.5150	1.03	0.94	1.13
61+; 26 to 34	-0.00	0.07	0.9669	1.00	0.87	1.15
61+; 35 to 49	-0.10	0.07	0.1506	0.91	0.79	1.04
61+; 50+	0.06	0.17	0.7084	1.06	0.77	1.48
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.07	0.02	0.0039	0.94	0.89	0.98
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	0.00	0.04	0.9641	1.00	0.92	1.09
Black, Non-Hispanic; Other Non-Hispanic	-0.35	0.08	0.0000	0.70	0.60	0.82
Black, Non-Hispanic; Hispanic	-0.28	0.06	0.0000	0.75	0.67	0.85
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.21	0.16	0.2107	0.81	0.59	1.12
Other, Non-Hispanic; Other Non-Hispanic	-0.22	0.09	0.0176	0.80	0.66	0.96
Other, Non-Hispanic; Hispanic	-0.16	0.13	0.2146	0.85	0.67	1.10
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.25	0.07	0.0001	0.77	0.68	0.88
Hispanic; Other Non-Hispanic	-0.53	0.08	0.0000	0.59	0.51	0.69
Hispanic; Hispanic	-0.70	0.05	0.0000	0.49	0.45	0.54
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.05	0.08	0.5124	0.95	0.81	1.11
40 to 59	-0.01	0.08	0.8740	0.99	0.85	1.15
60 to 99	-0.01	0.07	0.8512	0.99	0.86	1.13
100 to 249	-0.10	0.06	0.0954	0.90	0.80	1.02
250 to 499	-0.06	0.06	0.3047	0.94	0.83	1.06
500 to 749	-0.19	0.08	0.0115	0.82	0.71	0.96
750 to 999	-0.33	0.13	0.0084	0.72	0.56	0.92
1,000+	-0.63	0.15	0.0000	0.53	0.40	0.71

(continued)

Table A.4.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.03	0.17	0.8771	1.03	0.74	1.42
2004	0.24	0.16	0.1356	1.28	0.93	1.75
2005	-0.16	0.18	0.3968	0.86	0.60	1.23
2006	-0.19	0.18	0.2946	0.83	0.58	1.18
2007	-0.03	0.21	0.8667	0.97	0.64	1.45
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.04	0.12	0.7419	1.04	0.83	1.31
2003; 40 to 59	0.19	0.12	0.1067	1.22	0.96	1.54
2003; 60 to 99	0.06	0.10	0.5373	1.07	0.87	1.31
2003; 100 to 249	0.17	0.09	0.0712	1.18	0.99	1.42
2003; 250 to 499	0.08	0.09	0.4047	1.08	0.90	1.29
2003; 500 to 749	0.18	0.10	0.0773	1.20	0.98	1.47
2003; 750 to 999	0.24	0.16	0.1382	1.27	0.93	1.73
2003; 1,000+	0.49	0.18	0.0081	1.63	1.14	2.34
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	-0.00	0.11	0.9841	1.00	0.80	1.25
2004; 40 to 59	0.01	0.12	0.9225	1.01	0.79	1.29
2004; 60 to 99	-0.06	0.10	0.5477	0.94	0.77	1.15
2004; 100 to 249	0.09	0.09	0.3071	1.09	0.92	1.30
2004; 250 to 499	-0.03	0.08	0.7327	0.97	0.82	1.15
2004; 500 to 749	0.11	0.10	0.2861	1.11	0.91	1.36
2004; 750 to 999	0.25	0.14	0.0772	1.29	0.97	1.71
2004; 1,000+	0.61	0.17	0.0004	1.84	1.32	2.58
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.10	0.11	0.3801	1.10	0.89	1.36
2005; 40 to 59	0.08	0.11	0.4950	1.08	0.87	1.34
2005; 60 to 99	0.02	0.10	0.8502	1.02	0.83	1.25
2005; 100 to 249	0.05	0.09	0.5753	1.05	0.88	1.25
2005; 250 to 499	0.04	0.09	0.6194	1.04	0.88	1.24
2005; 500 to 749	0.14	0.10	0.1549	1.15	0.95	1.40
2005; 750 to 999	0.29	0.15	0.0459	1.34	1.01	1.79
2005; 1,000+	0.54	0.16	0.0009	1.72	1.25	2.36
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	0.01	0.11	0.9299	1.01	0.81	1.26
2006; 40 to 59	-0.10	0.12	0.3905	0.90	0.71	1.14
2006; 60 to 99	0.02	0.10	0.8327	1.02	0.83	1.26
2006; 100 to 249	0.02	0.09	0.8468	1.02	0.85	1.22

(continued)

Table A.4.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 250 to 499	0.06	0.09	0.5215	1.06	0.89	1.26
2006; 500 to 749	0.17	0.10	0.0981	1.18	0.97	1.44
2006; 750 to 999	0.26	0.14	0.0725	1.30	0.98	1.72
2006; 1,000+	0.50	0.16	0.0021	1.64	1.20	2.25
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.04	0.11	0.7073	0.96	0.77	1.19
2007; 40 to 59	-0.13	0.12	0.2797	0.87	0.68	1.12
2007; 60 to 99	-0.14	0.11	0.2000	0.87	0.70	1.08
2007; 100 to 249	-0.06	0.09	0.5488	0.94	0.78	1.14
2007; 250 to 499	-0.04	0.09	0.6563	0.96	0.80	1.15
2007; 500 to 749	0.02	0.10	0.8814	1.02	0.83	1.25
2007; 750 to 999	0.10	0.15	0.5000	1.10	0.83	1.47
2007; 1,000+	0.48	0.16	0.0035	1.61	1.17	2.22

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.14	0.14	0.0000	0.12	0.09	0.16
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.85	0.04	0.0000	2.35	2.16	2.55
26 to 34	0.58	0.06	0.0000	1.79	1.60	2.00
35 to 49	0.44	0.05	0.0000	1.56	1.40	1.73
50+	-0.69	0.09	0.0000	0.50	0.42	0.60
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.19	0.02	0.0000	0.82	0.79	0.86
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.70	0.03	0.0000	0.50	0.47	0.52
Other, Non-Hispanic	-0.33	0.03	0.0000	0.72	0.68	0.76
Hispanic	-0.38	0.02	0.0000	0.68	0.65	0.71
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.03	0.04	0.5001	1.03	0.95	1.11
51 to 60	0.00	0.04	0.9453	1.00	0.93	1.08
61+	-0.00	0.04	0.9602	1.00	0.93	1.08
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.03	0.02	0.0925	0.97	0.94	1.00
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.3424	1.03	0.97	1.08
Other, Non-Hispanic	-0.01	0.05	0.8936	0.99	0.90	1.09
Hispanic	0.00	0.03	0.9817	1.00	0.94	1.06
Average Miles per Week during the Quarter	-0.00	0.00	0.0023	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0834	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.06	0.05	0.2023	1.07	0.97	1.18
41 to 50; 26 to 34	0.01	0.07	0.8547	1.01	0.89	1.16
41 to 50, 35 to 49	-0.05	0.06	0.4783	0.96	0.84	1.08
41 to 50; 50+	-0.01	0.10	0.9132	0.99	0.80	1.21
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.09	0.05	0.0516	1.10	1.00	1.21
51 to 60; 26 to 34	0.07	0.06	0.3053	1.07	0.94	1.21
51 to 60, 35 to 49	-0.04	0.06	0.4936	0.96	0.85	1.08
51 to 60; 50+	-0.22	0.10	0.0260	0.80	0.66	0.97
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.13	0.05	0.0062	1.14	1.04	1.26
61+; 26 to 34	0.05	0.06	0.4557	1.05	0.93	1.19
61+; 35 to 49	-0.06	0.06	0.3114	0.94	0.84	1.06
61+; 50+	-0.06	0.10	0.5118	0.94	0.77	1.14
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.5730	0.99	0.94	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.11	0.05	0.0160	0.89	0.82	0.98
Black, Non-Hispanic; Other Non-Hispanic	-0.35	0.08	0.0000	0.70	0.60	0.83
Black, Non-Hispanic; Hispanic	-0.36	0.06	0.0000	0.70	0.62	0.79
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.03	0.19	0.8728	0.97	0.67	1.41
Other, Non-Hispanic; Other Non-Hispanic	-0.30	0.10	0.0017	0.74	0.61	0.89
Other, Non-Hispanic; Hispanic	-0.20	0.12	0.0983	0.82	0.65	1.04
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.30	0.07	0.0001	0.74	0.64	0.86
Hispanic; Other Non-Hispanic	-0.29	0.07	0.0001	0.75	0.65	0.87
Hispanic; Hispanic	-0.55	0.04	0.0000	0.58	0.53	0.63
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.03	0.07	0.6529	0.97	0.84	1.11
40 to 59	-0.07	0.07	0.3630	0.94	0.81	1.08
60 to 99	-0.05	0.06	0.4366	0.95	0.84	1.08
100 to 249	-0.16	0.06	0.0045	0.85	0.76	0.95
250 to 499	-0.22	0.06	0.0001	0.80	0.72	0.90
500 to 749	-0.39	0.07	0.0000	0.68	0.59	0.78
750 to 999	-0.46	0.12	0.0002	0.63	0.50	0.80
1,000+	-0.47	0.14	0.0009	0.62	0.47	0.82

(continued)

Table A.4.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.03	0.18	0.8863	1.03	0.73	1.45
2004	0.08	0.15	0.6097	1.08	0.80	1.47
2005	-0.06	0.16	0.7211	0.94	0.69	1.29
2006	0.01	0.17	0.9406	1.01	0.73	1.41
2007	0.26	0.18	0.1460	1.29	0.91	1.83
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.02	0.11	0.8841	1.02	0.83	1.25
2003; 40 to 59	0.08	0.11	0.4642	1.09	0.87	1.36
2003; 60 to 99	-0.07	0.10	0.4458	0.93	0.77	1.12
2003; 100 to 249	0.12	0.09	0.1527	1.13	0.96	1.34
2003; 250 to 499	0.09	0.09	0.2701	1.10	0.93	1.30
2003; 500 to 749	0.21	0.10	0.0329	1.24	1.02	1.51
2003; 750 to 999	0.07	0.15	0.6245	1.08	0.80	1.44
2003; 1,000+	0.16	0.18	0.3687	1.17	0.83	1.67
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.07	0.11	0.5516	1.07	0.86	1.33
2004; 40 to 59	0.10	0.11	0.3635	1.10	0.89	1.36
2004; 60 to 99	0.10	0.09	0.2733	1.11	0.92	1.33
2004; 100 to 249	0.20	0.08	0.0124	1.23	1.05	1.44
2004; 250 to 499	0.17	0.08	0.0244	1.19	1.02	1.38
2004; 500 to 749	0.34	0.09	0.0004	1.40	1.16	1.68
2004; 750 to 999	0.35	0.14	0.0099	1.42	1.09	1.86
2004; 1,000+	0.33	0.16	0.0431	1.39	1.01	1.93
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.07	0.10	0.4674	1.08	0.88	1.31
2005; 40 to 59	-0.01	0.11	0.9134	0.99	0.80	1.22
2005; 60 to 99	-0.06	0.10	0.5632	0.95	0.78	1.14
2005; 100 to 249	0.10	0.08	0.2210	1.11	0.94	1.31
2005; 250 to 499	0.17	0.08	0.0331	1.19	1.01	1.40
2005; 500 to 749	0.30	0.10	0.0017	1.35	1.12	1.63
2005; 750 to 999	0.35	0.14	0.0121	1.42	1.08	1.87
2005; 1,000+	0.28	0.16	0.0706	1.33	0.98	1.80
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.09	0.11	0.4122	0.92	0.75	1.13
2006; 40 to 59	0.02	0.11	0.8670	1.02	0.82	1.27
2006; 60 to 99	-0.01	0.10	0.8764	0.99	0.82	1.19
2006; 100 to 249	0.07	0.08	0.3831	1.08	0.91	1.27

(continued)

Table A.4.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 250 to 499	0.16	0.08	0.0552	1.17	1.00	1.38
2006; 500 to 749	0.25	0.10	0.0091	1.28	1.06	1.55
2006; 750 to 999	0.24	0.14	0.0800	1.27	0.97	1.67
2006; 1,000+	0.29	0.15	0.0610	1.33	0.99	1.80
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	0.03	0.11	0.7722	1.03	0.84	1.27
2007; 40 to 59	-0.06	0.11	0.6060	0.94	0.75	1.18
2007; 60 to 99	-0.10	0.11	0.3669	0.91	0.74	1.12
2007; 100 to 249	0.03	0.09	0.7649	1.03	0.86	1.23
2007; 250 to 499	0.12	0.09	0.1688	1.13	0.95	1.35
2007; 500 to 749	0.26	0.10	0.0120	1.29	1.06	1.58
2007; 750 to 999	0.25	0.14	0.0798	1.28	0.97	1.69
2007; 1,000+	0.24	0.16	0.1235	1.27	0.94	1.74

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.35	0.17	0.0000	0.10	0.07	0.13
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.46	0.05	0.0000	1.58	1.43	1.76
26 to 34	-0.15	0.09	0.0722	0.86	0.73	1.01
35 to 49	-0.47	0.08	0.0000	0.62	0.53	0.74
50+	-1.80	0.18	0.0000	0.17	0.12	0.24
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.09	0.03	0.0010	0.91	0.86	0.96
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.67	0.04	0.0000	0.51	0.48	0.55
Other, Non-Hispanic	-0.25	0.03	0.0000	0.78	0.73	0.83
Hispanic	-0.32	0.03	0.0000	0.73	0.69	0.77
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.04	0.05	0.4544	1.04	0.94	1.14
51 to 60	0.01	0.05	0.8405	1.01	0.92	1.10
61+	0.04	0.05	0.4310	1.04	0.95	1.14
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.8888	1.00	0.96	1.05
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.00	0.04	0.9477	1.00	0.93	1.07
Other, Non-Hispanic	-0.12	0.07	0.0888	0.88	0.76	1.02
Hispanic	-0.04	0.04	0.3156	0.96	0.88	1.04
Average Miles per Week during the Quarter	-0.00	0.00	0.0161	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0169	1.00	1.00	1.01
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.01	0.06	0.9131	0.99	0.88	1.12
41 to 50; 26 to 34	0.01	0.10	0.9311	1.01	0.83	1.23
41 to 50, 35 to 49	-0.19	0.10	0.0611	0.83	0.68	1.01
41 to 50; 50+	-0.01	0.21	0.9642	0.99	0.66	1.48
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.04	0.06	0.5200	1.04	0.93	1.16
51 to 60; 26 to 34	0.04	0.10	0.6653	1.04	0.86	1.26
51 to 60, 35 to 49	-0.17	0.09	0.0766	0.85	0.70	1.02
51 to 60; 50+	-0.19	0.20	0.3484	0.83	0.56	1.23
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 18 to 25	0.05	0.06	0.3700	1.06	0.94	1.19

(continued)

Table A.4.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 26 to 34	-0.05	0.10	0.5954	0.95	0.79	1.15
61+; 35 to 49	-0.24	0.10	0.0112	0.78	0.65	0.95
61+; 50+	-0.22	0.20	0.2670	0.80	0.55	1.18
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.04	0.03	0.2063	0.96	0.90	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.01	0.06	0.8514	0.99	0.87	1.12
Black, Non-Hispanic; Other Non-Hispanic	-0.48	0.12	0.0000	0.62	0.49	0.78
Black, Non-Hispanic; Hispanic	-0.33	0.08	0.0001	0.72	0.61	0.84
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.23	0.23	0.3232	1.26	0.80	1.98
Other, Non-Hispanic; Other Non-Hispanic	-0.16	0.15	0.2843	0.86	0.64	1.14
Other, Non-Hispanic; Hispanic	-0.16	0.17	0.3492	0.85	0.61	1.19
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.16	0.10	0.1012	0.85	0.70	1.03
Hispanic; Other Non-Hispanic	-0.36	0.10	0.0006	0.70	0.57	0.86
Hispanic; Hispanic	-0.44	0.06	0.0000	0.64	0.57	0.72
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.06	0.10	0.5530	0.94	0.78	1.14
40 to 59	-0.07	0.10	0.5005	0.94	0.77	1.13
60 to 99	-0.13	0.09	0.1333	0.88	0.74	1.04
100 to 249	-0.18	0.08	0.0185	0.84	0.72	0.97
250 to 499	-0.23	0.08	0.0028	0.79	0.68	0.92
500 to 749	-0.37	0.09	0.0001	0.69	0.57	0.83
750 to 999	-0.68	0.17	0.0000	0.51	0.36	0.70
1,000+	-0.56	0.20	0.0045	0.57	0.39	0.84

(continued)

Table A.4.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.03	0.21	0.8737	1.03	0.68	1.57
2004	0.02	0.21	0.9138	1.02	0.68	1.55
2005	-0.26	0.21	0.2196	0.77	0.51	1.17
2006	0.08	0.23	0.7253	1.08	0.70	1.68
2007	0.28	0.23	0.2133	1.33	0.85	2.07
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	-0.00	0.14	0.9814	1.00	0.75	1.32
2003; 40 to 59	0.08	0.15	0.5894	1.09	0.80	1.47
2003; 60 to 99	-0.00	0.14	1.0000	1.00	0.76	1.31
2003; 100 to 249	0.14	0.12	0.2397	1.15	0.91	1.45
2003; 250 to 499	0.14	0.12	0.2335	1.15	0.91	1.44
2003; 500 to 749	0.22	0.13	0.1012	1.24	0.96	1.60
2003; 750 to 999	0.30	0.21	0.1542	1.35	0.89	2.06
2003; 1,000+	0.29	0.26	0.2690	1.33	0.80	2.22
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.16	0.15	0.3086	1.17	0.86	1.58
2004; 40 to 59	0.14	0.15	0.3432	1.15	0.86	1.55
2004; 60 to 99	0.14	0.14	0.3025	1.15	0.88	1.51
2004; 100 to 249	0.29	0.12	0.0125	1.33	1.06	1.67
2004; 250 to 499	0.30	0.11	0.0061	1.35	1.09	1.68
2004; 500 to 749	0.42	0.13	0.0010	1.51	1.18	1.94
2004; 750 to 999	0.65	0.19	0.0007	1.91	1.32	2.78
2004; 1,000+	0.53	0.23	0.0189	1.70	1.09	2.65
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.24	0.14	0.0777	1.28	0.97	1.68
2005; 40 to 59	0.06	0.15	0.6917	1.06	0.79	1.44
2005; 60 to 99	0.15	0.13	0.2595	1.16	0.90	1.50
2005; 100 to 249	0.23	0.11	0.0422	1.26	1.01	1.57
2005; 250 to 499	0.30	0.11	0.0069	1.35	1.09	1.69
2005; 500 to 749	0.41	0.12	0.0009	1.51	1.19	1.93
2005; 750 to 999	0.73	0.19	0.0001	2.08	1.43	3.02
2005; 1,000+	0.45	0.22	0.0362	1.57	1.03	2.40
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.13	0.15	0.3670	0.88	0.66	1.17
2006; 40 to 59	0.05	0.15	0.7539	1.05	0.78	1.41
2006; 60 to 99	0.02	0.13	0.9055	1.02	0.78	1.32
2006; 100 to 249	0.03	0.11	0.7551	1.04	0.83	1.29

(continued)

Table A.4.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 250 to 499	0.09	0.11	0.4133	1.10	0.88	1.37
2006; 500 to 749	0.18	0.12	0.1478	1.20	0.94	1.52
2006; 750 to 999	0.43	0.19	0.0207	1.54	1.07	2.23
2006; 1,000+	0.37	0.21	0.0866	1.44	0.95	2.19
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.03	0.15	0.8427	0.97	0.73	1.30
2007; 40 to 59	-0.19	0.16	0.2117	0.82	0.61	1.12
2007; 60 to 99	-0.06	0.14	0.6964	0.95	0.72	1.25
2007; 100 to 249	-0.03	0.12	0.7741	0.97	0.76	1.22
2007; 250 to 499	0.01	0.12	0.9510	1.01	0.80	1.27
2007; 500 to 749	0.14	0.13	0.2757	1.15	0.89	1.49
2007; 750 to 999	0.35	0.19	0.0691	1.42	0.97	2.06
2007; 1,000+	0.22	0.22	0.3020	1.25	0.82	1.91

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-4.52	0.19	0.0000	0.01	0.01	0.02
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.02	0.08	0.0000	7.54	6.45	8.82
26 to 34	2.16	0.09	0.0000	8.68	7.31	10.31
35 to 49	2.80	0.08	0.0000	16.39	14.01	19.18
50+	1.30	0.10	0.0000	3.68	3.00	4.51
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.37	0.02	0.0000	0.69	0.66	0.72
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-1.07	0.04	0.0000	0.34	0.32	0.37
Other, Non-Hispanic	-0.43	0.03	0.0000	0.65	0.61	0.69
Hispanic	-0.28	0.03	0.0000	0.76	0.72	0.80
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.15	0.08	0.0749	1.16	0.98	1.37
51 to 60	0.10	0.08	0.2065	1.10	0.95	1.29
61+	0.11	0.08	0.1707	1.12	0.95	1.31
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.8473	1.00	0.96	1.04
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.3864	1.03	0.97	1.09
Other, Non-Hispanic	-0.00	0.05	0.9361	1.00	0.90	1.11
Hispanic	0.03	0.04	0.4388	1.03	0.96	1.10
Average Miles per Week during the Quarter	-0.00	0.00	0.0008	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0748	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.06	0.09	0.5244	0.94	0.79	1.13
41 to 50; 26 to 34	-0.04	0.10	0.7319	0.97	0.79	1.18
41 to 50, 35 to 49	-0.11	0.09	0.2509	0.90	0.75	1.08
41 to 50; 50+	-0.18	0.12	0.1293	0.83	0.66	1.06
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	-0.01	0.09	0.9516	0.99	0.84	1.18
51 to 60; 26 to 34	-0.01	0.10	0.9259	0.99	0.82	1.20
51 to 60, 35 to 49	-0.07	0.09	0.4288	0.93	0.79	1.11
51 to 60; 50+	-0.14	0.11	0.2175	0.87	0.69	1.09
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.03	0.09	0.7712	1.03	0.86	1.22
61+; 26 to 34	-0.01	0.10	0.8925	0.99	0.82	1.19
61+; 35 to 49	-0.13	0.09	0.1575	0.88	0.74	1.05
61+; 50+	-0.23	0.12	0.0550	0.80	0.63	1.00
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.06	0.03	0.0220	0.94	0.89	0.99
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.05	0.06	0.4172	0.95	0.85	1.07
Black, Non-Hispanic; Other Non-Hispanic	-0.39	0.10	0.0001	0.68	0.55	0.83
Black, Non-Hispanic; Hispanic	-0.43	0.08	0.0000	0.65	0.56	0.76
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.12	0.24	0.6170	1.13	0.71	1.80
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.10	0.1277	0.86	0.71	1.04
Other, Non-Hispanic; Hispanic	-0.27	0.13	0.0290	0.76	0.59	0.97
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.25	0.10	0.0077	0.78	0.64	0.93
Hispanic; Other Non-Hispanic	-0.46	0.09	0.0000	0.63	0.53	0.76
Hispanic; Hispanic	-0.56	0.05	0.0000	0.57	0.52	0.63
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.14	0.09	0.1038	0.87	0.73	1.03
40 to 59	-0.18	0.09	0.0429	0.84	0.70	0.99
60 to 99	-0.18	0.08	0.0214	0.84	0.72	0.97
100 to 249	-0.19	0.07	0.0067	0.83	0.73	0.95
250 to 499	-0.20	0.07	0.0033	0.82	0.71	0.93
500 to 749	-0.21	0.09	0.0144	0.81	0.68	0.96
750 to 999	-0.39	0.12	0.0017	0.68	0.53	0.86
1,000+	-0.83	0.17	0.0000	0.44	0.32	0.61

(continued)

Table A.4.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.11	0.21	0.5931	0.89	0.59	1.35
2004	0.03	0.20	0.8792	1.03	0.70	1.51
2005	0.03	0.20	0.8774	1.03	0.69	1.53
2006	0.08	0.20	0.6818	1.09	0.73	1.62
2007	0.13	0.22	0.5516	1.14	0.74	1.78
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	-0.08	0.13	0.5286	0.92	0.72	1.19
2003; 40 to 59	0.11	0.13	0.4080	1.12	0.86	1.45
2003; 60 to 99	0.11	0.12	0.3346	1.12	0.89	1.41
2003; 100 to 249	0.10	0.10	0.3580	1.10	0.90	1.35
2003; 250 to 499	0.03	0.10	0.7938	1.03	0.84	1.26
2003; 500 to 749	0.00	0.12	0.9961	1.00	0.79	1.27
2003; 750 to 999	0.20	0.16	0.2006	1.22	0.90	1.67
2003; 1,000+	0.63	0.20	0.0012	1.88	1.28	2.76
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.08	0.13	0.5153	1.09	0.85	1.40
2004; 40 to 59	0.10	0.13	0.4501	1.10	0.86	1.42
2004; 60 to 99	0.11	0.12	0.3496	1.12	0.89	1.41
2004; 100 to 249	0.11	0.10	0.2672	1.11	0.92	1.35
2004; 250 to 499	0.15	0.09	0.1212	1.16	0.96	1.39
2004; 500 to 749	0.12	0.11	0.2909	1.12	0.91	1.39
2004; 750 to 999	0.32	0.14	0.0238	1.38	1.04	1.83
2004; 1,000+	0.54	0.19	0.0051	1.72	1.18	2.51
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.06	0.12	0.6066	1.07	0.84	1.36
2005; 40 to 59	-0.02	0.13	0.9001	0.98	0.77	1.26
2005; 60 to 99	0.03	0.12	0.8058	1.03	0.82	1.30
2005; 100 to 249	0.06	0.10	0.5164	1.07	0.88	1.29
2005; 250 to 499	0.17	0.10	0.0910	1.18	0.97	1.43
2005; 500 to 749	0.03	0.11	0.7667	1.03	0.83	1.29
2005; 750 to 999	0.29	0.15	0.0469	1.34	1.00	1.79
2005; 1,000+	0.61	0.19	0.0010	1.85	1.28	2.66
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	0.06	0.13	0.6447	1.06	0.82	1.37
2006; 40 to 59	0.18	0.13	0.1798	1.19	0.92	1.55
2006; 60 to 99	0.15	0.11	0.2027	1.16	0.92	1.45
2006; 100 to 249	0.07	0.10	0.5267	1.07	0.87	1.31
2006; 250 to 499	0.14	0.10	0.1489	1.16	0.95	1.41

(continued)

Table A.4.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2006; 500 to 749	0.18	0.12	0.1290	1.19	0.95	1.49
2006; 750 to 999	0.32	0.15	0.0313	1.37	1.03	1.83
2006; 1,000+	0.70	0.18	0.0001	2.01	1.40	2.88
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	0.02	0.13	0.8917	1.02	0.80	1.30
2007; 40 to 59	-0.02	0.13	0.8523	0.98	0.76	1.26
2007; 60 to 99	0.05	0.12	0.6770	1.05	0.84	1.31
2007; 100 to 249	-0.02	0.10	0.8099	0.98	0.80	1.19
2007; 250 to 499	0.05	0.10	0.5943	1.06	0.86	1.29
2007; 500 to 749	0.04	0.12	0.7519	1.04	0.83	1.30
2007; 750 to 999	0.11	0.15	0.4319	1.12	0.84	1.49
2007; 1,000+	0.64	0.18	0.0005	1.90	1.33	2.72

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.10 Unweighted Ordinary Least Squares Regression of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value
Intercept	2.11	0.24	0.0000
Respondent Age			
12 to 17 (RC)	0.00	0.00	
18 to 25	2.65	0.06	0.0000
26 to 34	2.50	0.08	0.0000
35 to 49	2.92	0.07	0.0000
50+	1.14	0.07	0.0000
Respondent Gender			
Male (RC)	0.00	0.00	
Female	-1.20	0.03	0.0000
Respondent Race/Ethnicity			
White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic	-1.79	0.03	0.0000
Other, Non-Hispanic	-0.88	0.04	0.0000
Hispanic	-1.06	0.03	0.0000
Interviewer Age			
Less than 41 (RC)	0.00	0.00	
41 to 50	0.02	0.04	0.6952
51 to 60	-0.08	0.04	0.0380
61+	-0.13	0.04	0.0008
Interviewer Gender			
Male (RC)	0.00	0.00	
Female	0.00	0.03	0.9599
Interviewer Race/Ethnicity			
White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic	0.07	0.05	0.1493
Other, Non-Hispanic	0.06	0.09	0.5212
Hispanic	0.07	0.06	0.1862
Average Miles per Week during the Quarter	-0.00	0.00	0.0047
Average Hours per Week during the Quarter	0.00	0.00	0.3517
Interviewer Age by Respondent Age			
Less than 41; 12 to 17 (RC)	0.00	0.00	
Less than 41, 18 to 25 (RC)	0.00	0.00	
Less than 41; 26 to 34 (RC)	0.00	0.00	
Less than 41, 35 to 49 (RC)	0.00	0.00	
Less than 41; 50+ (RC)	.00	0.00	
41 to 50; 12 to 17 (RC)	0.00	0.00	
41 to 50, 18 to 25	0.15	0.08	0.0423
41 to 50; 26 to 34	0.21	0.10	0.0292
41 to 50, 35 to 49	0.03	0.08	0.6981
41 to 50; 50+	0.10	0.08	0.2491
51 to 60; 12 to 17 (RC)	0.00	0.00	
51 to 60, 18 to 25	0.28	0.07	0.0001
51 to 60; 26 to 34	0.45	0.09	0.0000
51 to 60, 35 to 49	0.19	0.08	0.0201
51 to 60; 50+	0.08	0.08	0.3355
61+; 12 to 17 (RC)	0.00	0.00	
61+; 18 to 25	0.44	0.07	0.0000

(continued)

Table A.4.10 Unweighted Ordinary Least Squares Regression of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value
61+; 26 to 34	0.50	0.09	0.0000
61+; 35 to 49	0.18	0.08	0.0325
61+; 50+	0.15	0.08	0.0658
Interviewer Gender by Respondent Gender			
Male; Male (RC)	0.00	0.00	
Male; Female (RC)	0.00	0.00	
Female; Male (RC)	0.00	0.00	
Female; Female	-0.10	0.03	0.0047
Interviewer Race/Ethnicity by Respondent Race/Ethnicity			
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic; Black Non-Hispanic	-0.12	0.06	0.0564
Black, Non-Hispanic; Other Non-Hispanic	-0.60	0.11	0.0000
Black, Non-Hispanic; Hispanic	-0.64	0.08	0.0000
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Other, Non-Hispanic; Black Non-Hispanic	-0.25	0.19	0.2009
Other, Non-Hispanic; Other Non-Hispanic	-0.68	0.13	0.0000
Other, Non-Hispanic; Hispanic	-0.40	0.17	0.0168
Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Hispanic; Black Non-Hispanic	-0.45	0.07	0.0000
Hispanic; Other Non-Hispanic	-0.96	0.10	0.0000
Hispanic; Hispanic	-1.25	0.07	0.0000
Cumulative Interview Count			
1 to 19 (RC)	0.00	0.00	
20 to 39	-0.04	0.12	0.7242
40 to 59	-0.18	0.12	0.1291
60 to 99	-0.11	0.11	0.3207
100 to 249	-0.23	0.10	0.0188
250 to 499	-0.26	0.10	0.0067
500 to 749	-0.39	0.11	0.0007
750 to 999	-0.63	0.16	0.0001
1,000+	-0.81	0.19	0.0000
Year			
2002 (RC)	0.00	0.00	
2003	-0.17	0.28	0.5539
2004	0.09	0.27	0.7354
2005	-0.18	0.26	0.4824
2006	-0.07	0.26	0.8029
2007	-0.02	0.30	0.9500
Year by Cumulative Interview Count			
2002; 1 to 19 (RC)	0.00	0.00	
2002; 20 to 39 (RC)	0.00	0.00	
2002; 40 to 59 (RC)	0.00	0.00	
2002; 60 to 99 (RC)	0.00	0.00	
2002; 100 to 249 (RC)	0.00	0.00	
2002; 250 to 499 (RC)	0.00	0.00	

(continued)

Table A.4.10 Unweighted Ordinary Least Squares Regression of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value
2002; 500 to 749 (RC)	0.00	0.00	
2002; 750 to 999 (RC)	0.00	0.00	
2002; 1,000+ (RC)	0.00	0.00	
2003; 1 to 19 (RC)	0.00	0.00	
2003; 20 to 39	-0.17	0.17	0.3369
2003; 40 to 59	0.24	0.19	0.2124
2003; 60 to 99	0.06	0.17	0.7354
2003; 100 to 249	0.13	0.15	0.3875
2003; 250 to 499	0.11	0.14	0.4582
2003; 500 to 749	0.14	0.16	0.3892
2003; 750 to 999	0.27	0.21	0.2091
2003; 1,000+	0.42	0.23	0.0729
2004; 1 to 19 (RC)	0.00	0.00	
2004; 20 to 39	-0.00	0.18	0.9864
2004; 40 to 59	0.13	0.18	0.4769
2004; 60 to 99	0.04	0.16	0.8022
2004; 100 to 249	0.17	0.14	0.2145
2004; 250 to 499	0.12	0.13	0.3582
2004; 500 to 749	0.31	0.15	0.0415
2004; 750 to 999	0.50	0.19	0.0100
2004; 1,000+	0.60	0.22	0.0069
2005; 1 to 19 (RC)	0.00	0.00	
2005; 20 to 39	-0.01	0.16	0.9602
2005; 40 to 59	0.11	0.17	0.5111
2005; 60 to 99	-0.02	0.15	0.9216
2005; 100 to 249	0.11	0.14	0.4376
2005; 250 to 499	0.24	0.13	0.0667
2005; 500 to 749	0.26	0.15	0.0820
2005; 750 to 999	0.44	0.19	0.0214
2005; 1,000+	0.55	0.21	0.0090
2006; 1 to 19 (RC)	0.00	0.00	
2006; 20 to 39	-0.00	0.17	0.9781
2006; 40 to 59	0.17	0.18	0.3357
2006; 60 to 99	0.19	0.15	0.2302
2006; 100 to 249	0.11	0.13	0.4057
2006; 250 to 499	0.25	0.13	0.0634
2006; 500 to 749	0.34	0.15	0.0231
2006; 750 to 999	0.51	0.19	0.0075
2006; 1,000+	0.63	0.21	0.0024
2007; 1 to 19 (RC)	0.00	0.00	
2007; 20 to 39	-0.20	0.17	0.2320
2007; 40 to 59	-0.16	0.18	0.3677
2007; 60 to 99	-0.17	0.17	0.3011
2007; 100 to 249	-0.08	0.15	0.5929
2007; 250 to 499	0.03	0.14	0.8183
2007; 500 to 749	0.10	0.16	0.5120
2007; 750 to 999	0.20	0.20	0.3135
2007; 1,000+	0.46	0.21	0.0307

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.72	0.21	0.0000	0.07	0.04	0.10
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.01	0.07	0.9039	0.99	0.86	1.14
26 to 34	0.00	0.10	0.9723	1.00	0.82	1.23
35 to 49	-0.22	0.10	0.0304	0.81	0.66	0.98
50+	-0.59	0.14	0.0000	0.55	0.42	0.74
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.85	0.04	0.0000	2.33	2.16	2.51
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.32	0.04	0.0000	0.73	0.67	0.79
Other, Non-Hispanic	0.00	0.04	0.9760	1.00	0.93	1.08
Hispanic	-0.12	0.03	0.0002	0.89	0.83	0.94
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.03	0.06	0.5426	0.97	0.86	1.08
51 to 60	-0.03	0.05	0.5292	0.97	0.87	1.07
61+	-0.06	0.05	0.3056	0.95	0.85	1.05
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.01	0.04	0.8416	0.99	0.92	1.07
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.05	0.1854	1.07	0.97	1.18
Other, Non-Hispanic	-0.11	0.10	0.2607	0.90	0.74	1.09
Hispanic	0.03	0.05	0.5718	1.03	0.93	1.14
Average Miles per Week during the Quarter	-0.00	0.00	0.3588	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.2337	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.03	0.08	0.6731	1.03	0.88	1.21
41 to 50; 26 to 34	-0.06	0.12	0.6107	0.94	0.75	1.19
41 to 50, 35 to 49	0.26	0.11	0.0212	1.30	1.04	1.62
41 to 50; 50+	-0.08	0.16	0.6273	0.92	0.67	1.27
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.08	0.08	0.3116	1.08	0.93	1.25
51 to 60; 26 to 34	0.10	0.11	0.3748	1.10	0.89	1.37
51 to 60, 35 to 49	0.19	0.11	0.0744	1.21	0.98	1.50
51 to 60; 50+	-0.01	0.15	0.9672	0.99	0.73	1.34
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.4.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.07	0.08	0.3752	1.07	0.92	1.24
61+; 26 to 34	0.02	0.11	0.8455	1.02	0.82	1.27
61+; 35 to 49	0.23	0.11	0.0323	1.26	1.02	1.56
61+; 50+	0.05	0.16	0.7280	1.06	0.78	1.43
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.00	0.04	0.9956	1.00	0.92	1.09
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.26	0.07	0.0004	0.77	0.66	0.89
Black, Non-Hispanic; Other Non-Hispanic	-0.07	0.12	0.5322	0.93	0.74	1.17
Black, Non-Hispanic; Hispanic	-0.16	0.10	0.1034	0.85	0.70	1.03
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.22	0.29	0.4491	1.25	0.70	2.21
Other, Non-Hispanic; Other Non-Hispanic	-0.13	0.15	0.3806	0.87	0.65	1.18
Other, Non-Hispanic; Hispanic	0.13	0.18	0.4534	1.14	0.81	1.62
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.04	0.10	0.7178	0.96	0.79	1.17
Hispanic; Other Non-Hispanic	-0.29	0.11	0.0089	0.75	0.60	0.93
Hispanic; Hispanic	-0.41	0.07	0.0000	0.66	0.58	0.76
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.16	0.13	0.2069	0.85	0.66	1.09
40 to 59	-0.17	0.13	0.1818	0.84	0.65	1.08
60 to 99	-0.12	0.11	0.2551	0.88	0.72	1.09
100 to 249	-0.05	0.09	0.6273	0.96	0.79	1.15
250 to 499	-0.15	0.09	0.0901	0.86	0.72	1.02
500 to 749	-0.09	0.09	0.3551	0.92	0.76	1.10
750 to 999	-0.15	0.10	0.1589	0.86	0.71	1.06
1,000+	-0.11	0.12	0.3989	0.90	0.70	1.15

(continued)

Table A.4.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year						
2004 (RC)	0.00	0.00		1.00	1.00	1.00
2005	-0.02	0.22	0.9306	0.98	0.63	1.52
2006	0.13	0.24	0.5834	1.14	0.71	1.82
2007	-0.21	0.24	0.3730	0.81	0.51	1.29
Year by Cumulative Interview Count						
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.06	0.16	0.7203	1.06	0.78	1.44
2005; 40 to 59	0.15	0.16	0.3540	1.16	0.85	1.59
2005; 60 to 99	-0.06	0.14	0.6749	0.94	0.72	1.24
2005; 100 to 249	-0.11	0.12	0.3598	0.90	0.71	1.13
2005; 250 to 499	0.04	0.11	0.7209	1.04	0.83	1.30
2005; 500 to 749	-0.09	0.12	0.4253	0.91	0.72	1.15
2005; 750 to 999	-0.09	0.13	0.4903	0.91	0.71	1.18
2005; 1,000+	-0.17	0.15	0.2532	0.84	0.63	1.13
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.07	0.16	0.6804	0.94	0.68	1.28
2006; 40 to 59	-0.11	0.17	0.4970	0.89	0.65	1.24
2006; 60 to 99	-0.09	0.14	0.5049	0.91	0.69	1.20
2006; 100 to 249	-0.19	0.12	0.1149	0.83	0.65	1.05
2006; 250 to 499	0.00	0.11	0.9690	1.00	0.80	1.26
2006; 500 to 749	-0.20	0.12	0.0985	0.82	0.65	1.04
2006; 750 to 999	-0.10	0.13	0.4446	0.90	0.70	1.17
2006; 1,000+	-0.12	0.15	0.3983	0.88	0.66	1.18
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	0.20	0.16	0.2184	1.22	0.89	1.69
2007; 40 to 59	0.17	0.17	0.3186	1.18	0.85	1.64
2007; 60 to 99	0.07	0.15	0.6124	1.08	0.81	1.44
2007; 100 to 249	0.05	0.13	0.6843	1.05	0.82	1.35
2007; 250 to 499	0.16	0.12	0.2013	1.17	0.92	1.50
2007; 500 to 749	0.07	0.13	0.5639	1.08	0.84	1.38
2007; 750 to 999	0.06	0.14	0.6460	1.06	0.82	1.39
2007; 1,000+	0.12	0.15	0.4157	1.13	0.84	1.52

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004 to 2007.

Table A.4.12 Unweighted Logistic Regression of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.50	0.26	0.0000	0.08	0.05	0.14
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.38	0.04	0.0000	1.46	1.36	1.57
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.20	0.04	0.0000	0.82	0.75	0.89
Other, Non-Hispanic	-0.06	0.04	0.1562	0.94	0.87	1.02
Hispanic	-0.13	0.04	0.0003	0.88	0.82	0.94
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.00	0.04	0.9080	1.00	0.93	1.08
51 to 60	0.04	0.04	0.2520	1.04	0.97	1.12
61+	-0.00	0.04	0.9841	1.00	0.93	1.07
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.04	0.03	0.2719	1.04	0.97	1.11
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.13	0.05	0.0116	1.14	1.03	1.27
Other, Non-Hispanic	-0.03	0.10	0.7906	0.97	0.80	1.18
Hispanic	0.01	0.06	0.8426	1.01	0.90	1.15
Average Miles per Week during the Quarter	-0.00	0.00	0.3033	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.1606	1.00	1.00	1.01
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.06	0.04	0.1420	0.94	0.86	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.10	0.08	0.2158	0.91	0.78	1.06
Black, Non-Hispanic; Other Non-Hispanic	-0.26	0.15	0.0706	0.77	0.58	1.02
Black, Non-Hispanic; Hispanic	-0.21	0.10	0.0323	0.81	0.67	0.98

(continued)

Table A.4.12 Unweighted Logistic Regression of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.15	0.30	0.6233	1.16	0.65	2.07
Other, Non-Hispanic; Other Non-Hispanic	-0.16	0.17	0.3490	0.86	0.62	1.19
Other, Non-Hispanic; Hispanic	-0.05	0.18	0.7782	0.95	0.66	1.36
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.12	0.11	0.2965	0.89	0.71	1.11
Hispanic; Other Non-Hispanic	-0.62	0.15	0.0000	0.54	0.40	0.72
Hispanic; Hispanic	-0.39	0.08	0.0000	0.68	0.58	0.79
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.00	0.15	0.9733	1.00	0.74	1.33
40 to 59	-0.02	0.14	0.8794	0.98	0.75	1.28
60 to 99	-0.10	0.12	0.4276	0.91	0.71	1.16
100 to 249	-0.06	0.11	0.5704	0.94	0.75	1.17
250 to 499	-0.12	0.11	0.2826	0.89	0.71	1.10
500 to 749	-0.09	0.13	0.5109	0.92	0.70	1.19
750 to 999	-0.04	0.20	0.8582	0.97	0.66	1.42
1,000+	-0.11	0.21	0.5924	0.90	0.60	1.34
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	-0.04	0.20	0.8258	0.96	0.64	1.42
2003; 40 to 59	-0.00	0.20	1.0000	1.00	0.68	1.47
2003; 60 to 99	0.04	0.18	0.8181	1.04	0.74	1.47
2003; 100 to 249	-0.07	0.16	0.6367	0.93	0.68	1.26
2003; 250 to 499	-0.05	0.15	0.7517	0.95	0.71	1.28
2003; 500 to 749	-0.02	0.17	0.8853	0.98	0.70	1.37
2003; 750 to 999	-0.30	0.25	0.2383	0.74	0.45	1.22
2003; 1,000+	-0.21	0.30	0.4787	0.81	0.45	1.45
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	0.20	0.21	0.3416	1.22	0.81	1.83
2004; 40 to 59	0.03	0.20	0.8742	1.03	0.69	1.54
2004; 60 to 99	0.14	0.19	0.4404	1.15	0.80	1.66
2004; 100 to 249	0.02	0.16	0.8977	1.02	0.75	1.40
2004; 250 to 499	0.06	0.16	0.6920	1.06	0.78	1.44
2004; 500 to 749	0.09	0.17	0.6105	1.09	0.78	1.53
2004; 750 to 999	-0.07	0.23	0.7461	0.93	0.59	1.46

(continued)

Table A.4.12 Unweighted Logistic Regression of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2004; 1,000+	-0.03	0.26	0.9036	0.97	0.58	1.61
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.06	0.20	0.7521	1.06	0.72	1.57
2005; 40 to 59	0.13	0.20	0.5163	1.14	0.77	1.69
2005; 60 to 99	0.24	0.18	0.1745	1.28	0.90	1.82
2005; 100 to 249	0.12	0.16	0.4545	1.12	0.83	1.53
2005; 250 to 499	0.15	0.15	0.3237	1.16	0.86	1.58
2005; 500 to 749	0.13	0.17	0.4711	1.13	0.81	1.59
2005; 750 to 999	0.12	0.23	0.6033	1.13	0.72	1.77
2005; 1,000+	0.25	0.24	0.3034	1.28	0.80	2.05
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.23	0.21	0.2560	0.79	0.53	1.19
2006; 40 to 59	0.06	0.20	0.7598	1.06	0.72	1.57
2006; 60 to 99	0.21	0.18	0.2440	1.23	0.87	1.74
2006; 100 to 249	-0.13	0.15	0.4012	0.88	0.65	1.19
2006; 250 to 499	0.10	0.15	0.4858	1.11	0.83	1.48
2006; 500 to 749	-0.07	0.17	0.7059	0.94	0.67	1.31
2006; 750 to 999	-0.11	0.23	0.6314	0.90	0.58	1.40
2006; 1,000+	-0.10	0.23	0.6714	0.91	0.57	1.43
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.12	0.22	0.5724	0.88	0.58	1.36
2007; 40 to 59	0.07	0.21	0.7322	1.07	0.71	1.62
2007; 60 to 99	0.17	0.19	0.3628	1.19	0.82	1.73
2007; 100 to 249	0.19	0.17	0.2818	1.20	0.86	1.69
2007; 250 to 499	0.20	0.17	0.2398	1.22	0.88	1.70
2007; 500 to 749	0.09	0.18	0.6070	1.10	0.77	1.58
2007; 750 to 999	0.00	0.24	0.9893	1.00	0.63	1.60
2007; 1,000+	0.19	0.24	0.4238	1.21	0.76	1.95

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.4.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Categorical Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.73	0.16	0.0000	0.06	0.05	0.09
Respondent Age						
18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
26 to 34	0.18	0.06	0.0061	1.19	1.05	1.35
35 to 49	0.44	0.05	0.0000	1.56	1.40	1.73
50+	0.18	0.07	0.0098	1.20	1.04	1.37
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.80	0.03	0.0000	2.22	2.09	2.35
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.84	0.04	0.0000	0.43	0.40	0.46
Other, Non-Hispanic	-0.40	0.04	0.0000	0.67	0.62	0.72
Hispanic	-0.55	0.03	0.0000	0.58	0.54	0.62
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.01	0.04	0.7139	1.01	0.94	1.09
51 to 60	0.00	0.04	0.9941	1.00	0.93	1.07
61+	0.03	0.04	0.3859	1.03	0.96	1.12
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.05	0.03	0.0706	1.05	1.00	1.12
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.03	0.04	0.3528	0.97	0.90	1.04
Other, Non-Hispanic	-0.04	0.07	0.5662	0.96	0.85	1.10
Hispanic	-0.06	0.04	0.1330	0.94	0.86	1.02
Average Miles per Week during the Quarter	-0.00	0.00	0.2784	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.6460	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 26 to 34	0.04	0.07	0.5800	1.04	0.90	1.21
41 to 50, 35 to 49	0.01	0.06	0.8533	1.01	0.90	1.14
41 to 50; 50+	-0.08	0.08	0.3194	0.92	0.79	1.08
51 to 60, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60; 26 to 34	0.17	0.07	0.0170	1.19	1.03	1.37
51 to 60, 35 to 49	0.05	0.06	0.4175	1.05	0.93	1.18
51 to 60; 50+	-0.04	0.08	0.5976	0.96	0.82	1.12
61+; 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 26 to 34	0.05	0.07	0.4731	1.05	0.91	1.22
61+; 35 to 49	-0.03	0.06	0.6744	0.97	0.86	1.10
61+; 50+	-0.17	0.08	0.0295	0.84	0.72	0.98

(continued)

Table A.4.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.04	0.03	0.2615	0.96	0.90	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.06	0.07	0.3972	0.95	0.83	1.08
Black, Non-Hispanic; Other Non-Hispanic	-0.18	0.11	0.1117	0.83	0.67	1.04
Black, Non-Hispanic; Hispanic	-0.21	0.09	0.0223	0.81	0.68	0.97
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.13	0.35	0.7053	0.88	0.45	1.73
Other, Non-Hispanic; Other Non-Hispanic	-0.30	0.14	0.0327	0.74	0.57	0.98
Other, Non-Hispanic; Hispanic	0.11	0.16	0.4866	1.12	0.81	1.54
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.12	0.11	0.2765	0.89	0.71	1.10
Hispanic; Other Non-Hispanic	-0.38	0.13	0.0043	0.68	0.53	0.89
Hispanic; Hispanic	-0.53	0.06	0.0000	0.59	0.52	0.66
Cumulative Interview Count						
1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
20 to 39	-0.05	0.10	0.6406	0.95	0.78	1.16
40 to 59	-0.09	0.10	0.3904	0.92	0.75	1.12
60 to 99	-0.03	0.09	0.7128	0.97	0.82	1.15
100 to 249	-0.08	0.08	0.3042	0.92	0.79	1.08
250 to 499	-0.06	0.08	0.4346	0.94	0.80	1.10
500 to 749	-0.05	0.10	0.6005	0.95	0.79	1.15
750 to 999	0.04	0.14	0.7844	1.04	0.79	1.36
1,000+	-0.11	0.15	0.4718	0.90	0.67	1.21
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.21	0.25	0.4109	0.81	0.50	1.33
2004	-0.19	0.25	0.4472	0.82	0.50	1.36
2005	0.07	0.19	0.7121	1.07	0.74	1.55
2006	-0.03	0.20	0.8775	0.97	0.65	1.44

(continued)

Table A.4.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2007	0.24	0.20	0.2341	1.27	0.86	1.88
Year by Cumulative Interview Count						
2002; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 20 to 39 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 40 to 59 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 60 to 99 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 100 to 249 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 250 to 499 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 500 to 749 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 750 to 999 (RC)	0.00	0.00		1.00	1.00	1.00
2002; 1,000+ (RC)	0.00	0.00		1.00	1.00	1.00
2003; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2003; 20 to 39	0.08	0.14	0.5533	1.09	0.82	1.44
2003; 40 to 59	0.10	0.15	0.5237	1.10	0.81	1.49
2003; 60 to 99	0.05	0.13	0.7133	1.05	0.81	1.36
2003; 100 to 249	0.07	0.12	0.5210	1.08	0.86	1.35
2003; 250 to 499	0.01	0.11	0.9319	1.01	0.81	1.26
2003; 500 to 749	0.03	0.13	0.8051	1.03	0.80	1.34
2003; 750 to 999	-0.03	0.18	0.8713	0.97	0.68	1.38
2003; 1,000+	0.09	0.19	0.6414	1.09	0.75	1.60
2004; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2004; 20 to 39	-0.09	0.15	0.5352	0.91	0.68	1.22
2004; 40 to 59	0.08	0.15	0.6133	1.08	0.81	1.44
2004; 60 to 99	-0.06	0.13	0.6576	0.94	0.73	1.22
2004; 100 to 249	0.12	0.11	0.2782	1.13	0.91	1.40
2004; 250 to 499	-0.00	0.11	0.9942	1.00	0.80	1.24
2004; 500 to 749	-0.06	0.13	0.6607	0.95	0.73	1.22
2004; 750 to 999	-0.25	0.17	0.1348	0.78	0.56	1.08
2004; 1,000+	-0.01	0.19	0.9664	0.99	0.68	1.44
2005; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2005; 20 to 39	0.00	0.15	0.9822	1.00	0.75	1.34
2005; 40 to 59	0.09	0.15	0.5316	1.10	0.82	1.47
2005; 60 to 99	-0.06	0.13	0.6542	0.94	0.72	1.23
2005; 100 to 249	-0.04	0.12	0.7539	0.96	0.77	1.21
2005; 250 to 499	-0.00	0.12	0.9911	1.00	0.80	1.25
2005; 500 to 749	0.01	0.13	0.9423	1.01	0.78	1.30
2005; 750 to 999	-0.12	0.16	0.4731	0.89	0.64	1.23
2005; 1,000+	-0.06	0.18	0.7182	0.94	0.66	1.33
2006; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2006; 20 to 39	-0.03	0.15	0.8387	0.97	0.73	1.29
2006; 40 to 59	-0.05	0.15	0.7498	0.95	0.71	1.29
2006; 60 to 99	-0.07	0.13	0.5613	0.93	0.73	1.19
2006; 100 to 249	-0.04	0.11	0.7407	0.96	0.77	1.20
2006; 250 to 499	0.02	0.11	0.8430	1.02	0.82	1.27
2006; 500 to 749	-0.07	0.12	0.5876	0.94	0.74	1.19
2006; 750 to 999	-0.16	0.16	0.3150	0.85	0.62	1.16
2006; 1,000+	-0.05	0.17	0.7890	0.96	0.68	1.33
2007; 1 to 19 (RC)	0.00	0.00		1.00	1.00	1.00
2007; 20 to 39	-0.06	0.14	0.6639	0.94	0.71	1.25

(continued)

Table A.4.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Categorical Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
2007; 40 to 59	0.10	0.15	0.5147	1.10	0.82	1.47
2007; 60 to 99	-0.22	0.13	0.0973	0.80	0.62	1.04
2007; 100 to 249	-0.13	0.11	0.2478	0.88	0.70	1.10
2007; 250 to 499	0.02	0.11	0.8727	1.02	0.82	1.27
2007; 500 to 749	-0.07	0.12	0.5605	0.93	0.73	1.19
2007; 750 to 999	-0.23	0.16	0.1633	0.80	0.58	1.10
2007; 1,000+	-0.04	0.17	0.8032	0.96	0.69	1.34

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-0.81	0.11	0.0000	0.44	0.36	0.55
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.67	0.03	0.0000	5.30	4.96	5.66
26 to 34	1.74	0.05	0.0000	5.71	5.20	6.26
35 to 49	1.97	0.04	0.0000	7.19	6.59	7.85
50+	1.63	0.05	0.0000	5.10	4.59	5.67
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.21	0.02	0.0000	0.81	0.78	0.84
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.71	0.02	0.0000	0.49	0.47	0.51
Other, Non-Hispanic	-0.35	0.02	0.0000	0.71	0.68	0.74
Hispanic	-0.27	0.02	0.0000	0.77	0.74	0.79
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.01	0.03	0.7938	0.99	0.94	1.05
51 to 60	-0.04	0.03	0.1230	0.96	0.91	1.01
61+	-0.07	0.03	0.0085	0.93	0.88	0.98
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.9936	1.00	0.97	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.02	0.03	0.4314	1.02	0.97	1.07
Other, Non-Hispanic	-0.03	0.04	0.4611	0.97	0.89	1.06
Hispanic	0.04	0.03	0.1200	1.04	0.99	1.10
Average Miles per Week during the Quarter	0.00	0.00	0.3344	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.6319	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.06	0.04	0.1270	1.06	0.98	1.15
41 to 50; 26 to 34	0.11	0.06	0.0472	1.12	1.00	1.25
41 to 50, 35 to 49	0.04	0.05	0.4299	1.04	0.94	1.15
41 to 50; 50+	0.21	0.06	0.0008	1.24	1.09	1.40
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.09	0.04	0.0180	1.09	1.02	1.18
51 to 60; 26 to 34	0.23	0.05	0.0000	1.26	1.13	1.40
51 to 60, 35 to 49	0.12	0.05	0.0145	1.13	1.02	1.24
51 to 60; 50+	0.18	0.06	0.0021	1.20	1.07	1.35
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.14	0.04	0.0001	1.15	1.07	1.24
61+; 26 to 34	0.23	0.05	0.0000	1.26	1.13	1.40
61+; 35 to 49	0.15	0.05	0.0025	1.16	1.05	1.28
61+; 50+	0.26	0.06	0.0000	1.29	1.15	1.45
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.02	0.02	0.3004	0.98	0.94	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.04	0.04	0.2737	0.96	0.90	1.03
Black, Non-Hispanic; Other Non-Hispanic	-0.25	0.07	0.0001	0.78	0.68	0.88
Black, Non-Hispanic; Hispanic	-0.30	0.05	0.0000	0.74	0.67	0.82
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.19	0.17	0.2608	0.83	0.60	1.15
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.08	0.0604	0.86	0.74	1.01
Other, Non-Hispanic; Hispanic	-0.01	0.10	0.9565	0.99	0.82	1.20
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.31	0.05	0.0000	0.73	0.66	0.81
Hispanic; Other Non-Hispanic	-0.41	0.06	0.0000	0.66	0.59	0.75
Hispanic; Hispanic	-0.60	0.04	0.0000	0.55	0.51	0.59
Cumulative Interview Count	-0.00	0.00	0.0121	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.14	0.12	0.2423	0.87	0.69	1.10
2004	-0.16	0.12	0.1611	0.85	0.68	1.07
2005	-0.17	0.12	0.1702	0.85	0.66	1.07
2006	0.02	0.13	0.9048	1.02	0.78	1.32
2007	-0.14	0.14	0.3085	0.87	0.66	1.14

(continued)

Table A.5.1 Unweighted Logistic Regression of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.1268	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0277	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0760	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0344	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.1387	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-1.53	0.12	0.0000	0.22	0.17	0.27
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.32	0.04	0.0000	3.75	3.50	4.03
26 to 34	0.97	0.05	0.0000	2.64	2.41	2.90
35 to 49	0.87	0.04	0.0000	2.39	2.20	2.60
50+	-0.09	0.06	0.1297	0.91	0.81	1.03
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.19	0.02	0.0000	0.82	0.80	0.85
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.70	0.02	0.0000	0.50	0.48	0.52
Other, Non-Hispanic	-0.16	0.02	0.0000	0.86	0.82	0.89
Hispanic	-0.30	0.02	0.0000	0.74	0.71	0.76
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.03	0.03	0.3159	0.97	0.91	1.03
51 to 60	0.02	0.03	0.6285	1.02	0.95	1.08
61+	-0.01	0.03	0.8653	0.99	0.93	1.06
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.00	0.02	0.8263	1.00	0.97	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.2140	1.03	0.98	1.08
Other, Non-Hispanic	-0.05	0.04	0.2777	0.96	0.88	1.04
Hispanic	0.06	0.03	0.0510	1.06	1.00	1.12
Average Miles per Week during the Quarter	-0.00	0.00	0.9908	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.6705	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.07	0.04	0.1094	1.07	0.98	1.16
41 to 50; 26 to 34	0.14	0.06	0.0115	1.15	1.03	1.29
41 to 50, 35 to 49	0.03	0.05	0.5323	1.03	0.93	1.14
41 to 50; 50+	0.15	0.07	0.0298	1.17	1.02	1.34
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.04	0.04	0.3737	1.04	0.96	1.12
51 to 60; 26 to 34	0.06	0.05	0.2258	1.07	0.96	1.18
51 to 60, 35 to 49	-0.06	0.05	0.2042	0.94	0.86	1.03
51 to 60; 50+	0.07	0.07	0.3246	1.07	0.94	1.22
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.08	0.04	0.0609	1.08	1.00	1.17
61+; 26 to 34	0.09	0.05	0.0957	1.09	0.98	1.21
61+; 35 to 49	-0.08	0.05	0.0934	0.92	0.84	1.01
61+; 50+	0.07	0.07	0.3188	1.07	0.94	1.22
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.6219	0.99	0.95	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.04	0.04	0.3185	0.96	0.89	1.04
Black, Non-Hispanic; Other Non-Hispanic	-0.34	0.07	0.0000	0.71	0.63	0.81
Black, Non-Hispanic; Hispanic	-0.31	0.05	0.0000	0.73	0.66	0.81
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.01	0.19	0.9611	0.99	0.69	1.43
Other, Non-Hispanic; Other Non-Hispanic	-0.17	0.07	0.0226	0.85	0.73	0.98
Other, Non-Hispanic; Hispanic	-0.03	0.09	0.7502	0.97	0.81	1.17
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.28	0.06	0.0000	0.76	0.68	0.85
Hispanic; Other Non-Hispanic	-0.37	0.06	0.0000	0.69	0.61	0.78
Hispanic; Hispanic	-0.48	0.04	0.0000	0.62	0.57	0.67
Cumulative Interview Count	-0.00	0.00	0.0181	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.02	0.15	0.8749	1.02	0.76	1.37
2004	0.07	0.13	0.5888	1.07	0.84	1.37
2005	0.13	0.14	0.3449	1.14	0.87	1.49
2006	0.18	0.15	0.2333	1.20	0.89	1.62
2007	0.19	0.15	0.2219	1.21	0.89	1.64

(continued)

Table A.5.2 Unweighted Logistic Regression of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.1399	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0674	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.2015	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0398	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0899	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-0.66	0.12	0.0000	0.52	0.41	0.66
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.21	0.04	0.0000	9.15	8.45	9.91
26 to 34	2.43	0.06	0.0000	11.34	10.02	12.85
35 to 49	2.66	0.06	0.0000	14.37	12.79	16.13
50+	1.89	0.06	0.0000	6.59	5.87	7.39
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.12	0.02	0.0000	0.89	0.85	0.92
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.50	0.02	0.0000	0.61	0.58	0.64
Other, Non-Hispanic	-0.51	0.02	0.0000	0.60	0.57	0.63
Hispanic	-0.22	0.02	0.0000	0.80	0.77	0.83
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.01	0.03	0.6426	1.01	0.96	1.07
51 to 60	-0.06	0.03	0.0226	0.94	0.90	0.99
61+	-0.06	0.03	0.0176	0.94	0.89	0.99
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.00	0.02	0.8342	1.00	0.96	1.03
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.03	0.0214	1.07	1.01	1.14
Other, Non-Hispanic	-0.06	0.05	0.2415	0.94	0.85	1.04
Hispanic	0.06	0.03	0.0854	1.06	0.99	1.14
Average Miles per Week during the Quarter	-0.00	0.00	0.2612	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.4351	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.04	0.05	0.4583	1.04	0.94	1.14
41 to 50; 26 to 34	0.18	0.08	0.0193	1.20	1.03	1.39
41 to 50, 35 to 49	-0.07	0.07	0.2842	0.93	0.81	1.06
41 to 50; 50+	0.07	0.07	0.3513	1.07	0.93	1.23
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.15	0.05	0.0011	1.16	1.06	1.27
51 to 60; 26 to 34	0.41	0.07	0.0000	1.50	1.30	1.74
51 to 60, 35 to 49	0.24	0.07	0.0003	1.27	1.12	1.45
51 to 60; 50+	0.23	0.06	0.0005	1.25	1.10	1.42
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.17	0.05	0.0003	1.18	1.08	1.29
61+; 26 to 34	0.33	0.07	0.0000	1.39	1.21	1.61
61+; 35 to 49	0.19	0.07	0.0044	1.21	1.06	1.37
61+; 50+	0.26	0.07	0.0001	1.30	1.14	1.48
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.5635	0.99	0.95	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.05	0.04	0.2207	0.95	0.87	1.03
Black, Non-Hispanic; Other Non-Hispanic	-0.13	0.08	0.1210	0.88	0.75	1.03
Black, Non-Hispanic; Hispanic	-0.24	0.05	0.0000	0.79	0.71	0.88
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.21	0.14	0.1488	0.81	0.61	1.08
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.09	0.0839	0.86	0.72	1.02
Other, Non-Hispanic; Hispanic	-0.10	0.12	0.4020	0.90	0.72	1.14
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.21	0.06	0.0005	0.81	0.72	0.91
Hispanic; Other Non-Hispanic	-0.39	0.07	0.0000	0.68	0.59	0.78
Hispanic; Hispanic	-0.47	0.04	0.0000	0.63	0.57	0.68
Cumulative Interview Count	-0.00	0.00	0.0124	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.31	0.12	0.0121	1.37	1.07	1.75
2004	0.17	0.13	0.1832	1.18	0.92	1.51
2005	0.10	0.13	0.4605	1.10	0.85	1.43
2006	0.16	0.16	0.2979	1.18	0.86	1.61
2007	0.24	0.16	0.1438	1.27	0.92	1.76

(continued)

Table A.5.3 Unweighted Logistic Regression of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.4871	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0083	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0600	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.1505	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.1470	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-1.13	0.11	0.0000	0.32	0.26	0.40
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.03	0.04	0.0000	7.64	7.10	8.23
26 to 34	1.90	0.05	0.0000	6.69	6.08	7.37
35 to 49	1.77	0.04	0.0000	5.87	5.38	6.40
50+	0.96	0.05	0.0000	2.62	2.38	2.89
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.12	0.02	0.0000	0.89	0.86	0.92
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.52	0.02	0.0000	0.59	0.57	0.62
Other, Non-Hispanic	-0.46	0.02	0.0000	0.63	0.61	0.66
Hispanic	-0.26	0.02	0.0000	0.77	0.74	0.80
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.00	0.03	0.8671	1.00	0.95	1.06
51 to 60	-0.06	0.03	0.0171	0.94	0.89	0.99
61+	-0.04	0.03	0.1043	0.96	0.91	1.01
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.01	0.02	0.6152	0.99	0.96	1.02
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.03	0.0080	1.07	1.02	1.13
Other, Non-Hispanic	-0.07	0.04	0.0851	0.93	0.86	1.01
Hispanic	0.02	0.03	0.4372	1.02	0.97	1.08
Average Miles per Week during the Quarter	-0.00	0.00	0.0005	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0035	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.01	0.04	0.8606	1.01	0.93	1.10
41 to 50; 26 to 34	0.13	0.06	0.0283	1.14	1.01	1.27
41 to 50, 35 to 49	-0.09	0.05	0.0722	0.91	0.83	1.01
41 to 50; 50+	0.03	0.06	0.5743	1.03	0.92	1.15
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.13	0.04	0.0016	1.14	1.05	1.24
51 to 60; 26 to 34	0.25	0.06	0.0000	1.29	1.15	1.43
51 to 60, 35 to 49	0.06	0.05	0.2038	1.07	0.97	1.17
51 to 60; 50+	0.06	0.05	0.3007	1.06	0.95	1.17
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.12	0.04	0.0046	1.13	1.04	1.22
61+; 26 to 34	0.16	0.06	0.0048	1.17	1.05	1.31
61+; 35 to 49	0.05	0.05	0.3188	1.05	0.95	1.16
61+; 50+	0.06	0.05	0.2632	1.06	0.96	1.18
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.02	0.02	0.2456	0.98	0.94	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.05	0.04	0.1637	0.95	0.88	1.02
Black, Non-Hispanic; Other Non-Hispanic	-0.17	0.07	0.0127	0.84	0.74	0.96
Black, Non-Hispanic; Hispanic	-0.23	0.05	0.0000	0.79	0.72	0.87
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.20	0.13	0.1330	0.82	0.63	1.06
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.08	0.0452	0.86	0.74	1.00
Other, Non-Hispanic; Hispanic	-0.19	0.11	0.0769	0.83	0.67	1.02
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.12	0.05	0.0172	0.88	0.80	0.98
Hispanic; Other Non-Hispanic	-0.27	0.06	0.0000	0.76	0.67	0.87
Hispanic; Hispanic	-0.39	0.04	0.0000	0.68	0.63	0.73
Cumulative Interview Count	-0.00	0.00	0.0002	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.27	0.11	0.0106	1.32	1.07	1.62
2004	0.21	0.13	0.0915	1.24	0.97	1.59
2005	0.07	0.14	0.5827	1.08	0.83	1.41
2006	0.27	0.14	0.0478	1.31	1.00	1.70
2007	0.19	0.14	0.1868	1.21	0.91	1.59

(continued)

Table A.5.4 Unweighted Logistic Regression of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.0383	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0043	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0091	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0058	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0133	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.10	0.11	0.0000	0.12	0.10	0.15
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	1.62	0.04	0.0000	5.08	4.72	5.47
26 to 34	1.51	0.05	0.0000	4.52	4.12	4.95
35 to 49	1.75	0.04	0.0000	5.77	5.30	6.28
50+	0.31	0.06	0.0000	1.36	1.22	1.52
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.21	0.02	0.0000	0.81	0.78	0.84
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.34	0.02	0.0000	0.71	0.69	0.74
Other, Non-Hispanic	-0.40	0.02	0.0000	0.67	0.64	0.70
Hispanic	-0.38	0.02	0.0000	0.69	0.66	0.71
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.07	0.03	0.0489	1.07	1.00	1.14
51 to 60	-0.01	0.03	0.7623	0.99	0.93	1.06
61+	-0.02	0.03	0.5810	0.98	0.92	1.05
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.03	0.02	0.1076	1.03	0.99	1.06
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.02	0.0030	1.08	1.03	1.13
Other, Non-Hispanic	0.01	0.04	0.7530	1.01	0.93	1.10
Hispanic	0.06	0.03	0.0383	1.06	1.00	1.12
Average Miles per Week during the Quarter	-0.00	0.00	0.0003	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0790	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.02	0.04	0.7186	0.98	0.90	1.07
41 to 50; 26 to 34	-0.00	0.06	0.9916	1.00	0.90	1.11
41 to 50, 35 to 49	-0.05	0.05	0.3236	0.95	0.87	1.05
41 to 50; 50+	0.05	0.06	0.4202	1.05	0.93	1.20
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.04	0.04	0.3440	1.04	0.96	1.13
51 to 60; 26 to 34	0.14	0.05	0.0080	1.15	1.04	1.28
51 to 60, 35 to 49	0.10	0.05	0.0318	1.11	1.01	1.21
51 to 60; 50+	0.06	0.06	0.3193	1.06	0.94	1.20
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.07	0.04	0.0795	1.08	0.99	1.17
61+; 26 to 34	0.14	0.05	0.0096	1.15	1.03	1.27
61+; 35 to 49	0.11	0.05	0.0201	1.12	1.02	1.22
61+; 50+	0.10	0.06	0.1176	1.10	0.98	1.24
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.07	0.02	0.0002	0.93	0.90	0.97
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.10	0.04	0.0072	0.90	0.84	0.97
Black, Non-Hispanic; Other Non-Hispanic	-0.37	0.07	0.0000	0.69	0.61	0.79
Black, Non-Hispanic; Hispanic	-0.27	0.05	0.0000	0.76	0.69	0.84
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.11	0.12	0.3891	0.90	0.71	1.14
Other, Non-Hispanic; Other Non-Hispanic	-0.21	0.08	0.0077	0.81	0.69	0.95
Other, Non-Hispanic; Hispanic	-0.21	0.11	0.0519	0.81	0.66	1.00
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.37	0.05	0.0000	0.69	0.63	0.77
Hispanic; Other Non-Hispanic	-0.57	0.06	0.0000	0.57	0.50	0.64
Hispanic; Hispanic	-0.87	0.04	0.0000	0.42	0.39	0.45
Cumulative Interview Count	-0.00	0.00	0.0001	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.04	0.11	0.6856	1.05	0.84	1.30
2004	0.13	0.13	0.3089	1.14	0.89	1.46
2005	-0.08	0.13	0.5288	0.92	0.71	1.19
2006	-0.02	0.13	0.8827	0.98	0.76	1.26
2007	-0.05	0.13	0.7005	0.95	0.73	1.24

(continued)

Table A.5.5 Unweighted Logistic Regression of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.1815	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0124	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0125	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0018	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0118	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.00	0.13	0.0000	0.14	0.10	0.18
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.76	0.04	0.0000	2.14	1.97	2.32
26 to 34	-0.03	0.06	0.5977	0.97	0.85	1.09
35 to 49	-0.52	0.06	0.0000	0.59	0.53	0.67
50+	-2.17	0.15	0.0000	0.11	0.08	0.15
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.33	0.02	0.0000	0.72	0.69	0.75
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.27	0.02	0.0000	0.77	0.73	0.80
Other, Non-Hispanic	-0.24	0.02	0.0000	0.78	0.75	0.82
Hispanic	-0.30	0.02	0.0000	0.74	0.71	0.77
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.04	0.04	0.2931	1.04	0.97	1.12
51 to 60	0.01	0.04	0.6848	1.01	0.95	1.09
61+	0.06	0.03	0.0771	1.06	0.99	1.14
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.02	0.02	0.3169	1.02	0.98	1.06
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.08	0.03	0.0040	1.09	1.03	1.15
Other, Non-Hispanic	0.01	0.06	0.8042	1.01	0.90	1.14
Hispanic	0.04	0.03	0.2589	1.04	0.97	1.11
Average Miles per Week during the Quarter	-0.00	0.00	0.0006	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0072	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.03	0.05	0.5257	1.03	0.94	1.13
41 to 50; 26 to 34	0.04	0.07	0.5636	1.04	0.90	1.21
41 to 50, 35 to 49	-0.01	0.07	0.8720	0.99	0.86	1.14
41 to 50; 50+	0.33	0.17	0.0511	1.39	1.00	1.93
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.03	0.05	0.4860	1.03	0.94	1.13
51 to 60; 26 to 34	0.05	0.07	0.4966	1.05	0.92	1.20
51 to 60, 35 to 49	0.01	0.07	0.8736	1.01	0.88	1.16
51 to 60; 50+	0.14	0.17	0.3930	1.15	0.83	1.60
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.03	0.05	0.5034	1.03	0.94	1.13
61+; 26 to 34	-0.00	0.07	0.9862	1.00	0.87	1.15
61+; 35 to 49	-0.10	0.07	0.1483	0.91	0.79	1.04
61+; 50+	0.06	0.17	0.7065	1.07	0.77	1.48
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.07	0.02	0.0035	0.93	0.89	0.98
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	0.00	0.04	0.9465	1.00	0.92	1.09
Black, Non-Hispanic; Other Non-Hispanic	-0.35	0.08	0.0000	0.70	0.60	0.82
Black, Non-Hispanic; Hispanic	-0.28	0.06	0.0000	0.75	0.67	0.85
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.20	0.17	0.2268	0.82	0.59	1.13
Other, Non-Hispanic; Other Non-Hispanic	-0.23	0.09	0.0143	0.79	0.66	0.95
Other, Non-Hispanic; Hispanic	-0.16	0.13	0.2008	0.85	0.66	1.09
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.25	0.07	0.0001	0.78	0.68	0.88
Hispanic; Other Non-Hispanic	-0.53	0.08	0.0000	0.59	0.51	0.68
Hispanic; Hispanic	-0.71	0.05	0.0000	0.49	0.45	0.54
Cumulative Interview Count	-0.00	0.00	0.0000	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.11	0.14	0.4540	1.11	0.84	1.46
2004	0.20	0.15	0.1646	1.22	0.92	1.63
2005	-0.15	0.17	0.3628	0.86	0.62	1.19
2006	-0.21	0.16	0.2008	0.81	0.59	1.12
2007	-0.16	0.19	0.3937	0.85	0.58	1.24

(continued)

Table A.5.6 Unweighted Logistic Regression of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.1039	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0012	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0014	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0015	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0006	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.19	0.13	0.0000	0.11	0.09	0.14
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.85	0.04	0.0000	2.34	2.16	2.55
26 to 34	0.58	0.06	0.0000	1.79	1.60	2.00
35 to 49	0.44	0.05	0.0000	1.56	1.40	1.73
50+	-0.69	0.09	0.0000	0.50	0.42	0.60
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.19	0.02	0.0000	0.82	0.79	0.86
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.70	0.03	0.0000	0.50	0.47	0.52
Other, Non-Hispanic	-0.33	0.03	0.0000	0.72	0.68	0.76
Hispanic	-0.38	0.02	0.0000	0.68	0.65	0.71
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.03	0.04	0.5021	1.03	0.95	1.11
51 to 60	0.00	0.04	0.9705	1.00	0.93	1.08
61+	-0.00	0.04	0.9021	1.00	0.92	1.07
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.03	0.02	0.0912	0.97	0.94	1.00
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.3138	1.03	0.97	1.09
Other, Non-Hispanic	-0.00	0.05	0.9520	1.00	0.91	1.10
Hispanic	-0.00	0.03	0.9592	1.00	0.94	1.06
Average Miles per Week during the Quarter	-0.00	0.00	0.0031	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0692	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.06	0.05	0.2032	1.07	0.97	1.18
41 to 50; 26 to 34	0.01	0.07	0.8557	1.01	0.89	1.16
41 to 50, 35 to 49	-0.05	0.06	0.4714	0.95	0.84	1.08
41 to 50; 50+	-0.01	0.10	0.9214	0.99	0.81	1.22
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.09	0.05	0.0506	1.10	1.00	1.21
51 to 60; 26 to 34	0.07	0.06	0.2977	1.07	0.94	1.21
51 to 60, 35 to 49	-0.04	0.06	0.4890	0.96	0.85	1.08
51 to 60; 50+	-0.22	0.10	0.0260	0.80	0.66	0.97
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.13	0.05	0.0061	1.14	1.04	1.26
61+; 26 to 34	0.05	0.06	0.4439	1.05	0.93	1.19
61+; 35 to 49	-0.06	0.06	0.3096	0.94	0.83	1.06
61+; 50+	-0.06	0.10	0.5104	0.94	0.77	1.14
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.01	0.02	0.5691	0.99	0.94	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.11	0.05	0.0140	0.89	0.81	0.98
Black, Non-Hispanic; Other Non-Hispanic	-0.35	0.08	0.0000	0.70	0.60	0.83
Black, Non-Hispanic; Hispanic	-0.36	0.06	0.0000	0.70	0.62	0.79
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.02	0.19	0.9110	0.98	0.67	1.43
Other, Non-Hispanic; Other Non-Hispanic	-0.30	0.10	0.0015	0.74	0.61	0.89
Other, Non-Hispanic; Hispanic	-0.20	0.12	0.0995	0.82	0.65	1.04
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.29	0.07	0.0001	0.75	0.65	0.86
Hispanic; Other Non-Hispanic	-0.28	0.07	0.0001	0.75	0.65	0.87
Hispanic; Hispanic	-0.55	0.04	0.0000	0.58	0.53	0.63
Cumulative Interview Count	-0.00	0.00	0.0000	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.05	0.16	0.7332	1.05	0.78	1.43
2004	0.16	0.14	0.2460	1.17	0.90	1.53
2005	-0.03	0.14	0.8190	0.97	0.73	1.28
2006	0.00	0.15	0.9806	1.00	0.74	1.35
2007	0.21	0.16	0.1870	1.24	0.90	1.69

(continued)

Table A.5.7 Unweighted Logistic Regression of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.0076	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0000	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.42	0.16	0.0000	0.09	0.07	0.12
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	0.46	0.05	0.0000	1.58	1.42	1.75
26 to 34	-0.15	0.09	0.0748	0.86	0.73	1.02
35 to 49	-0.47	0.08	0.0000	0.62	0.53	0.74
50+	-1.80	0.18	0.0000	0.17	0.12	0.23
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.09	0.03	0.0011	0.91	0.86	0.96
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.67	0.04	0.0000	0.51	0.48	0.55
Other, Non-Hispanic	-0.25	0.03	0.0000	0.78	0.73	0.83
Hispanic	-0.32	0.03	0.0000	0.73	0.69	0.77
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.03	0.05	0.4674	1.04	0.94	1.14
51 to 60	0.01	0.05	0.8712	1.01	0.92	1.10
61+	0.04	0.05	0.4534	1.04	0.94	1.14
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.8520	1.00	0.96	1.05
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.00	0.04	0.9262	1.00	0.92	1.07
Other, Non-Hispanic	-0.12	0.07	0.1078	0.89	0.77	1.03
Hispanic	-0.05	0.04	0.2621	0.95	0.88	1.04
Average Miles per Week during the Quarter	-0.00	0.00	0.0271	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0174	1.00	1.00	1.01
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.01	0.06	0.9285	0.99	0.88	1.12
41 to 50; 26 to 34	0.01	0.10	0.9513	1.01	0.83	1.23
41 to 50, 35 to 49	-0.19	0.10	0.0586	0.83	0.68	1.01
41 to 50; 50+	-0.01	0.21	0.9699	0.99	0.66	1.49
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.04	0.06	0.5073	1.04	0.93	1.16
51 to 60; 26 to 34	0.04	0.10	0.6676	1.04	0.86	1.26
51 to 60, 35 to 49	-0.17	0.09	0.0745	0.85	0.70	1.02
51 to 60; 50+	-0.19	0.20	0.3524	0.83	0.56	1.23

(continued)

Table A.5.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 18 to 25	0.05	0.06	0.3696	1.06	0.94	1.19
61+; 26 to 34	-0.05	0.10	0.5860	0.95	0.78	1.15
61+; 35 to 49	-0.25	0.10	0.0108	0.78	0.65	0.94
61+; 50+	-0.22	0.20	0.2673	0.80	0.55	1.18
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.04	0.03	0.2012	0.96	0.90	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.01	0.06	0.8284	0.99	0.87	1.12
Black, Non-Hispanic; Other Non-Hispanic	-0.48	0.12	0.0000	0.62	0.49	0.78
Black, Non-Hispanic; Hispanic	-0.33	0.08	0.0001	0.72	0.61	0.84
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.24	0.23	0.3028	1.27	0.81	2.00
Other, Non-Hispanic; Other Non-Hispanic	-0.16	0.14	0.2651	0.85	0.64	1.13
Other, Non-Hispanic; Hispanic	-0.16	0.17	0.3440	0.85	0.61	1.19
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.16	0.10	0.1038	0.85	0.70	1.03
Hispanic; Other Non-Hispanic	-0.36	0.10	0.0006	0.70	0.57	0.86
Hispanic; Hispanic	-0.44	0.06	0.0000	0.64	0.57	0.72
Cumulative Interview Count	-0.00	0.00	0.0000	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.07	0.18	0.6981	1.07	0.75	1.53
2004	0.17	0.19	0.3663	1.19	0.82	1.71
2005	-0.12	0.19	0.5371	0.89	0.62	1.29
2006	0.04	0.20	0.8553	1.04	0.70	1.54
2007	0.17	0.20	0.3953	1.19	0.80	1.76

(continued)

Table A.5.8 Unweighted Logistic Regression of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.0052	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0000	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0000	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-4.64	0.18	0.0000	0.01	0.01	0.01
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	2.02	0.08	0.0000	7.52	6.43	8.79
26 to 34	2.16	0.09	0.0000	8.67	7.30	10.30
35 to 49	2.80	0.08	0.0000	16.39	14.01	19.18
50+	1.30	0.10	0.0000	3.67	2.99	4.50
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.37	0.02	0.0000	0.69	0.66	0.72
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-1.07	0.04	0.0000	0.34	0.32	0.37
Other, Non-Hispanic	-0.43	0.03	0.0000	0.65	0.61	0.69
Hispanic	-0.28	0.03	0.0000	0.76	0.72	0.80
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.14	0.08	0.0868	1.16	0.98	1.36
51 to 60	0.09	0.08	0.2331	1.10	0.94	1.28
61+	0.11	0.08	0.1956	1.11	0.95	1.30
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.00	0.02	0.8455	1.00	0.96	1.04
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.03	0.03	0.4264	1.03	0.96	1.09
Other, Non-Hispanic	-0.00	0.05	0.9773	1.00	0.90	1.11
Hispanic	0.03	0.04	0.4500	1.03	0.96	1.10
Average Miles per Week during the Quarter	-0.00	0.00	0.0007	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0501	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	-0.06	0.09	0.5500	0.95	0.79	1.13
41 to 50; 26 to 34	-0.03	0.10	0.7384	0.97	0.79	1.18
41 to 50, 35 to 49	-0.11	0.09	0.2465	0.90	0.75	1.08
41 to 50; 50+	-0.18	0.12	0.1348	0.83	0.66	1.06
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	-0.00	0.09	0.9797	1.00	0.84	1.18
51 to 60; 26 to 34	-0.01	0.10	0.9453	0.99	0.82	1.20
51 to 60, 35 to 49	-0.07	0.09	0.4287	0.93	0.79	1.11
51 to 60; 50+	-0.14	0.11	0.2246	0.87	0.69	1.09
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.03	0.09	0.7479	1.03	0.86	1.23
61+; 26 to 34	-0.01	0.10	0.9095	0.99	0.82	1.20
61+; 35 to 49	-0.13	0.09	0.1565	0.88	0.74	1.05
61+; 50+	-0.22	0.12	0.0576	0.80	0.63	1.01
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.06	0.03	0.0220	0.94	0.89	0.99
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.04	0.06	0.4506	0.96	0.85	1.07
Black, Non-Hispanic; Other Non-Hispanic	-0.39	0.10	0.0002	0.68	0.55	0.83
Black, Non-Hispanic; Hispanic	-0.42	0.08	0.0000	0.66	0.56	0.76
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.12	0.24	0.6020	1.13	0.71	1.80
Other, Non-Hispanic; Other Non-Hispanic	-0.15	0.10	0.1292	0.86	0.71	1.04
Other, Non-Hispanic; Hispanic	-0.27	0.13	0.0314	0.76	0.60	0.98
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.25	0.10	0.0087	0.78	0.65	0.94
Hispanic; Other Non-Hispanic	-0.46	0.09	0.0000	0.63	0.53	0.76
Hispanic; Hispanic	-0.56	0.05	0.0000	0.57	0.52	0.63
Cumulative Interview Count	-0.00	0.00	0.0001	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.08	0.19	0.6612	0.92	0.63	1.34
2004	0.12	0.18	0.4871	1.13	0.80	1.61
2005	0.10	0.18	0.5995	1.10	0.77	1.58
2006	0.17	0.19	0.3678	1.18	0.82	1.70
2007	0.10	0.21	0.6218	1.11	0.74	1.66

(continued)

Table A.5.9 Unweighted Logistic Regression of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	0.00	0.00	0.1431	1.00	1.00	1.00
2004; CIC	0.00	0.00	0.0279	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.0096	1.00	1.00	1.00
2006; CIC	0.00	0.00	0.0021	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.0021	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.10 Unweighted Ordinary Least Squares Regression of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value
Intercept	2.02	0.22	0.0000
Respondent Age			
12 to 17 (RC)	0.00	0.00	
18 to 25	2.65	0.06	0.0000
26 to 34	2.50	0.08	0.0000
35 to 49	2.92	0.07	0.0000
50+	1.14	0.07	0.0000
Respondent Gender			
Male (RC)	0.00	0.00	
Female	-1.20	0.03	0.0000
Respondent Race/Ethnicity			
White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic	-1.79	0.03	0.0000
Other, Non-Hispanic	-0.88	0.04	0.0000
Hispanic	-1.06	0.03	0.0000
Interviewer Age			
Less than 41 (RC)	0.00	0.00	
41 to 50	0.01	0.04	0.7381
51 to 60	-0.08	0.04	0.0321
61+	-0.14	0.04	0.0005
Interviewer Gender			
Male (RC)	0.00	0.00	
Female	0.00	0.03	0.9487
Interviewer Race/Ethnicity			
White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic	0.07	0.05	0.1521
Other, Non-Hispanic	0.06	0.09	0.5150
Hispanic	0.07	0.06	0.2102
Average Miles per Week during the Quarter	-0.00	0.00	0.0060
Average Hours per Week during the Quarter	0.00	0.00	0.2497
Interviewer Age by Respondent Age			
Less than 41; 12 to 17 (RC)	0.00	0.00	
Less than 41, 18 to 25 (RC)	0.00	0.00	
Less than 41; 26 to 34 (RC)	0.00	0.00	
Less than 41, 35 to 49 (RC)	0.00	0.00	
Less than 41; 50+ (RC)	0.00	0.00	
41 to 50; 12 to 17 (RC)	0.00	0.00	
41 to 50, 18 to 25	0.15	0.08	0.0404
41 to 50; 26 to 34	0.21	0.10	0.0285
41 to 50, 35 to 49	0.03	0.08	0.7054
41 to 50; 50+	0.10	0.08	0.2381
51 to 60; 12 to 17 (RC)	0.00	0.00	
51 to 60, 18 to 25	0.29	0.07	0.0001
51 to 60; 26 to 34	0.45	0.09	0.0000
51 to 60, 35 to 49	0.19	0.08	0.0202
51 to 60; 50+	0.08	0.08	0.3255
61+; 12 to 17 (RC)	0.00	0.00	
61+; 18 to 25	0.45	0.07	0.0000
61+; 26 to 34	0.50	0.09	0.0000

(continued)

Table A.5.10 Unweighted Ordinary Least Squares Regression of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value
61+; 35 to 49	0.18	0.08	0.0327
61+; 50+	0.15	0.08	0.0642
Interviewer Gender by Respondent Gender			
Male; Male (RC)	0.00	0.00	
Male; Female (RC)	0.00	0.00	
Female; Male (RC)	0.00	0.00	
Female; Female	-0.10	0.03	0.0046
Interviewer Race/Ethnicity by Respondent Race/Ethnicity			
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00	
White, Non-Hispanic; Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Black, Non-Hispanic; Black Non-Hispanic	-0.12	0.06	0.0562
Black, Non-Hispanic; Other Non-Hispanic	-0.59	0.11	0.0000
Black, Non-Hispanic; Hispanic	-0.64	0.08	0.0000
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Other, Non-Hispanic; Black Non-Hispanic	-0.24	0.19	0.2161
Other, Non-Hispanic; Other Non-Hispanic	-0.68	0.13	0.0000
Other, Non-Hispanic; Hispanic	-0.40	0.17	0.0177
Hispanic; White, Non-Hispanic (RC)	0.00	0.00	
Hispanic; Black Non-Hispanic	-0.44	0.07	0.0000
Hispanic; Other Non-Hispanic	-0.96	0.10	0.0000
Hispanic; Hispanic	-1.25	0.07	0.0000
Cumulative Interview Count	-0.00	0.00	0.0000
Year			
2002 (RC)	0.00	0.00	
2003	-0.12	0.25	0.6105
2004	0.13	0.25	0.6086
2005	-0.12	0.24	0.6076
2006	0.02	0.24	0.9348
2007	-0.17	0.27	0.5184
Year by Cumulative Interview Count (CIC)			
2002; CIC (RC)	0.00	0.00	
2003; CIC	0.00	0.00	0.0451
2004; CIC	0.00	0.00	0.0003
2005; CIC	0.00	0.00	0.0001
2006; CIC	0.00	0.00	0.0000
2007; CIC	0.00	0.00	0.0000

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.83	0.19	0.0000	0.06	0.04	0.09
Respondent Age						
12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
18 to 25	-0.01	0.07	0.9206	0.99	0.87	1.14
26 to 34	0.00	0.10	0.9856	1.00	0.82	1.22
35 to 49	-0.22	0.10	0.0309	0.81	0.66	0.98
50+	-0.59	0.14	0.0000	0.56	0.42	0.74
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.84	0.04	0.0000	2.33	2.16	2.51
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.32	0.04	0.0000	0.73	0.67	0.79
Other, Non-Hispanic	0.00	0.04	0.9888	1.00	0.93	1.08
Hispanic	-0.12	0.03	0.0002	0.88	0.83	0.94
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	-0.04	0.06	0.5133	0.96	0.86	1.08
51 to 60	-0.04	0.05	0.4884	0.96	0.87	1.07
61+	-0.06	0.05	0.2467	0.94	0.85	1.04
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	-0.01	0.04	0.8589	0.99	0.92	1.07
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.07	0.05	0.1765	1.07	0.97	1.18
Other, Non-Hispanic	-0.11	0.10	0.2700	0.90	0.74	1.09
Hispanic	0.02	0.05	0.6499	1.02	0.92	1.13
Average Miles per Week during the Quarter	-0.00	0.00	0.3782	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.2441	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25	0.03	0.08	0.6919	1.03	0.88	1.21
41 to 50; 26 to 34	-0.06	0.12	0.6128	0.94	0.75	1.19
41 to 50, 35 to 49	0.26	0.11	0.0219	1.30	1.04	1.62
41 to 50; 50+	-0.08	0.16	0.6280	0.92	0.67	1.27
51 to 60; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60, 18 to 25	0.07	0.08	0.3222	1.08	0.93	1.25
51 to 60; 26 to 34	0.10	0.11	0.3630	1.11	0.89	1.37
51 to 60, 35 to 49	0.19	0.11	0.0743	1.21	0.98	1.50
51 to 60; 50+	-0.01	0.15	0.9681	0.99	0.74	1.34
61+; 12 to 17 (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 18 to 25	0.06	0.08	0.3925	1.07	0.92	1.24
61+; 26 to 34	0.02	0.11	0.8426	1.02	0.82	1.27
61+; 35 to 49	0.23	0.11	0.0332	1.26	1.02	1.56
61+; 50+	0.05	0.16	0.7370	1.05	0.78	1.43
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	0.00	0.04	0.9963	1.00	0.92	1.09
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.27	0.07	0.0003	0.77	0.66	0.88
Black, Non-Hispanic; Other Non-Hispanic	-0.07	0.12	0.5402	0.93	0.74	1.17
Black, Non-Hispanic; Hispanic	-0.17	0.10	0.0975	0.85	0.70	1.03
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	0.23	0.29	0.4285	1.26	0.71	2.24
Other, Non-Hispanic; Other Non-Hispanic	-0.13	0.15	0.3840	0.87	0.65	1.18
Other, Non-Hispanic; Hispanic	0.14	0.18	0.4401	1.15	0.81	1.63
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.03	0.10	0.7759	0.97	0.80	1.18
Hispanic; Other Non-Hispanic	-0.28	0.11	0.0101	0.75	0.61	0.93
Hispanic; Hispanic	-0.40	0.07	0.0000	0.67	0.59	0.76
Cumulative Interview Count	-0.00	0.00	0.6785	1.00	1.00	1.00
Year						
2004 (RC)	0.00	0.00		1.00	1.00	1.00
2005	0.00	0.20	1.0000	1.00	0.67	1.49
2006	0.04	0.22	0.8494	1.04	0.68	1.59
2007	-0.11	0.21	0.5891	0.89	0.60	1.34

(continued)

Table A.5.11 Unweighted Logistic Regression of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2004; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2005; CIC	-0.00	0.00	0.1546	1.00	1.00	1.00
2006; CIC	-0.00	0.00	0.9516	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.7903	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004 to 2007.

Table A.5.12 Unweighted Logistic Regression of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.58	0.23	0.0000	0.08	0.05	0.12
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.38	0.04	0.0000	1.46	1.36	1.57
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.20	0.04	0.0000	0.82	0.75	0.89
Other, Non-Hispanic	-0.06	0.04	0.1388	0.94	0.86	1.02
Hispanic	-0.13	0.04	0.0002	0.87	0.81	0.94
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.00	0.04	0.9443	1.00	0.93	1.08
51 to 60	0.04	0.04	0.2747	1.04	0.97	1.12
61+	-0.00	0.04	0.9172	1.00	0.93	1.07
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.04	0.03	0.2670	1.04	0.97	1.11
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	0.14	0.05	0.0110	1.14	1.03	1.27
Other, Non-Hispanic	-0.04	0.10	0.7253	0.97	0.79	1.17
Hispanic	0.01	0.06	0.8741	1.01	0.89	1.14
Average Miles per Week during the Quarter	-0.00	0.00	0.3518	1.00	1.00	1.00
Average Hours per Week during the Quarter	0.00	0.00	0.0814	1.00	1.00	1.01
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.06	0.04	0.1445	0.94	0.86	1.02
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.10	0.08	0.1811	0.90	0.78	1.05
Black, Non-Hispanic; Other Non-Hispanic	-0.26	0.14	0.0746	0.77	0.58	1.03
Black, Non-Hispanic; Hispanic	-0.22	0.10	0.0271	0.80	0.66	0.98
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00

(continued)

Table A.5.12 Unweighted Logistic Regression of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Other, Non-Hispanic; Black Non-Hispanic	0.14	0.30	0.6424	1.15	0.64	2.07
Other, Non-Hispanic; Other Non-Hispanic	-0.14	0.17	0.4103	0.87	0.63	1.21
Other, Non-Hispanic; Hispanic	-0.05	0.18	0.7987	0.95	0.67	1.37
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.11	0.11	0.3247	0.89	0.72	1.12
Hispanic; Other Non-Hispanic	-0.61	0.15	0.0000	0.54	0.41	0.73
Hispanic; Hispanic	-0.38	0.08	0.0000	0.68	0.58	0.80
Cumulative Interview Count	-0.00	0.00	0.3983	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	0.48	0.26	0.0665	1.62	0.97	2.70
2004	0.37	0.29	0.1896	1.45	0.83	2.55
2005	0.37	0.28	0.1896	1.45	0.83	2.54
2006	0.66	0.28	0.0178	1.94	1.12	3.35
2007	0.72	0.25	0.0044	2.05	1.25	3.35
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	-0.00	0.00	0.3361	1.00	1.00	1.00
2004; CIC	-0.00	0.00	0.9356	1.00	1.00	1.00
2005; CIC	0.00	0.00	0.3805	1.00	1.00	1.00
2006; CIC	-0.00	0.00	0.9121	1.00	1.00	1.00
2007; CIC	0.00	0.00	0.6489	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table A.5.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Continuous Experience

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Intercept	-2.80	0.15	0.0000	0.06	0.05	0.08
Respondent Age						
18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
26 to 34	0.18	0.06	0.0059	1.19	1.05	1.35
35 to 49	0.44	0.05	0.0000	1.56	1.40	1.73
50+	0.18	0.07	0.0105	1.20	1.04	1.37
Respondent Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.80	0.03	0.0000	2.22	2.09	2.35
Respondent Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.84	0.04	0.0000	0.43	0.40	0.46
Other, Non-Hispanic	-0.40	0.04	0.0000	0.67	0.62	0.72
Hispanic	-0.55	0.03	0.0000	0.58	0.54	0.62
Interviewer Age						
Less than 41 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50	0.02	0.04	0.6718	1.02	0.94	1.10
51 to 60	0.00	0.04	0.9654	1.00	0.93	1.08
61+	0.04	0.04	0.3624	1.04	0.96	1.12
Interviewer Gender						
Male (RC)	0.00	0.00		1.00	1.00	1.00
Female	0.05	0.03	0.0700	1.05	1.00	1.12
Interviewer Race/Ethnicity						
White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic	-0.03	0.04	0.3887	0.97	0.90	1.04
Other, Non-Hispanic	-0.03	0.07	0.6119	0.97	0.85	1.10
Hispanic	-0.07	0.04	0.1155	0.94	0.86	1.02
Average Miles per Week during the Quarter	-0.00	0.00	0.2847	1.00	1.00	1.00
Average Hours per Week during the Quarter	-0.00	0.00	0.7554	1.00	1.00	1.00
Interviewer Age by Respondent Age						
Less than 41, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 26 to 34 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41, 35 to 49 (RC)	0.00	0.00		1.00	1.00	1.00
Less than 41; 50+ (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
41 to 50; 26 to 34	0.04	0.07	0.5905	1.04	0.90	1.20
41 to 50, 35 to 49	0.01	0.06	0.8655	1.01	0.89	1.14
41 to 50; 50+	-0.08	0.08	0.3376	0.93	0.79	1.08
51 to 60, 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
51 to 60; 26 to 34	0.17	0.07	0.0175	1.19	1.03	1.37
51 to 60, 35 to 49	0.05	0.06	0.4175	1.05	0.93	1.18
51 to 60; 50+	-0.04	0.08	0.6182	0.96	0.83	1.12
61+; 18 to 25 (RC)	0.00	0.00		1.00	1.00	1.00
61+; 26 to 34	0.05	0.07	0.4761	1.05	0.91	1.22
61+; 35 to 49	-0.03	0.06	0.6727	0.97	0.86	1.10

(continued)

Table A.5.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
61+; 50+	-0.17	0.08	0.0312	0.85	0.73	0.98
Interviewer Gender by Respondent Gender						
Male; Male (RC)	0.00	0.00		1.00	1.00	1.00
Male; Female (RC)	0.00	0.00		1.00	1.00	1.00
Female; Male (RC)	0.00	0.00		1.00	1.00	1.00
Female; Female	-0.04	0.03	0.2563	0.96	0.90	1.03
Interviewer Race/Ethnicity by Respondent Race/Ethnicity						
White, Non-Hispanic; White Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Black Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Other Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
White, Non-Hispanic; Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Black, Non-Hispanic; Black Non-Hispanic	-0.06	0.07	0.4038	0.95	0.83	1.08
Black, Non-Hispanic; Other Non-Hispanic	-0.18	0.11	0.1125	0.83	0.67	1.04
Black, Non-Hispanic; Hispanic	-0.21	0.09	0.0214	0.81	0.68	0.97
Other, Non-Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Other, Non-Hispanic; Black Non-Hispanic	-0.12	0.34	0.7340	0.89	0.45	1.75
Other, Non-Hispanic; Other Non-Hispanic	-0.30	0.14	0.0296	0.74	0.56	0.97
Other, Non-Hispanic; Hispanic	0.11	0.16	0.4900	1.12	0.81	1.54
Hispanic; White, Non-Hispanic (RC)	0.00	0.00		1.00	1.00	1.00
Hispanic; Black Non-Hispanic	-0.12	0.11	0.2968	0.89	0.72	1.11
Hispanic; Other Non-Hispanic	-0.38	0.13	0.0040	0.68	0.53	0.88
Hispanic; Hispanic	-0.52	0.06	0.0000	0.59	0.53	0.67
Cumulative Interview Count	-0.00	0.00	0.8985	1.00	1.00	1.00
Year						
2002 (RC)	0.00	0.00		1.00	1.00	1.00
2003	-0.15	0.22	0.4972	0.86	0.55	1.33
2004	-0.14	0.23	0.5376	0.87	0.55	1.36
2005	0.08	0.16	0.5886	1.09	0.80	1.48
2006	-0.04	0.18	0.8190	0.96	0.68	1.36
2007	0.17	0.17	0.3222	1.19	0.85	1.67

(continued)

Table A.5.13 Unweighted Logistic Regression of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older, Continuous Experience (continued)

Variable	Coefficient	Standard Error	*P* Value	Odds Ratio	Lower 95% OR	Upper 95% OR
Year by Cumulative Interview Count (CIC)						
2002; CIC (RC)	0.00	0.00		1.00	1.00	1.00
2003; CIC	-0.00	0.00	0.7617	1.00	1.00	1.00
2004; CIC	-0.00	0.00	0.2048	1.00	1.00	1.00
2005; CIC	-0.00	0.00	0.6733	1.00	1.00	1.00
2006; CIC	-0.00	0.00	0.6573	1.00	1.00	1.00
2007; CIC	-0.00	0.00	0.7003	1.00	1.00	1.00

RC = reference category.

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Appendix B: Conditional Marginal Plots

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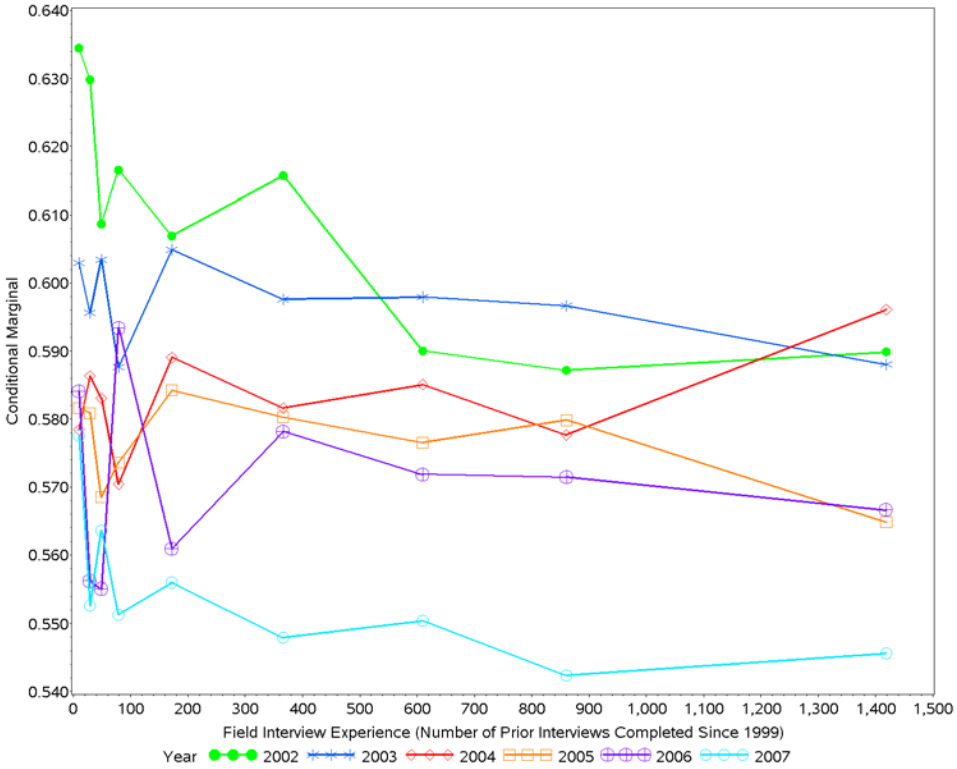
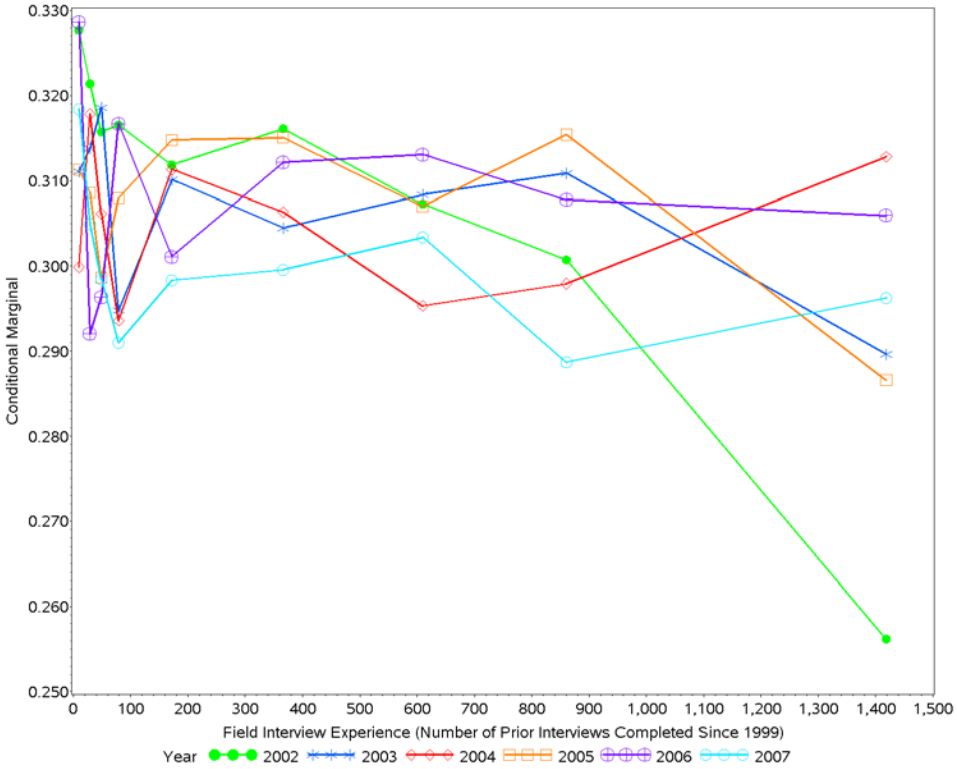
Figure B1.1 Conditional Marginals of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



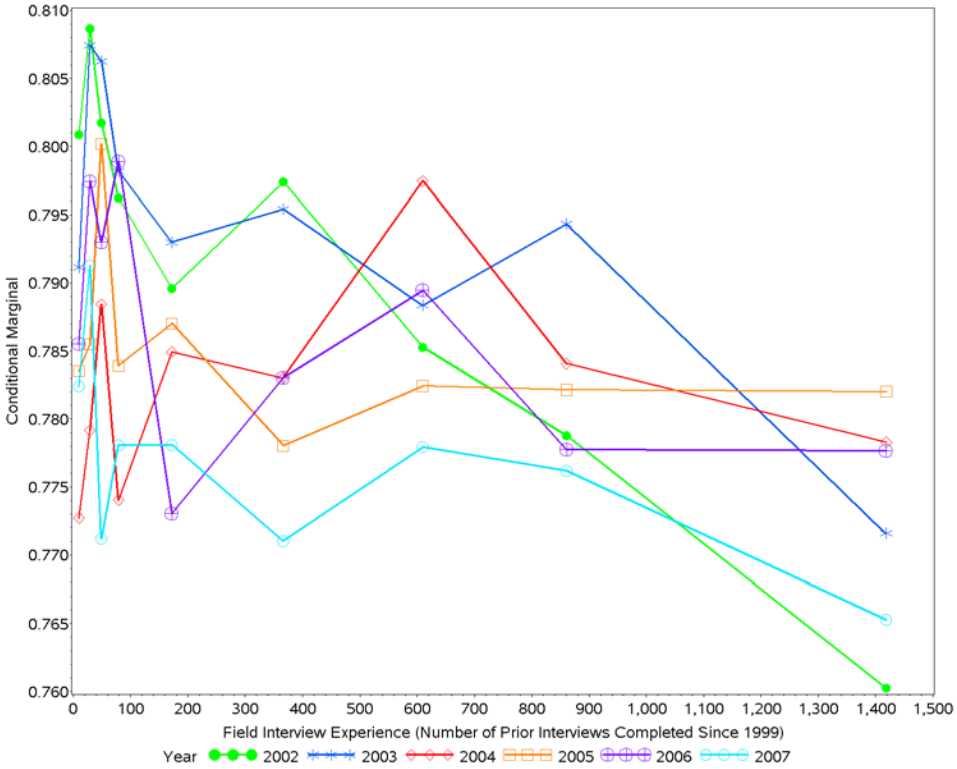
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.2 Conditional Marginals of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



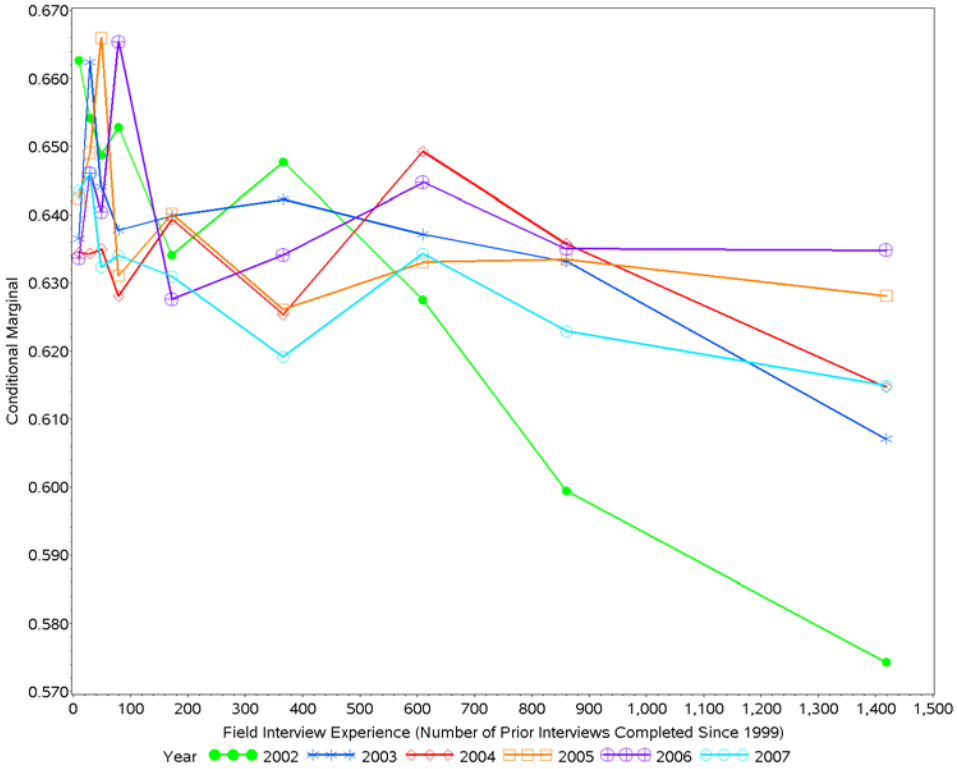
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.3 Conditional Marginals of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



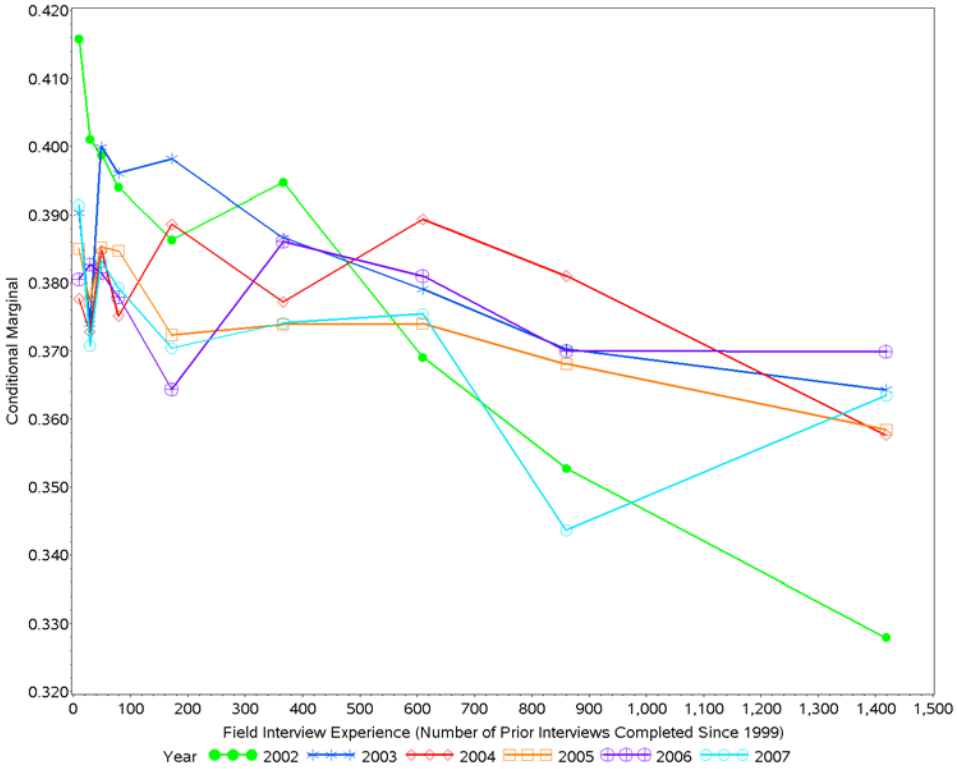
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.4 Conditional Marginals of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



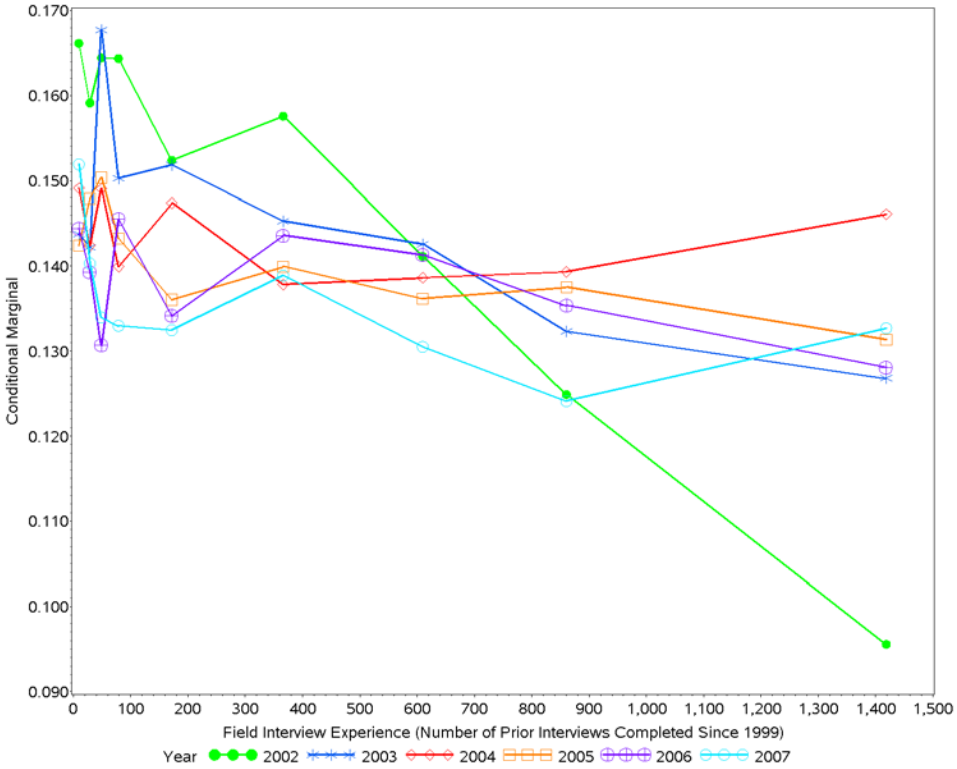
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.5 Conditional Marginals of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



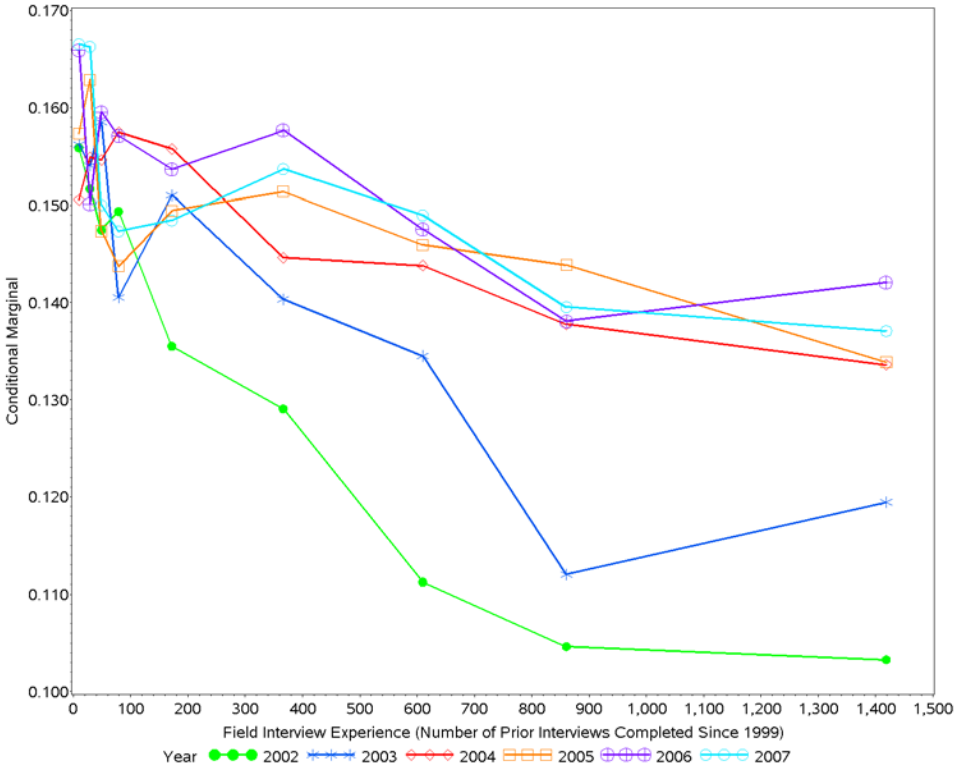
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.6 Conditional Marginals of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



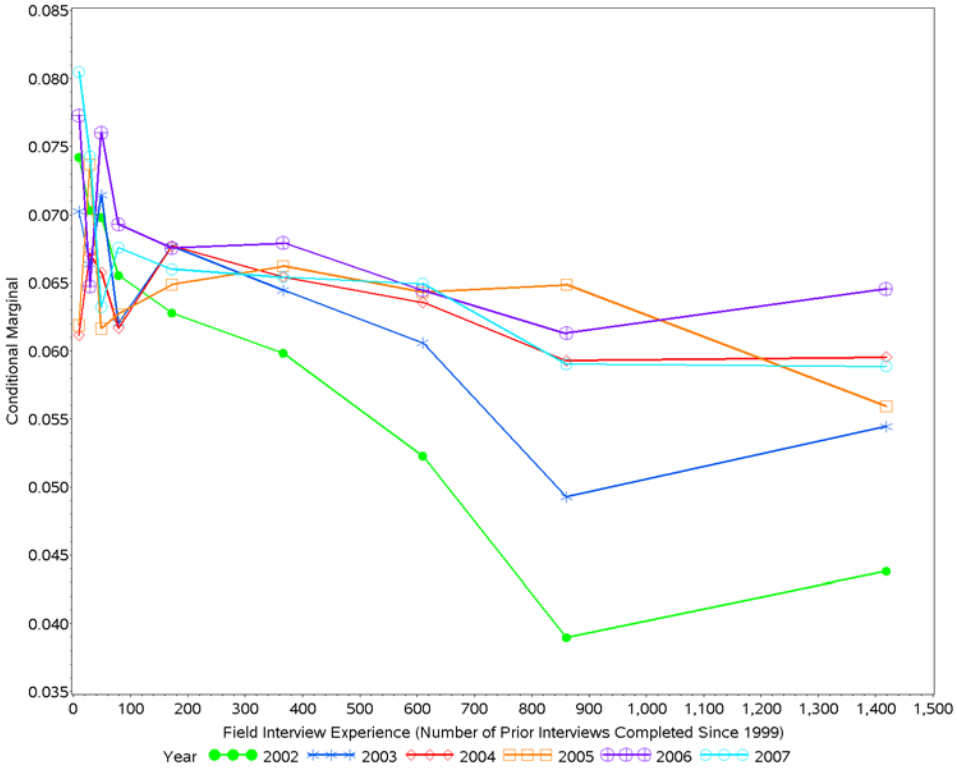
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.7 Conditional Marginals of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older: Categorical Experience



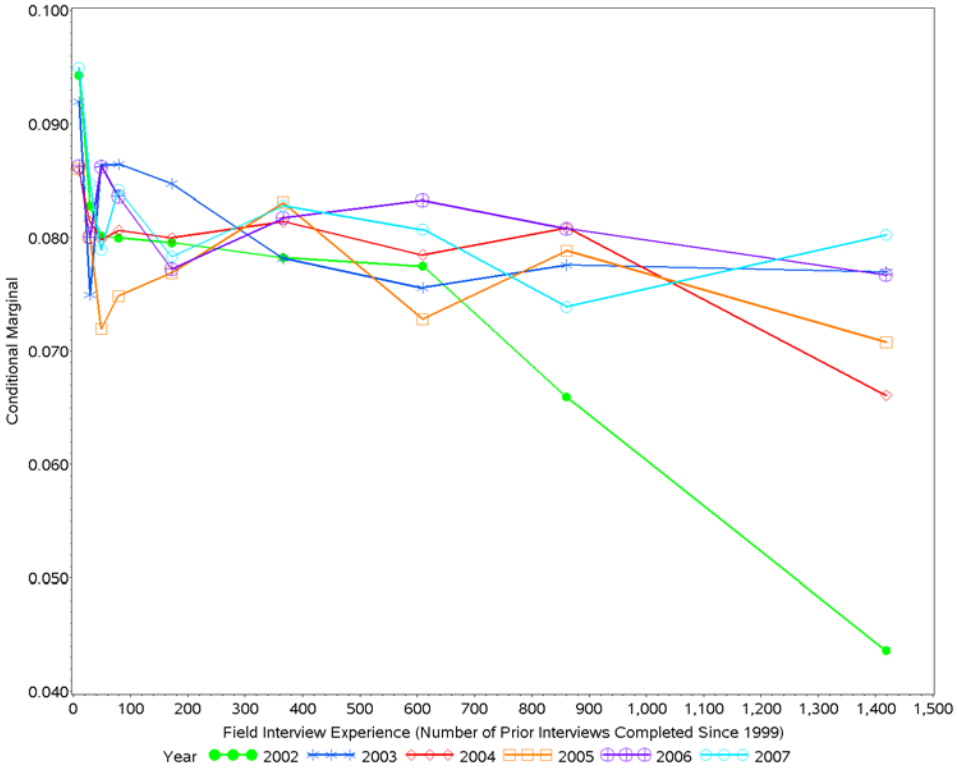
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.8 Conditional Marginals of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older: Categorical Experience



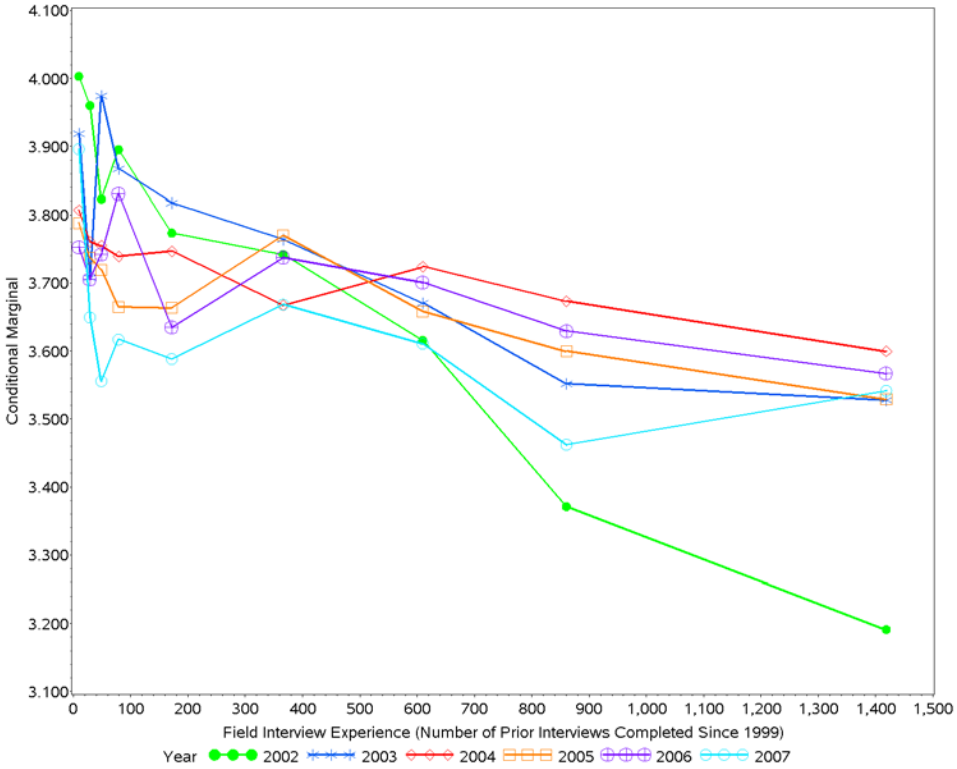
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.9 Conditional Marginals of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older: Categorical Experience



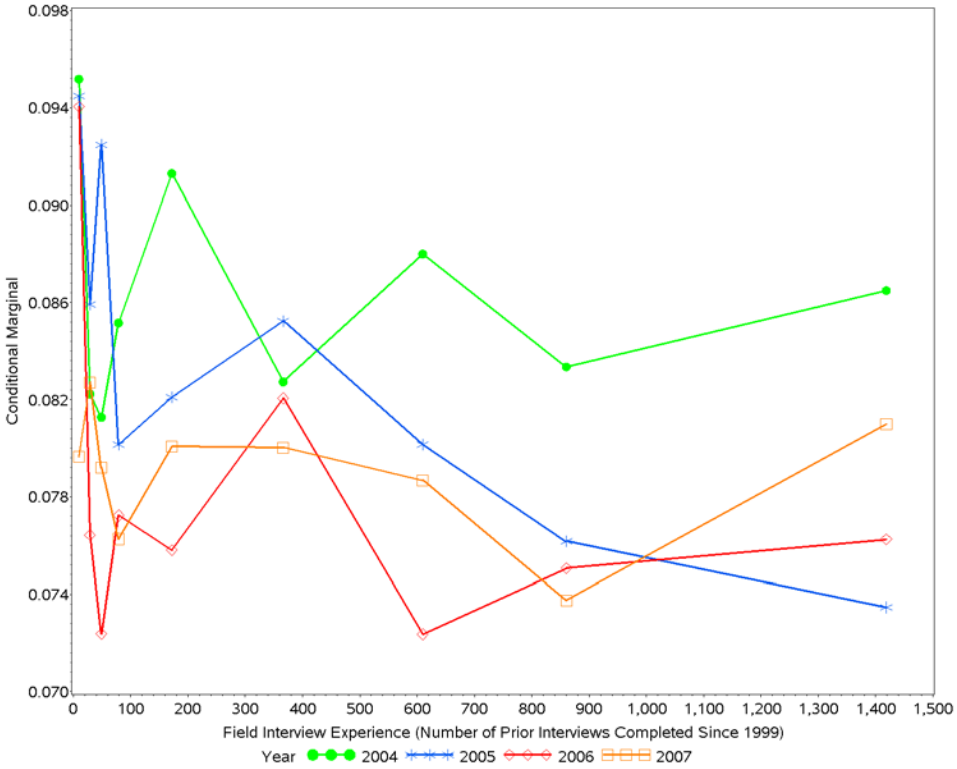
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.10 Conditional Marginals of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older: Categorical Experience



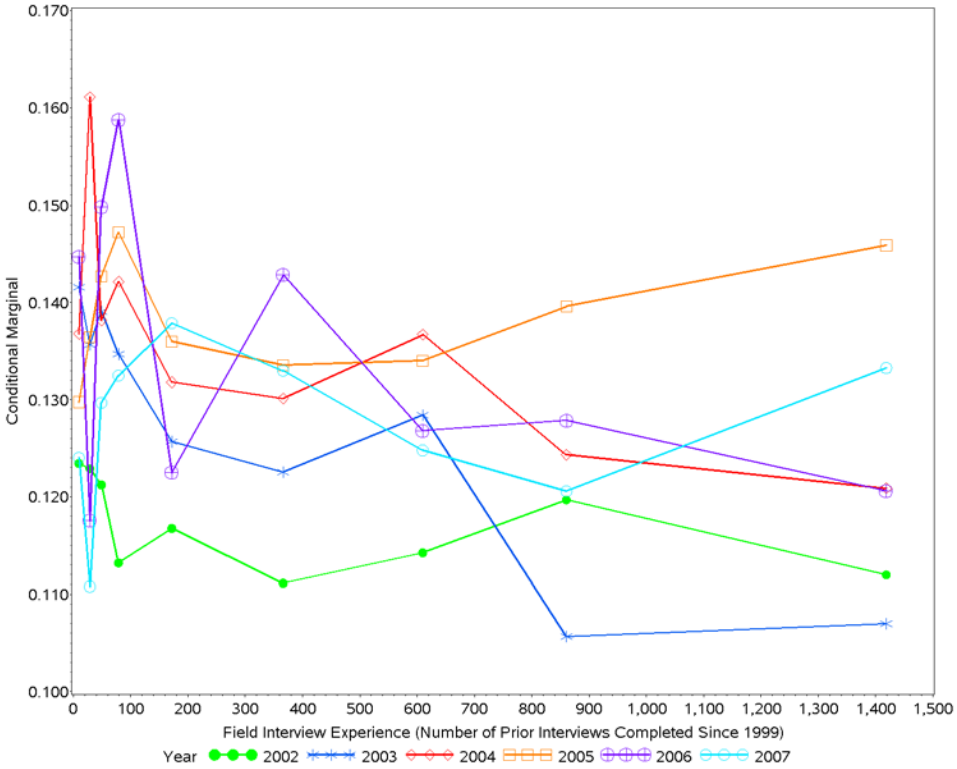
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.11 Conditional Marginals of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older: Categorical Experience



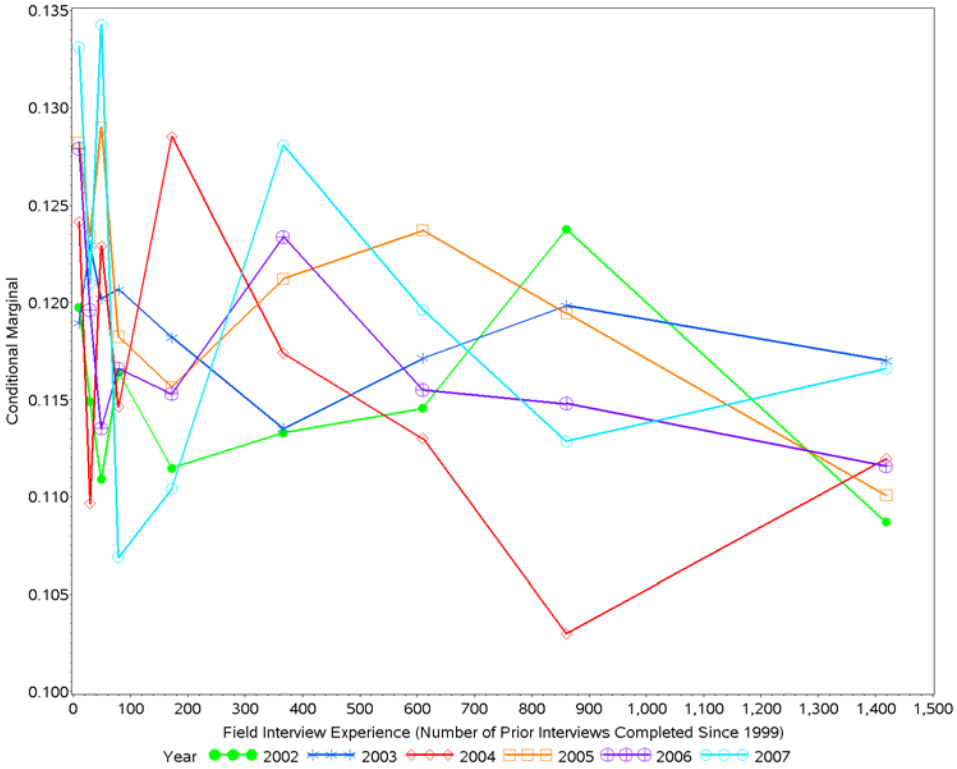
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004 to 2007.

Figure B1.12 Conditional Marginals of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17: Categorical Experience



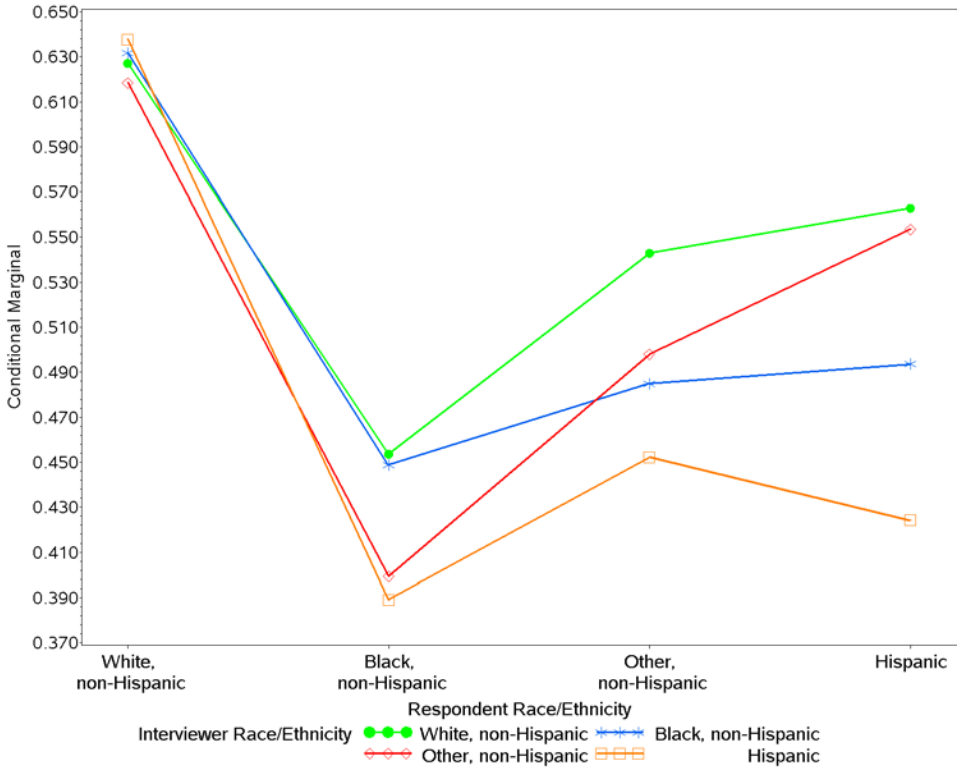
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B1.13 Conditional Marginals of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older: Categorical Experience



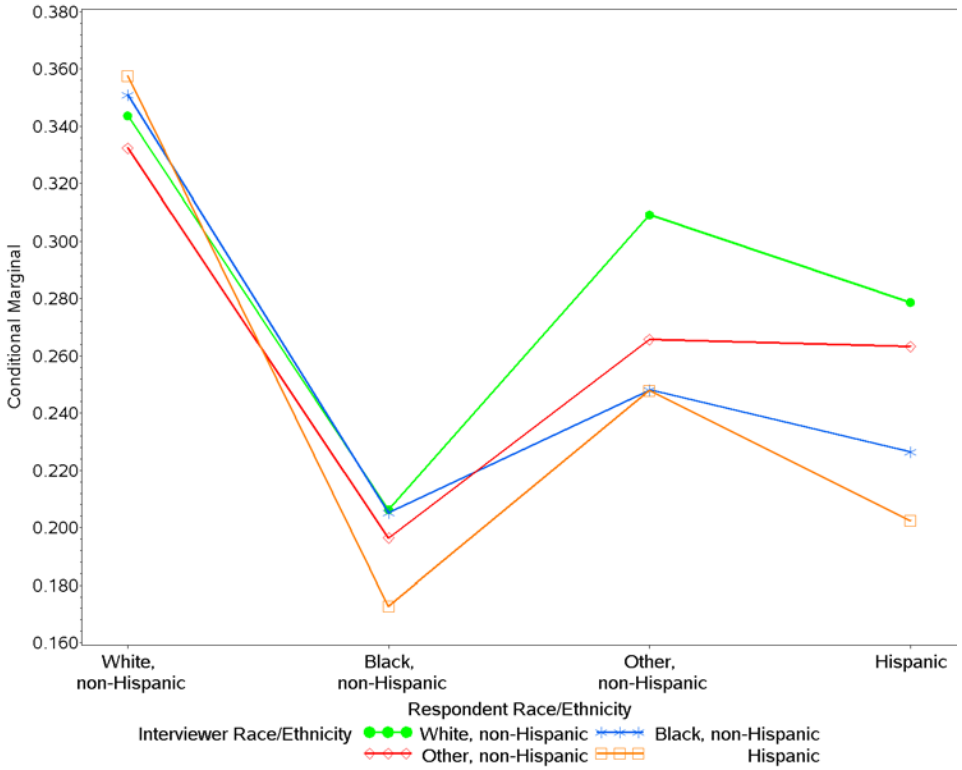
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.1 Conditional Marginals of Respondent Reporting Lifetime Cigarette Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



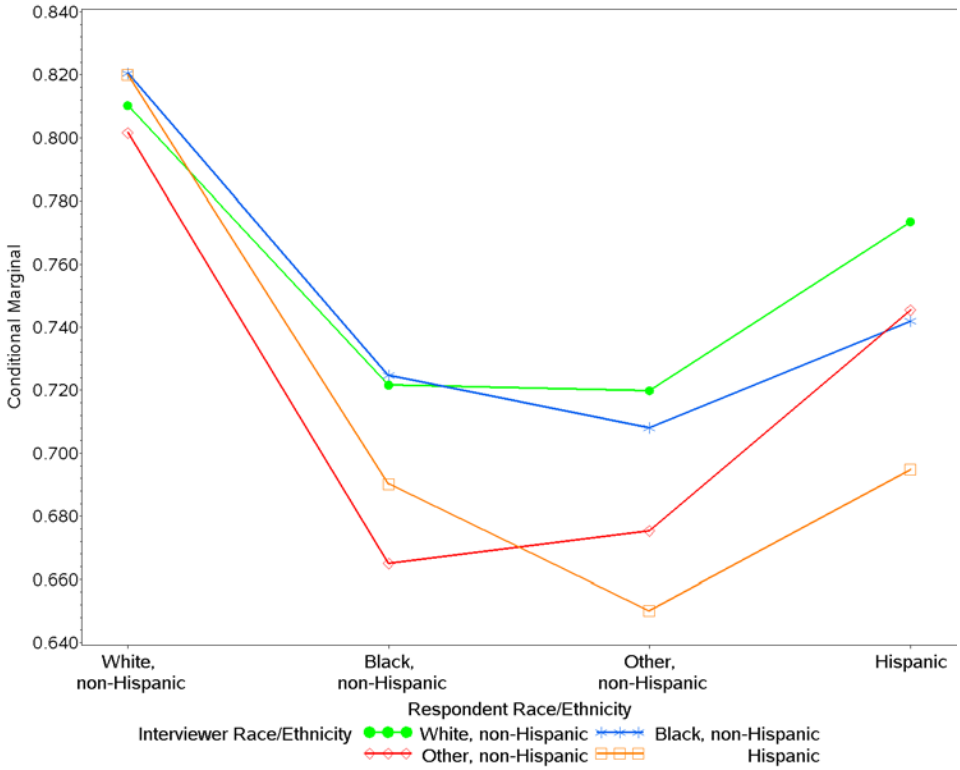
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.2 Conditional Marginals of Respondent Reporting Past Year Cigarette Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



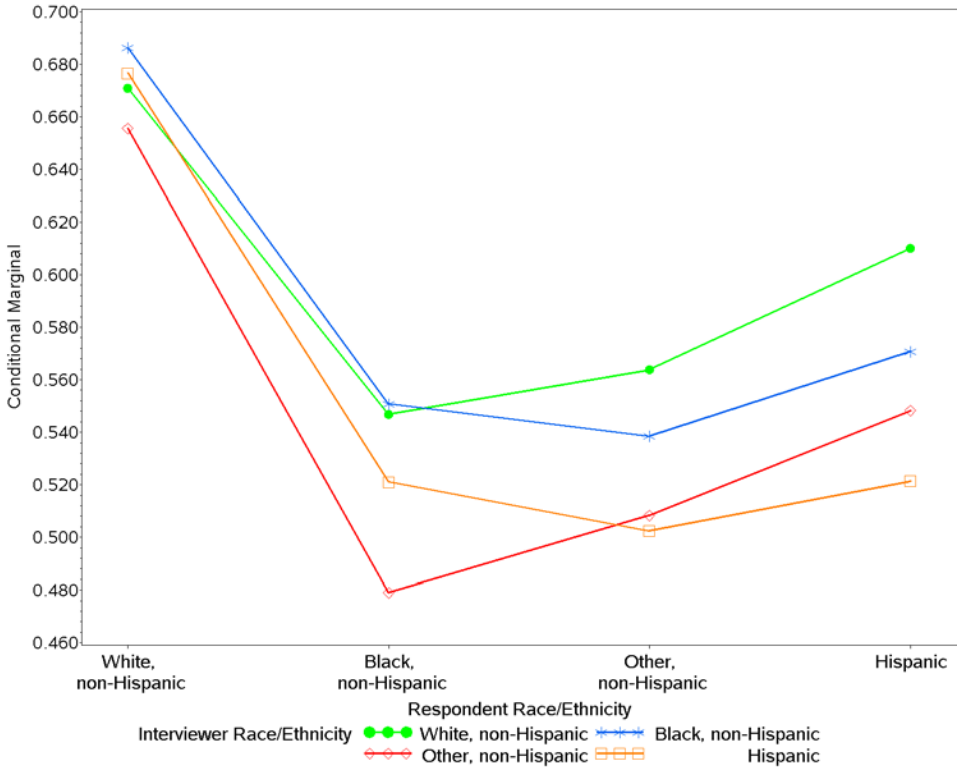
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.3 Conditional Marginals of Respondent Reporting Lifetime Alcohol Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



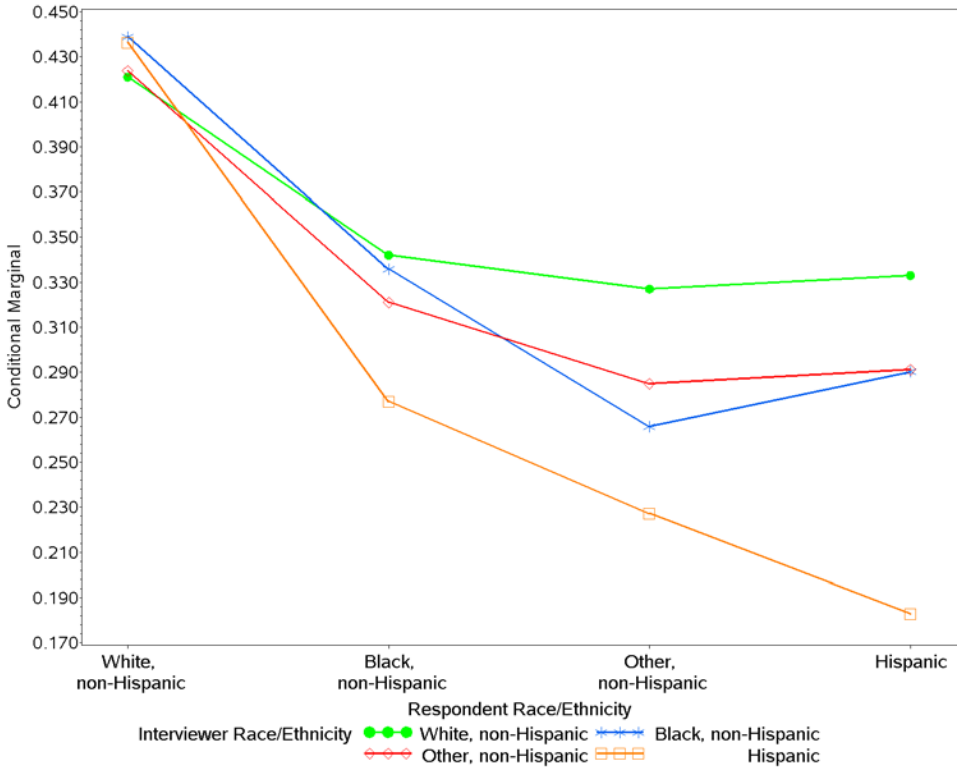
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.4 Conditional Marginals of Respondent Reporting Past Year Alcohol Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



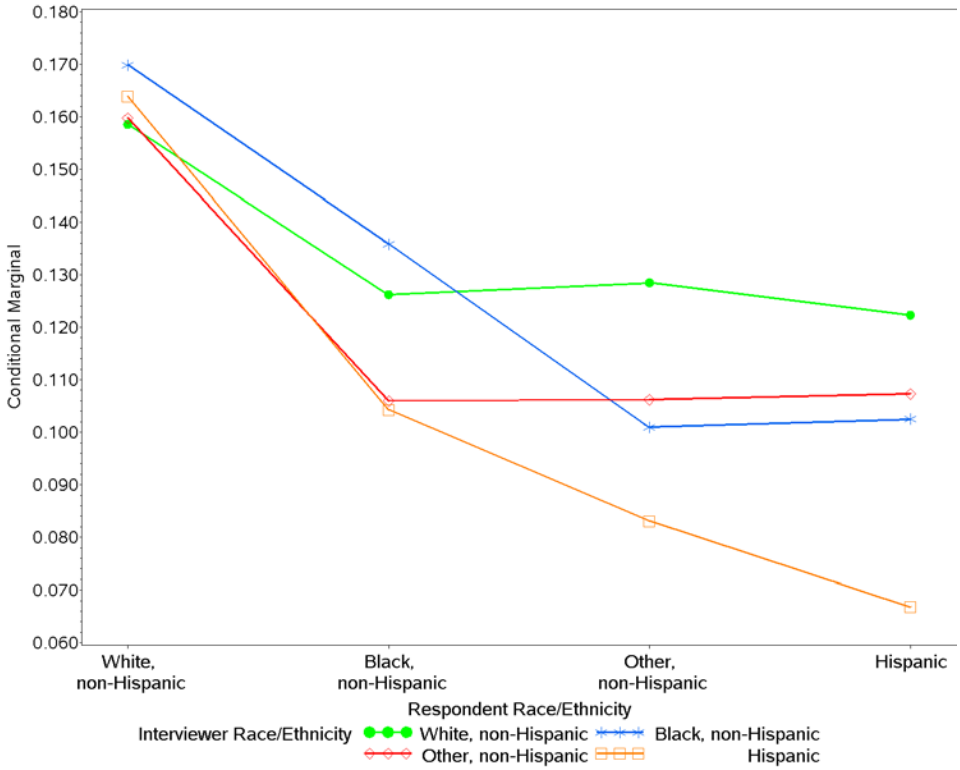
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.5 Conditional Marginals of Respondent Reporting Lifetime Marijuana Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



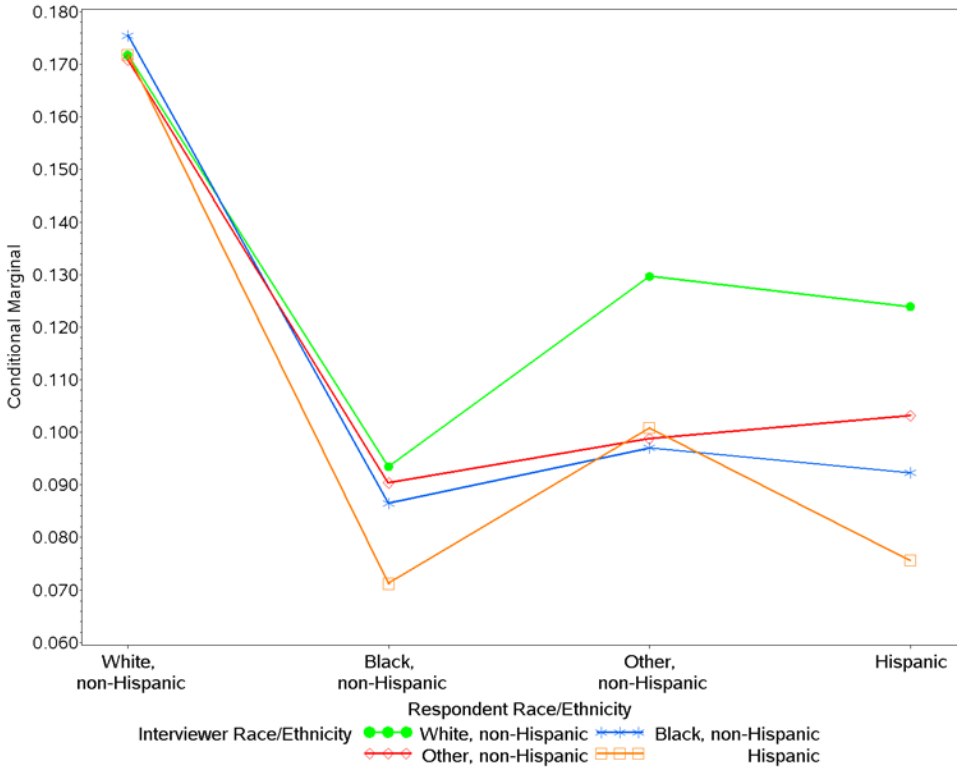
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.6 Conditional Marginals of Respondent Reporting Past Year Marijuana Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



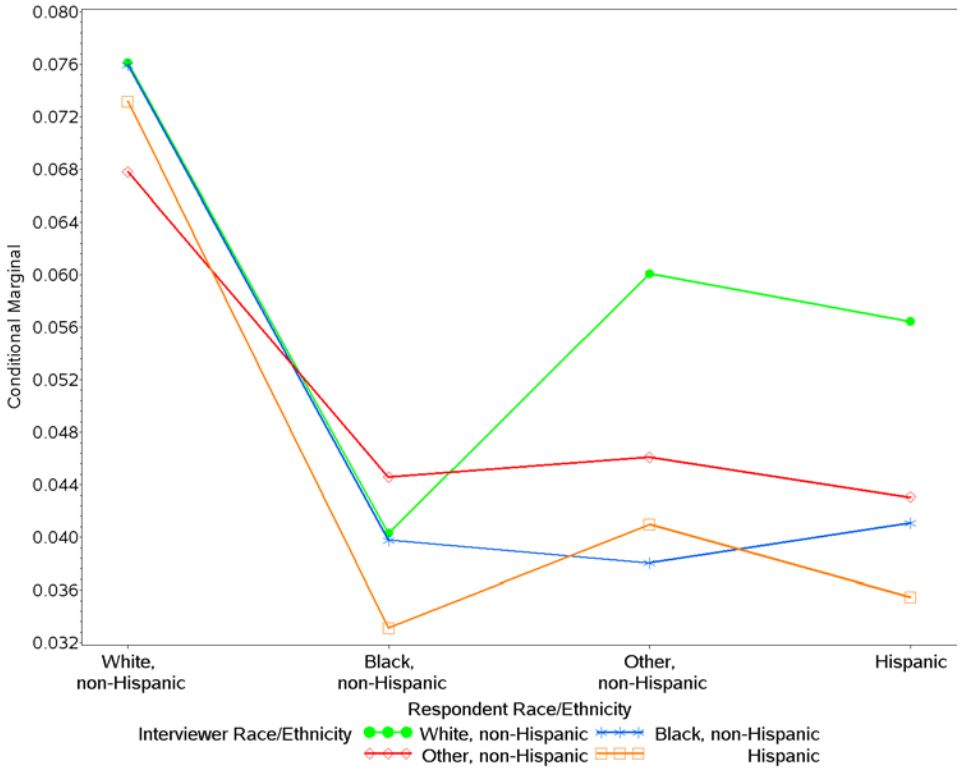
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.7 Conditional Marginals of Respondent Reporting Lifetime Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



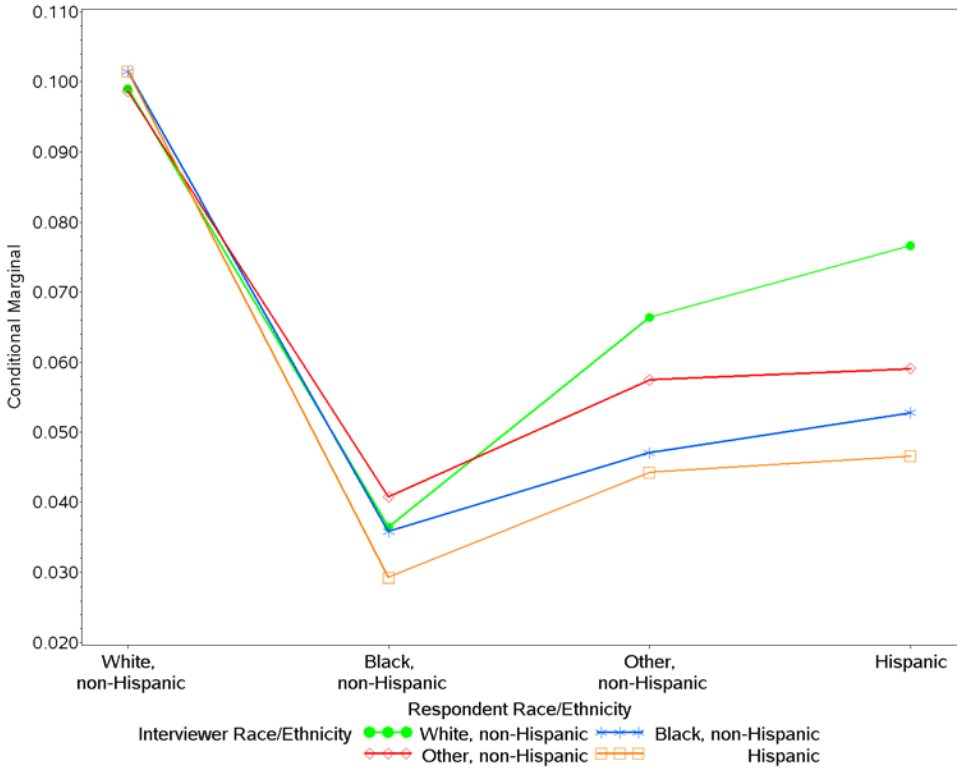
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.8 Conditional Marginals of Respondent Reporting Past Year Nonmedical Use of Pain Relievers: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



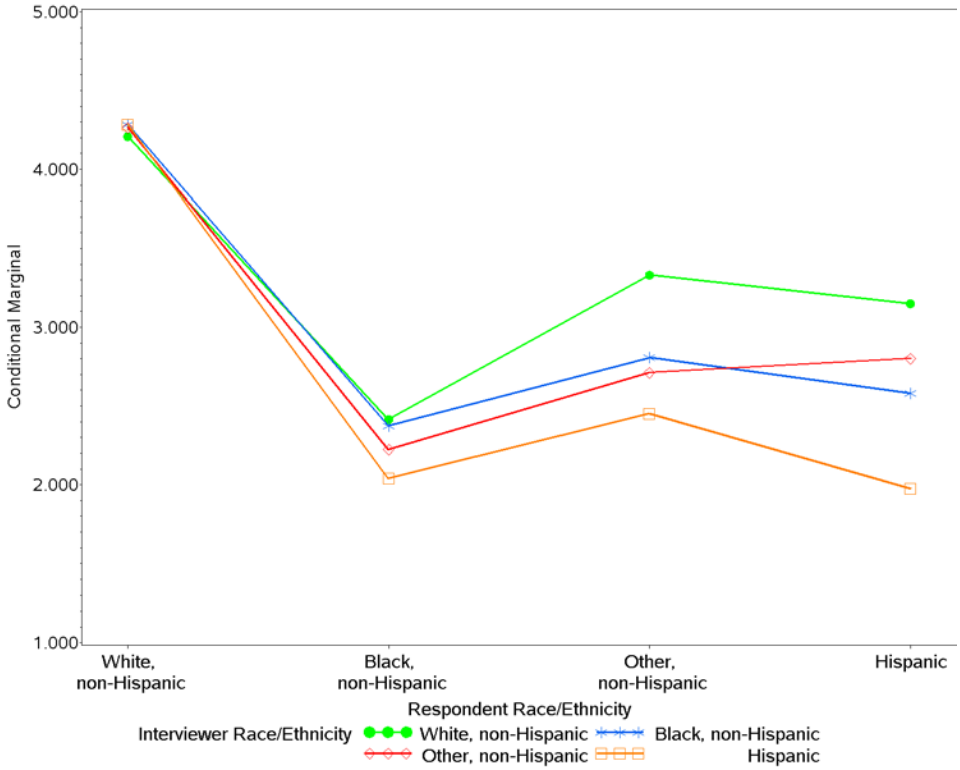
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.9 Conditional Marginals of Respondent Reporting Lifetime Cocaine Use: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



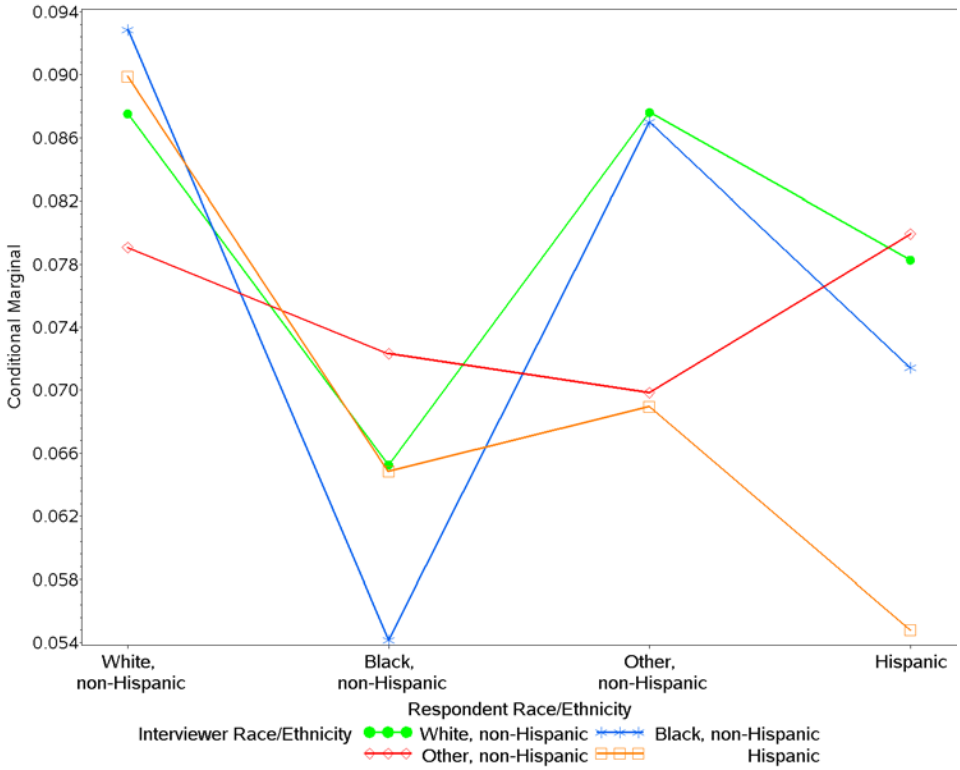
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.10 Conditional Marginals of Number of Positive Responses to Gate Items: 2002 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



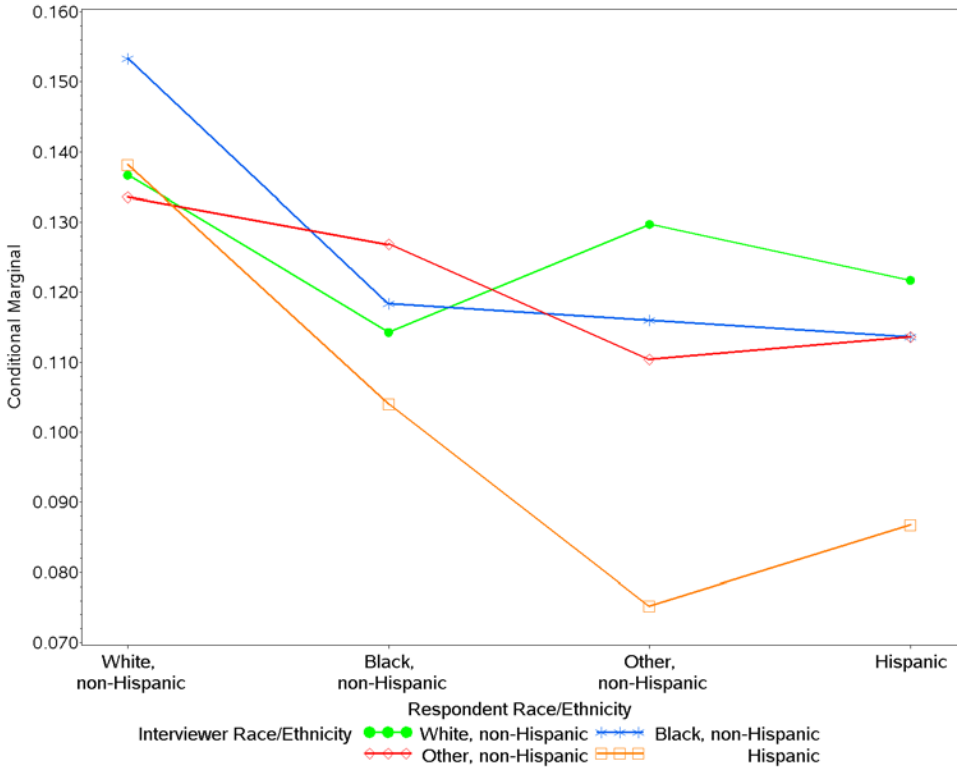
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.11 Conditional Marginals of Respondent Reporting Past Year Major Depressive Episode: 2004 to 2007, Aged 12 or Older: Interviewer and Respondent Race/Ethnicity



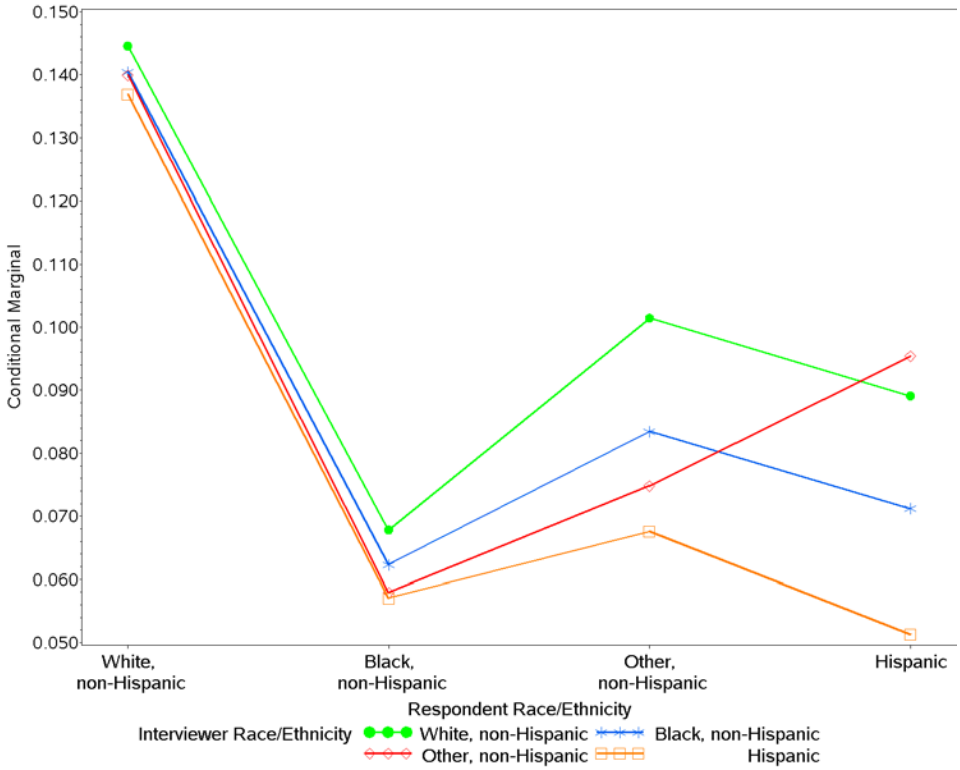
Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004 to 2007.

Figure B2.12 Conditional Marginals of Respondent Reporting Past Year Specialty Mental Health Treatment: 2002 to 2007, Aged 12 to 17: Interviewer and Respondent Race/Ethnicity



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Figure B2.13 Conditional Marginals of Respondent Reporting Past Year Adult Mental Health Treatment: 2002 to 2007, Aged 18 or Older: Interviewer and Respondent Race/Ethnicity



Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Appendix C: Cohort Analysis Results

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Table C1.1 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Lifetime Use of Cigarettes

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.601	0.574	0.570	0.581	0.603	0.574	0.573	0.504
20 to 39	--	0.570	0.599	0.571	0.540	0.595	0.560	0.577
40 to 59	--	--	0.547	0.586	0.554	0.601	0.544	0.589
60 to 99	--	--	--	0.581	0.553	0.568	0.575	0.566
100 to 249	--	--	--	--	0.586	0.566	0.578	0.568
250 to 499	--	--	--	--	--	0.563	0.573	0.569
500 to 749	--	--	--	--	--	--	0.586	0.558
750+	--	--	--	--	--	--	--	0.597

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.2 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Use of Cigarettes

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.378	0.348	0.307	0.338	0.359	0.318	0.312	0.262
20 to 39	--	0.316	0.351	0.325	0.289	0.330	0.294	0.377
40 to 59	--	--	0.323	0.351	0.312	0.371	0.302	0.337
60 to 99	--	--	--	0.349	0.311	0.332	0.317	0.324
100 to 249	--	--	--	--	0.341	0.331	0.336	0.336
250 to 499	--	--	--	--	--	0.330	0.334	0.332
500 to 749	--	--	--	--	--	--	0.348	0.331
750+	--	--	--	--	--	--	--	0.354

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.3 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Lifetime Use of Alcohol

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.734	0.723	0.701	0.726	0.738	0.711	0.699	0.699
20 to 39	--	0.709	0.724	0.707	0.710	0.724	0.701	0.690
40 to 59	--	--	0.713	0.718	0.716	0.716	0.719	0.717
60 to 99	--	--	--	0.724	0.718	0.719	0.728	0.703
100 to 249	--	--	--	--	0.729	0.703	0.716	0.722
250 to 499	--	--	--	--	--	0.698	0.717	0.716
500 to 749	--	--	--	--	--	--	0.727	0.714
750+	--	--	--	--	--	--	--	0.725

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.4 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Use of Alcohol

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.627	0.636	0.569	0.607	0.631	0.615	0.569	0.619
20 to 39	--	0.596	0.634	0.590	0.596	0.621	0.602	0.536
40 to 59	--	--	0.592	0.591	0.597	0.591	0.591	0.545
60 to 99	--	--	--	0.616	0.598	0.596	0.599	0.583
100 to 249	--	--	--	--	0.616	0.589	0.606	0.603
250 to 499	--	--	--	--	--	0.582	0.604	0.596
500 to 749	--	--	--	--	--	--	0.613	0.605
750+	--	--	--	--	--	--	--	0.604

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.5 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Lifetime Use of Marijuana

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.427	0.417	0.410	0.407	0.422	0.390	0.419	0.356
20 to 39	--	0.381	0.370	0.403	0.392	0.391	0.397	0.328
40 to 59	--	--	0.382	0.408	0.398	0.412	0.380	0.460
60 to 99	--	--	--	0.427	0.396	0.404	0.414	0.396
100 to 249	--	--	--	--	0.414	0.394	0.413	0.404
250 to 499	--	--	--	--	--	0.376	0.402	0.388
500 to 749	--	--	--	--	--	--	0.420	0.411
750+	--	--	--	--	--	--	--	0.426

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.6 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Use of Marijuana

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.207	0.192	0.182	0.189	0.195	0.186	0.186	0.121
20 to 39	--	0.175	0.145	0.191	0.169	0.151	0.188	0.147
40 to 59	--	--	0.161	0.204	0.188	0.183	0.167	0.210
60 to 99	--	--	--	0.199	0.182	0.189	0.172	0.160
100 to 249	--	--	--	--	0.176	0.174	0.184	0.188
250 to 499	--	--	--	--	--	0.166	0.179	0.181
500 to 749	--	--	--	--	--	--	0.190	0.186
750+	--	--	--	--	--	--	--	0.212

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.7 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Lifetime Nonmedical Use of Analgesics

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.174	0.177	0.161	0.199	0.178	0.209	0.177	0.171
20 to 39	--	0.164	0.143	0.191	0.196	0.191	0.158	0.184
40 to 59	--	--	0.177	0.163	0.168	0.169	0.194	0.230
60 to 99	--	--	--	0.164	0.170	0.182	0.160	0.167
100 to 249	--	--	--	--	0.178	0.177	0.170	0.186
250 to 499	--	--	--	--	--	0.160	0.178	0.176
500 to 749	--	--	--	--	--	--	0.176	0.170
750+	--	--	--	--	--	--	--	0.181

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.8 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Nonmedical Use of Analgesics

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.084	0.083	0.064	0.104	0.078	0.103	0.089	0.085
20 to 39	--	0.081	0.058	0.088	0.100	0.096	0.079	0.120
40 to 59	--	--	0.078	0.067	0.075	0.078	0.107	0.148
60 to 99	--	--	--	0.067	0.084	0.075	0.066	0.090
100 to 249	--	--	--	--	0.081	0.088	0.082	0.078
250 to 499	--	--	--	--	--	0.078	0.087	0.092
500 to 749	--	--	--	--	--	--	0.088	0.082
750+	--	--	--	--	--	--	--	0.085

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.9 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Lifetime Use of Cocaine

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.145	0.127	0.138	0.142	0.147	0.144	0.125	0.100
20 to 39	--	0.119	0.115	0.125	0.124	0.124	0.145	0.076
40 to 59	--	--	0.141	0.120	0.129	0.144	0.118	0.168
60 to 99	--	--	--	0.112	0.119	0.143	0.121	0.141
100 to 249	--	--	--	--	0.124	0.123	0.138	0.135
250 to 499	--	--	--	--	--	0.120	0.124	0.126
500 to 749	--	--	--	--	--	--	0.131	0.125
750+	--	--	--	--	--	--	--	0.134

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.10 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Positive Responses to Gate Items

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	4.037	3.732	3.551	3.936	3.953	3.807	3.526	3.256
20 to 39	--	3.589	3.448	3.829	3.660	3.691	3.735	3.216
40 to 59	--	--	3.893	3.737	3.711	3.845	3.646	4.310
60 to 99	--	--	--	3.867	3.703	3.765	3.640	3.697
100 to 249	--	--	--	--	3.800	3.590	3.748	3.659
250 to 499	--	--	--	--	--	3.503	3.712	3.629
500 to 749	--	--	--	--	--	--	3.790	3.635
750+	--	--	--	--	--	--	--	3.935

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.11 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Specialty Mental Health Treatment, Aged 12 to 17

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.113	0.140	0.172	0.087	0.137	0.098	0.172	0.030
20 to 39	--	0.136	0.151	0.171	0.142	0.157	0.081	0.197
40 to 59	--	--	0.155	0.132	0.084	0.138	0.165	0.084
60 to 99	--	--	--	0.095	0.125	0.127	0.120	0.164
100 to 249	--	--	--	--	0.141	0.131	0.120	0.075
250 to 499	--	--	--	--	--	0.115	0.133	0.129
500 to 749	--	--	--	--	--	--	0.114	0.123
750+	--	--	--	--	--	--	--	0.131

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C1.12 Adjusted Prevalence Estimates by Experience Measures for 2002 Cohort – Past Year Adult Mental Health Treatment, Aged 18 or Older

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.162	0.099	0.113	0.122	0.139	0.138	0.140	0.078
20 to 39	--	0.124	0.091	0.116	0.106	0.180	0.159	0.125
40 to 59	--	--	0.125	0.114	0.140	0.152	0.157	0.106
60 to 99	--	--	--	0.090	0.119	0.162	0.164	0.078
100 to 249	--	--	--	--	0.123	0.134	0.132	0.109
250 to 499	--	--	--	--	--	0.130	0.131	0.119
500 to 749	--	--	--	--	--	--	0.144	0.116
750+	--	--	--	--	--	--	--	0.141

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2007.

Table C2.1 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Lifetime Use of Cigarettes

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.537	0.532	0.584	0.536	0.562	0.558	0.586	0.595
20 to 39	--	0.542	0.503	0.543	0.525	0.551	0.566	0.579
40 to 59	--	--	0.564	0.534	0.535	0.572	0.561	0.642
60 to 99	--	--	--	0.543	0.551	0.553	0.534	0.517
100 to 249	--	--	--	--	0.558	0.557	0.543	0.546
250 to 499	--	--	--	--	--	0.556	0.561	0.538
500 to 749	--	--	--	--	--	--	0.576	0.581
750+	--	--	--	--	--	--	--	0.540

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.2 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Use of Cigarettes

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.274	0.311	0.355	0.333	0.309	0.295	0.319	0.335
20 to 39	--	0.300	0.308	0.298	0.310	0.337	0.305	0.291
40 to 59	--	--	0.298	0.289	0.293	0.343	0.295	0.406
60 to 99	--	--	--	0.303	0.304	0.320	0.308	0.285
100 to 249	--	--	--	--	0.299	0.312	0.294	0.304
250 to 499	--	--	--	--	--	0.307	0.310	0.286
500 to 749	--	--	--	--	--	--	0.309	0.317
750+	--	--	--	--	--	--	--	0.303

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.3 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Lifetime Use of Alcohol

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.706	0.698	0.721	0.720	0.721	0.718	0.710	0.710
20 to 39	--	0.756	0.701	0.713	0.710	0.747	0.721	0.743
40 to 59	--	--	0.738	0.702	0.719	0.716	0.768	0.753
60 to 99	--	--	--	0.701	0.725	0.708	0.704	0.705
100 to 249	--	--	--	--	0.713	0.724	0.715	0.695
250 to 499	--	--	--	--	--	0.720	0.724	0.700
500 to 749	--	--	--	--	--	--	0.733	0.706
750+	--	--	--	--	--	--	--	0.707

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.4 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Use of Alcohol

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.572	0.570	0.599	0.584	0.606	0.614	0.573	0.618
20 to 39	--	0.621	0.555	0.592	0.584	0.634	0.614	0.631
40 to 59	--	--	0.633	0.587	0.594	0.613	0.636	0.637
60 to 99	--	--	--	0.590	0.596	0.603	0.573	0.550
100 to 249	--	--	--	--	0.601	0.607	0.585	0.577
250 to 499	--	--	--	--	--	0.598	0.608	0.580
500 to 749	--	--	--	--	--	--	0.617	0.585
750+	--	--	--	--	--	--	--	0.573

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.5 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Lifetime Use of Marijuana

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.388	0.385	0.419	0.357	0.398	0.379	0.395	0.401
20 to 39	--	0.382	0.361	0.394	0.359	0.399	0.356	0.369
40 to 59	--	--	0.380	0.376	0.405	0.394	0.412	0.476
60 to 99	--	--	--	0.401	0.403	0.375	0.387	0.354
100 to 249	--	--	--	--	0.373	0.389	0.379	0.386
250 to 499	--	--	--	--	--	0.390	0.397	0.357
500 to 749	--	--	--	--	--	--	0.410	0.409
750+	--	--	--	--	--	--	--	0.376

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.6 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Use of Marijuana

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.153	0.166	0.148	0.173	0.189	0.161	0.183	0.145
20 to 39	--	0.141	0.170	0.158	0.154	0.192	0.168	0.199
40 to 59	--	--	0.162	0.158	0.177	0.190	0.197	0.241
60 to 99	--	--	--	0.187	0.186	0.161	0.166	0.140
100 to 249	--	--	--	--	0.168	0.170	0.166	0.170
250 to 499	--	--	--	--	--	0.177	0.174	0.159
500 to 749	--	--	--	--	--	--	0.167	0.168
750+	--	--	--	--	--	--	--	0.155

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.7 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Lifetime Nonmedical Use of Analgesics

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.139	0.175	0.187	0.197	0.182	0.159	0.167	0.186
20 to 39	--	0.162	0.184	0.162	0.155	0.187	0.198	0.124
40 to 59	--	--	0.172	0.171	0.167	0.173	0.178	0.231
60 to 99	--	--	--	0.186	0.161	0.167	0.166	0.160
100 to 249	--	--	--	--	0.161	0.170	0.159	0.146
250 to 499	--	--	--	--	--	0.170	0.162	0.149
500 to 749	--	--	--	--	--	--	0.161	0.143
750+	--	--	--	--	--	--	--	0.150

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.8 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Nonmedical Use of Analgesics

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.054	0.092	0.085	0.092	0.093	0.066	0.085	0.081
20 to 39	--	0.061	0.063	0.059	0.069	0.085	0.113	0.053
40 to 59	--	--	0.069	0.068	0.077	0.084	0.074	0.138
60 to 99	--	--	--	0.083	0.071	0.071	0.097	0.076
100 to 249	--	--	--	--	0.077	0.076	0.080	0.072
250 to 499	--	--	--	--	--	0.080	0.076	0.074
500 to 749	--	--	--	--	--	--	0.074	0.061
750+	--	--	--	--	--	--	--	0.060

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.9 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Lifetime Use of Cocaine

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.117	0.135	0.134	0.115	0.130	0.124	0.127	0.123
20 to 39	--	0.120	0.119	0.114	0.103	0.132	0.089	0.103
40 to 59	--	--	0.088	0.107	0.120	0.124	0.088	0.136
60 to 99	--	--	--	0.127	0.126	0.125	0.112	0.119
100 to 249	--	--	--	--	0.112	0.117	0.112	0.104
250 to 499	--	--	--	--	--	0.125	0.123	0.105
500 to 749	--	--	--	--	--	--	0.130	0.129
750+	--	--	--	--	--	--	--	0.114

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.10 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Positive Responses to Gate Items

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	3.388	3.670	3.556	3.657	3.823	3.644	3.791	3.711
20 to 39	--	3.550	3.278	3.494	3.269	3.920	3.420	3.221
40 to 59	--	--	3.628	3.691	3.513	3.690	3.643	4.421
60 to 99	--	--	--	3.712	3.668	3.693	3.467	3.557
100 to 249	--	--	--	--	3.539	3.634	3.470	3.291
250 to 499	--	--	--	--	--	3.665	3.679	3.407
500 to 749	--	--	--	--	--	--	3.770	3.671
750+	--	--	--	--	--	--	--	3.561

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.11 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Specialty Mental Health Treatment, Aged 12 to 17

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.177	0.121	0.154	0.176	0.139	0.147	0.083	0.266
20 to 39	--	0.095	0.086	0.170	0.145	0.132	0.099	0.292
40 to 59	--	--	0.174	0.130	0.136	0.164	0.148	0.076
60 to 99	--	--	--	0.123	0.151	0.134	0.099	0.255
100 to 249	--	--	--	--	0.131	0.140	0.119	0.170
250 to 499	--	--	--	--	--	0.141	0.150	0.131
500 to 749	--	--	--	--	--	--	0.107	0.094
750+	--	--	--	--	--	--	--	0.116

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Table C2.12 Adjusted Prevalence Estimates by Experience Measures for 2003 Cohort – Past Year Adult Mental Health Treatment, Aged 18 or Older

Number of Interviews Completed at Time of Interview	Eventual Experience: Number of Interviews Completed by the End of 2007							
	1 to 19	20 to 39	40 to 59	60 to 99	100 to 249	250 to 499	500 to 749	750+
1 to 19	0.122	0.082	0.118	0.115	0.115	0.141	0.180	0.229
20 to 39	--	0.094	0.107	0.155	0.111	0.128	0.176	0.103
40 to 59	--	--	0.186	0.119	0.097	0.141	0.155	0.211
60 to 99	--	--	--	0.106	0.124	0.119	0.101	0.106
100 to 249	--	--	--	--	0.110	0.128	0.135	0.112
250 to 499	--	--	--	--	--	0.141	0.135	0.127
500 to 749	--	--	--	--	--	--	0.121	0.143
750+	--	--	--	--	--	--	--	0.126

Source: Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2003 to 2007.

Appendix D: Estimating Interviewer Level of Effort and Potential Interviewer Effects Based on Sample Design Scenarios

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Appendix D: Estimating Interviewer Level of Effort and Potential Interviewer Effects Based on Sample Design Scenarios

The purpose of this appendix is to provide additional explanation of the assumptions used to produce the projections of prevalence rates for past year marijuana use in Section B.6 in Appendix B of the National Survey on Drug Use and Health (NSDUH) report titled *Sample Redesign Issues and Methodological Studies* (Center for Behavioral Health Statistics and Quality [CBHSQ], 2012).[1] Although a general description of the methodology is provided in that report's appendix, additional details are provided in this appendix on the assumptions used and how the projections were computed.

Step 1: Determining the Number of FI Labor Hours Required

Starting with screening and interviewing labor hours worked by field interviewers (FIs) in 2007, costs were differentiated between variable costs and costs considered fixed regardless of the sample design. The overall FI level of effort for each sample design scenario was estimated using the following assumptions:

1. Variable level of effort per State sampling region (SSR) = 56.32 FI labor hours. Using field experience knowledge, it was somewhat arbitrarily assumed that approximately one third of the variable level of effort undergoes changes based on sample clustering, with one third of this smaller amount changing based on the number of SSRs and two thirds changing based on the number of segments. This latter assumption is based on the logic that, given a constant number of households sampled, screenings completed, and interviews completed, the effect of sample clustering on variable level of effort is partly due to the number of SSRs because segments are contained within SSRs, but mostly due to the number of segments because segments are only one level of specificity removed from the number of dwelling units sampled.
2. Variable level of effort per segment = 14.22 FI labor hours, using the logic outlined in item 1.
3. Variable level of effort per screening completed = 0.90 FI labor hours. This assumes that two thirds of the level of effort for contacting and locating is based on the number of screenings completed and one third is based on the number of interviews completed. This somewhat arbitrary allocation is based on the assumption that it is more difficult to contact a screening respondent than an interview respondent. (In the case of the interview, the FI has already made contact with someone in the household.) This assumption is supported by the finding that more visits are required to complete screenings than to complete interviews, as documented in the 2007 NSDUH data collection final report (Caviness et al., 2008). Also, the contacting and

[1] The report titled *Sample Redesign Issues and Methodological Studies* is available as a PDF at http://www.samhsa.gov/data/Methodological_Reports.aspx.

locating time includes time to complete screenings, whereas time spent completing interviews is claimed in a separate category on the FI timesheet.

4. Variable level of effort per interview completed = 2.02 FI labor hours. This figure includes the remaining portion of contacting and locating time not associated with screening and the time that FIs claimed for completing interviews.
5. For each sample design, the variable level of effort was added to the estimated fixed FI level of effort independent of the number of SSRs, segments, screenings completed, and interviews completed. This includes time spent conferencing with the field supervisor, retraining, transmitting data, and time resolving technical support issues. This provided a total FI labor level of effort for each design scenario.

Step 2: Estimating Interviewer Productivity

An average of 81 interviews were completed per interviewer in 2007 based on the total number of interviewers who worked during the year. Using the estimated level of effort calculated under step 1, an interviewer's productivity relative to 81 was estimated based on variation in cluster size (see the following exhibit). The change in interviewing effort associated with a design change for a State was modeled as a function of the relative productivity and the ratio of proposed to current sample size.

Cluster Size	Completed Interviews	Relative Productivity
9.375	81	1.000
18.750	96	1.185
28.125	103	1.272

As an example of increasing sample size, consider Option A for California with a total sample size that increased from 3,600 to 4,800 and an average cluster size that increased from 9.375 to 28.125. Using the current design as a reference point, the relative interviewing effort required was modeled as follows:

$$\textit{Relative effort} = (4{,}800/3{,}600) * (1/1.272)$$
$$= 1.049.$$

Considering sample size alone, the relative effort would be 1.333, but this is reduced by dividing through by the relative productivity associated with the larger cluster size. The relative effort for each design option for each State or State grouping is shown in the change in effort row in Tables B9 to B13 in Appendix B of CBHSQ (2012).

Step 3: Calculating Revised Distribution of Interviews by FI Experience

The 2007 distribution of FI experience (by number of completed interviews) was used as a starting point to study the impact of the proposed design options on the distribution of interviews by FI experience and its impact on the prevalence of self-reported past year marijuana use in a subsequent year. The six design options involving two levels of change in sample size and three average cluster size options were compared using estimates of workload calculated as noted in steps 1 and 2. The average interviewer productivity of 81, 96, and 103 interviews

completed per year along with sample size changes for specific State groupings were used to project new experience distributions.

1. For modeling purposes, new FIs were defined by the experience categories 1 to 19, 20 to 39, and 40 to 59 interviews completed.
2. The shift in the annual distribution of interviews by experience was based on a transition matrix that aged each group based on increasing its experience by 90 interviews per year and moving part of the group to the next level. The count of 90 interviews is based on the average number of interviews completed by FIs per year in 2007, rounded up to the nearest 10. For transitions of interviewers in categories 250 to 499 interviews completed or higher, it was assumed that 36 percent of the interviewers in a given category would transition to the next category the following year and 64 percent would remain in that category. For transitions involving interviewers in the 100 to 249 category of completed interviews, it was assumed that 60 percent of those in that category would transition to the 250 to 499 category and the remaining 40 percent would remain in the 100 to 249 category. This is based on the ratios of 160 out of 250 = .64 and 90 out of 150 = .60.
3. As a rough approximation based on historical experience, attrition rates for new FIs were set to 50 percent and those for experienced FIs were set to 6.8 percent.
4. Table B7 in Appendix B of CBHSQ (2012) contains the distribution of interviewer experience by completed interviews for 2007 among FIs who were not on travel status. Because the projections are intended to cover all interviews, including those done by interviewers on travel status, the starting distribution of experience in Tables B9 to B13 in Appendix B of CBHSQ (2012) is based on all interviews for 2007.

As an example, consider again Option A for California with a cluster size of 28.125. For this example, the 0.049 interviewing effort increase is equally allocated to the first three experience categories (0 to 19, 20 to 39, and 40 to 59) after shifting the distribution toward more experience using the transition matrix, which assumes a shift of 90 interviews per year. Because the logistic regression model is based on proportions adding to 1.000, the distribution must be normalized to add to 1.000.

Step 4: Modeling the Prevalence Rate for a Given Design

The general approach applies the logistic regression model parameters to generate a predicted log odds (logit function) for the projected distributions of interviews by interview experience and then to convert it to a prevalence level.

The current design experience distribution aged 1 year past 2007 is used as the baseline and assigned a prevalence rate of 10.000 percent. As the reference level, it is also assigned a log odds ratio of 0.000 and an odds ratio of 1.000. The reference level odds are computed based on the prevalence rate of 10.000 percent. The reference log odds value is predicted from the projected interviewer experience distribution assuming no change in design.

Note that the odds ratio for a prevalence level of 10.000 is approximately 0.111115 to establish the key baseline measure. The predicted log odds for the baseline interviewer experience distribution is approximately -0.151183.

Continuing with the California example discussed above (with a total sample size that increased from 3,600 to 4,800 and an average cluster size that increased from 9.375 to 28.125), the predicted odds are approximately -0.148526. The log odds ratio is computed by taking the difference between the projected log odds measures:

$$(-0.148526) - (-0.151183) = 0.003327.$$

The predicted odds ratio is obtained by exponentiation:

$$\textit{Odds ratio} = \exp(0.003327) = 1.003332.$$

The odds relative to baseline are computed as follows:

$$\textit{Odds} = \textit{Baseline odds} * \textit{Odds ratio} = 0.111115 * 1.003332 = 0.111485.$$

The predicted prevalence is then based on the odds as follows:

$$\textit{Prevalence} = \textit{Odds}/(1 + \textit{Odds}) = 10.030.$$

The experience distribution modeling and the logistic regression prediction would, therefore, estimate the change in prevalence from 10.000 to 10.030 associated with design change being considered for California (total sample size increased from 3,600 to 4,800 and average cluster size increased from 9.375 to 28.125).