

## Using Surname-Based Telephone Survey Methodology in Asian-American Communities: Practical Issues and Caveats

Toshiaki Sasao

Department of Psychology  
University of California, Los Angeles

This study examined the feasibility of using surname-based telephone survey methodology in Asian-American (AA) communities by highlighting some practical issues, caveats, and research directions in implementing telephone surveys in AA communities. These issues were: (a) identifying and sampling AA respondents; (b) obtaining respondent cooperation; (c) designing bilingual interview protocols; (d) dealing with possible biases due to interviewer gender, language, and topical sensitivity; and (e) cost of phone survey. In a recent statewide telephone survey involving Chinese, Japanese, Korean, Pilipino, and Vietnamese residents in California ( $n = 1,764$ ), we found low-to moderate-level response rates with varying levels of refusal rates in telephone interviewing on substance abuse and health-related issues. The results suggested that despite general reluctance to use telephone survey methodology in AA communities, personal information may be reliably collected by telephone to the extent that phone-number lists contained Asian surnames that were clearly unique to a particular AA group. Certain aspects of telephone surveying must be exploited for unraveling important social and mental health issues in a timely and cost-efficient manner.

The procurement of representative survey samples is a continuing methodological challenge in conducting research in Asian-American (AA) communities, particularly because geographically dispersed AA populations in the United States make random sampling neither feasible nor efficient. As such, a great deal of field research involving AA communities has been based on convenience or captive samples such as church or temple members, AA students enrolled in Asian or Asian-American studies classes, members of Asian political organizations, social clubs, kinship associations, or Asian clients at mental health clinics or HMO facilities (Sasao & Sue, 1993; see Leong & Whitfield, 1992, for a comprehensive listing of references on research with AA populations). Although such convenience samples serve as important sources of information for exploratory and descriptive purposes, they are often inadequate for making generalizations to other contexts or individuals, or providing accurate prevalence estimates (cf. Cook & Campbell, 1979). Therefore, to enhance the external validity of empirical findings on AA community research, efforts must be expended in searching

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for optimal research methods for unraveling mental health and other health issues important to communities where the numbers and diversity of AA populations are increasing.

### Use of Surname-Based Telephone Survey Methodology in AA Communities

Over the past decade, telephone survey methodology has regained wide acceptance and interest in community-based research because it is cost-efficient and yields relatively valid responses in studying diverse community phenomena such as depression (Aneshensel, Frerichs, Clarke, & Yokopenic, 1982), drug abuse (Frank, 1985), HIV infection (Valdiserrie, Holtgrave, & Brackbill, 1993), general health among the elderly (Psaty et al., 1991), and Holocaust experiences (Fenig, Levav, Kohn, & Yelin, 1993). Particularly with geographically scattered, "rare and elusive" populations such as AA and other ethnic minority groups, drawing samples randomly from existing lists such as telephone directories serves as a viable sampling strategy (Frankel & Frankel, 1977; Shin & Yu, 1984; Sudman & Kalton, 1986). Telephone directories, despite some limitations (cf. Frey, 1983), can reliably identify potential respondents because Asians have unique ethnic surnames associated with specific groups (e.g., "Kim" for the Korean group; "Nguyen" for the Vietnamese group; "Wong" for the Chinese group; "Tanaka" for the Japanese group). Thus, to the extent that lists of *unequivocally Asian surnames* are readily accessible and available to researchers, the use of list-based phone survey sampling in AA communities can be more cost-efficient and reliable than "true" random sampling procedures often used in survey research.

Although the lack of *complete* sample coverage for a certain region (e.g., rural and inner-city areas) may be one of the most serious problems with list-based sampling (Frey, 1983), it has been noted that list samples are often the best alternative in terms of cost, efficiency, and coverage when compared to the random digit dialing (RDD) sampling method because telephone ownership in AA communities is high (92%–94%) with a relatively low unlisted rate in telephone directories (16%–20%) (cf. Shin & Yu, 1984). Also, although the RDD methods or some variants are often used in order to avoid or reduce other selection biases such as exclusion of unlisted phone numbers or certain segments of the population (e.g., higher SES groups) from list-sample frames, empirical evidence suggests that the RDD procedure is not necessarily bias-free even with its most recent modification (i.e., the Waksberg-Mitofsky approach; Waksberg, 1978). In a recent study on the effects of demographic changes in an RDD sample frame in the state of Washington, Voigt, Davis, and Heuser (1992) revealed that the rapidly changing and unstable demographic distributions of the population in a 12-month period influenced the proportion of residential phone numbers according to primary sampling units. Thus, despite the common advantages with RDD procedures, sampling AA populations especially in urban settings may still lead to selection bias.

Most of all, in view of the fact that AA populations, consisting of more than 30 culturally and linguistically distinct groups, constitute the fastest growing and most diverse population in the United States (127% population increase from 1980 to 1990; Asian Week, 1991), telephone interviewing can cover wider geographical areas more economically than face-to-face or other survey methods. Hence, the greater the coverage permitted by a survey, the more valid the findings, because more representative samples are possible (cf. Frey, 1983).

Unfortunately, the paucity of telephone survey research in ethnic minority communities tends to cultivate the perception that AAs and other "rare and elusive" ethnic minority group members do *not* respond to surveys, especially telephone interviews.

However, findings from a few recent surveys conducted in ethnic communities suggest that this perception may *not* be entirely accurate. For example, an epidemiological phone-survey investigation on smoking behavior among Hispanic respondents in San Francisco resulted in a large number of completed bilingual interviews with high response rates and low refusal rates (Marin, Vanoss, & Perez-Stable, 1990). Similarly, a pilot telephone survey on substance abuse perception conducted in a predominantly Japanese-American community in Southern California found an acceptable response rate (60.8%) (Sasao, 1992a). In another telephone survey with Chinese respondents in San Francisco (Ying, 1989), it was found that 68.7% (277 out of 403 Chinese who initially agreed to participate in the phone interview) completed telephone interviews with questions drawn from the Center for Epidemiological Studies—Depression (CES-D) scale (Radloff, 1977). It should be noted that all these studies were conducted in relatively confined geographical areas or population areas (e.g., Chinatown, Little Tokyo), and that the feasibility of sampling AA respondents in a larger frame is yet to be determined. Therefore, it appears that although telephone survey methodology may be successfully implemented in these ethnic-cultural communities, specific methodological questions remain unanswered because very little empirical research has been conducted with AA populations using telephone survey methodology.

In addition to sampling issues for conducting telephone surveys with AA populations, other critical methodological questions include the degree of compliance with interviews, the nonresponse to particular items (Ying, 1989), the extent to which particular questions are culturally inappropriate and insensitive (cf. Renzetti & Lee, 1993), effects of gender and language as influenced by cultural values and expectations, and development of bilingual survey forms. For example, Ying (1989) speculates that nonresponse to CES-D over the phone among Chinese respondents can be attributed to specific cultural factors including unfamiliarity with the phone survey methodology, low level of acculturation or assimilation into the American culture, concerns about “giving face,” and culturally sanctioned gender roles in Chinese culture. Thus, compliance with telephone interviews is to some extent influenced by cultural values and contexts in which interviewing occurs. Furthermore, the extent of interview compliance also varies greatly among specific ethnic AA groups as they are significantly different in terms of language, immigration history, acculturation, and cultural practices (Kitano & Daniels, 1988).

Moreover, the procedural integrity of phone interviews can be maintained more easily than other survey methods because all interviews can be conducted at a single site, thus providing direct monitoring and supervision of interviewers (Frey, 1983). Administrative costs can also be greatly reduced with list-based phone sampling, including travel time by interviewers and survey implementation time. Furthermore, given the increasing phenomenon of street violence in urban areas along with community residents’ concomitant distrust and fear of strangers (“interviewers”), telephone survey methodology would indeed be an excellent sampling strategy especially with monolingual AA and other ethnic minorities in the United States because of its less intrusive nature.

### Purpose of the Study

The purpose of this study was to assess the feasibility of using telephone survey methodology in specific AA communities by highlighting some practical issues, caveats, possible solutions as well as research directions in implementing community telephone

surveys in Chinese, Japanese, Korean, Pilipino, and Vietnamese communities.<sup>1</sup> These issues include (a) identifying and sampling AA respondents; (b) obtaining respondent cooperation; (c) designing bilingual interview protocols; (d) dealing with biases due to interviewer gender and language, and topical sensitivity; and (e) cost of phone survey.

### Method

The Statewide Asian Drug Abuse Community Phone Survey was part of a larger needs assessment project contracted to the University of California, Los Angeles (UCLA) by the California State Department of Alcohol and Drug Programs. (See Sasao, 1991, for a detailed description of the study.) The major objectives of the study were: (a) to document alcohol, tobacco, and other drug (ATOD) use and related problems, and (b) to identify psychosocial correlates of ATOD use among California residents of Chinese, Japanese, Korean, Pilipino, and Vietnamese descent. The Community Phone Survey was one of the five methods<sup>2</sup> used in the needs assessment. Each phone interview lasted no longer than 15 minutes and included approximately 40 questions and branching-out questions including lifetime and last-month use of cigarettes and other tobacco products, alcohol, marijuana, and cocaine/crack cocaine, perceived seriousness of ATOD abuse problems in respondents' neighborhood, health-related questions, perceived social support in neighborhood, racial composition of neighborhood, reasons for ATOD use in youths and adults, and sociodemographic variables (e.g., gender, race, language used at home, number of children living at home, ethnicity). The interview was conducted in the language of the respondent's choice. Percentages of interviews conducted in each Asian language were: Chinese, 31%; Japanese, 25%; Korean, 80%; Pilipino, 49%; and Vietnamese, 98%. It appears that the use of an Asian language in interviewing was related to the relative *recency* of respondents' immigration or refugee status: the majority of Koreans and Vietnamese respondents, whose history in the United States is shorter than the other groups, preferred to use their native languages.

Two to three bilingual interviewers were selected per ethnic group, including at least one male and one female interviewer. The total of 16 interviewers were trained in three 3-hour sessions in which phone survey mechanics and cultural issues were presented and discussed, including in vivo practice of phone interviewing. In order to assure data quality and administrative record keeping, two telephone survey supervisors monitored all interviews unobtrusively using a form with criteria to evaluate the interviewer's performance (e.g., accuracy of reading questions and recording answers verbatim, pace, probing style, handling respondents' questions, and establishing rapport with respondents; Lavrakas, 1987) and provided suggestions to improve interviewing skills on a weekly basis.

### *Sampling Procedure*

Survey respondents were randomly selected on the basis of commercially available lists of phone numbers. A list of 4,000 numbers per ethnic group was randomly generated

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<sup>1</sup>In this article, the terms "Asian-Americans" and "Asians" are used interchangeably, both referring to individuals of Asian descent, and more specifically referring to Chinese, Japanese, Koreans, Vietnamese, and Pilipinos. Pacific Islanders are not included in our definition. Although the correct spelling for the people of the Philippines is "Filipino," the word "Pilipino" is currently preferred within the Asian-American communities and used in this article because it is more compatible with their phonetic system.

<sup>2</sup>In addition to the Community Phone Survey, the following methods of needs assessment were used to obtain convergence in findings: (a) Community Forums & Client Focus Groups, (b) ATOD Use Indicator Study, (c) Service Utilization Study, and (d) Drug Services Survey (Sasao, 1991, 1992b).

from a set of randomly selected numbers with ethnic surnames<sup>3</sup> unique to each ethnic group in selected California counties (Los Angeles, Orange, San Francisco, San Mateo, and Santa Clara) where the majority of Asians reside according to the 1980 Census and California automobile registration records (Chris De Angelis, Survey Sampling, Inc., personal communication, June 20, 1990). Thus, a total of 20,000 phone numbers were used as the entire sampling frame for the present phone survey.

Because of our focus on ATOD use issues in the community resident populations with various Asian ancestries, any respondent over 18 years of age was eligible. Initially, random sampling within each household was attempted by asking to interview the "next-birthday person in your household." However, it was apparent at pilot-testing that the majority of Asian respondents, especially recent immigrants who were monolingual, did not comprehend its meaning. Thus, an interview was conducted with anyone 18 years of age or older in each household. In addition, when the questionnaire was pilot-tested through focus groups consisting of community residents in each ethnic group of selected California counties, it was apparent that a significant number of Korean and Vietnamese households had two parents working full-time, usually in the evenings as well, thereby leaving only children at home. Consequently, in households where either younger respondents (albeit eligible) or either the male or female parent appeared to be interviewed disproportionately in each Asian group, an adjustment in sampling was made by asking to call back when parents were at home or the other spouse was available. An examination of respondents' demographic characteristics revealed that the distributions of sex and age were fairly comparable across five ethnic groups, and were consistent with AA profiles in California (Asian Week, 1991; O'Hare & Felt, 1991). Male and female respondents were equally represented in each group, and age groups (10s to 50s) were approximately normally distributed.

The sample size of completed interviews for each ethnic group was determined by a simple spreadsheet model in order to obtain the smallest sampling error for the given budget. The model was based on assumptions regarding contact and completion rates, and also assumed costs of dialing, screening, and interviewing. The model-determined sample allocation for each group was 400 completed interviews, which would produce a sampling error of .027 or less for estimates of proportions (cf. Sirken & Casady, 1988). Thus, sampling occurred until approximately 400 respondents from each group were obtained.

In order to increase compliance rates of telephone interviewing, the present survey was extensively publicized prior to the survey, using ethnic radio/television public service announcements, and ethnic and mainstream newspaper articles in local communities in Northern and Southern California. Previous research using these advance announcement techniques has demonstrated a significant increase in overall response rates (Frank, 1985; Frey, 1983). In the present survey, approximately 75% of the respondents were aware of such media announcements when they were interviewed; thus, the utility of advance announcement was demonstrated.

Moreover, to maximize the probability of reaching eligible respondents, all telephone interviewing occurred Monday through Thursday, from 6:00–9:30 p.m., and on Saturdays, from 9:30 a.m.–2:00 p.m., for a period of 9 weeks (July 16 through September 11,

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<sup>3</sup>Each ethnic group phone list was based on the following numbers of unique surnames: *Chinese*—308 names with potential overlap with 80 Korean and 11 Japanese surnames; *Japanese*—4,443 names with 6 Korean overlaps and 11 Chinese overlaps; *Korean*—342 names with 80 overlapping with Chinese and 6 with Japanese; *Pilipino*—977 names with no overlapping; and *Vietnamese*—70 names with no overlapping.

1990). In some cases, when a respondent requested a call-back during specific times other than the above, an interview was arranged to comply with the respondent's request.

### Results and Discussion

Table 1 shows the results of telephone calls made to five AA communities in California using the surname-based telemarketing phone lists. It should be noted that the final sample sizes for different groups do *not* necessarily match the actual numbers of interviews completed because each list of phone numbers has overlapping surnames across some ethnic groups. Although approximately 10 times the desired number of completed interviews in the sampling pool were assumed necessary, about one fourth or fewer of the numbers were actually used to reach the desired goal of about 400 completed interviews per ethnic group except for the Pilipino group.

In this section, findings related to issues in implementing telephone surveying in the AA communities are discussed, including practical considerations, caveats, and future research directions.

Table 1  
*Summary of Telephone Calls by Outcome and Ethnicity*

Outcome	Ethnicity (final sample size)					Tot (1,764)
	C (409)	J (416)	K (399)	P (150)	V (390)	
Total numbers dialed	2,755	1,864	2,021	2,231	1,239	10,110
<i>Eligibles</i>						
Completed interviews	370	431	427	149	423	1,800
Refusals	540	466	100	224	50	1,380
Call back	239	148	310	102	55	854
Premature termination	30	4	71	41	100	246
<i>Ineligibles</i>						
Business/answering machine/number change	525	301	205	388	116	1,535
Ethnicity	118	113	232	646	117	1,226
Disconnected	268	105	155	148	145	821
No answer	529	265	449	425	209	1,877
Response rate <sup>a</sup>	31%	41%	47%	29%	67%	43%
Refusal rate <sup>a</sup>	46%	44%	12%	43%	8%	32%

Note. C = Chinese, J = Japanese, K = Korean, P = Pilipino, and V = Vietnamese.

<sup>a</sup>See Footnote 4 for definitions of response and refusal rates.

### *Identifying and Sampling Asian Respondents*

Based upon the results shown in Table 1 and postinterview discussions with each phone interviewer, it was apparent that there were significant differences in "contact rates" (i.e., the list's success rate in contacting eligible respondents): Chinese, 43%, Japanese, 56%; Korean, 45%; Pilipino, 23%; and Vietnamese, 51%. The probability that a particular number dialed was an eligible household with a respondent of *specific Asian ethnicity* was approximately 50% in most of the lists, with the exception of the

Pilipinos. The reason for lower contact rates for the Pilipino group (646 ineligible numbers) was primarily due to the exceedingly high overlap of surnames with the Hispanic population. Although the contact rates generally appear lower compared to a typical face-to-face interview situation, the use of surname-based phone lists may be more expedient in identifying and sampling AA respondents, especially considering the wide geographical areas that each phone list covered in terms of cities and towns across the state of California: Chinese, 95; Japanese, 98; Korean, 102; Pilipino, 55; and Vietnamese, 94.

Furthermore, given that there are individuals residing in some "ethnic enclaves" that are generally difficult to reach by outside interviewers/researchers (e.g., Chinatown, Little Saigon, Little Tokyo, etc.), the telephone survey method can reliably penetrate into such ethnic neighborhoods. In telephone survey sampling, random digit dialing (RDD) or some modification thereof (e.g., Waksberg, 1978) is usually preferred if a large sample is generated (Frey, 1983). However, the present use of sampling based on ethnic surnames is a preferable method for the AA community because the RDD-based contact rates would be substantially lower due to geographically dispersed patterns of the AA populations, as noted elsewhere (Sasao, 1994). Although it is unknown to what extent the present surname-based sampling procedure contributed to biases from excluding *unlisted* phone numbers, given the limited resources available for the survey, our main concern here was the efficiency with which sizeable samples of completed interviews were collected with minimum sampling variance (.032).

Another issue in list-based sampling is related to the proportion of telephone ownership in AA communities. Sampling might be problematic if telephone ownership in AA communities is restricted by socioeconomic status. Thus, we examined percentage of telephone ownership among Asian households who were included in the phone number universe (Chris De Angelis, Survey Sampling, Inc., personal communication, December 7, 1992). In six California counties selected for the survey, the average phone ownership was approximately 92% in a census tract where more than 30% or more of the residents are Asians. Also, given local prefixes of those completed interviews, it was possible to assess approximate median income levels per prefix (obtained from Donnelley Marketing Information Services, Los Angeles). The income levels in each list represented a fairly normal distribution, approximating the 1988 intercensus estimates. Therefore, it appears that AA communities in the present study were adequately sampled, with the exception of the Pilipino community.

### *Respondent Cooperation*

Another crucial issue in survey research with AA populations concerns the level of cooperation or compliance with phone interviewing among target respondents. In order to provide clarity on this issue, response rates and refusal rates<sup>4</sup> were calculated

<sup>4</sup>The most "stringent" response rate (RR) was calculated by the following equation (Frey, 1983):

$$RR = \frac{\text{Number of Completed Interviews (CI)}}{\text{Total Number of Eligible Calls (EC)}}$$

where EC = CI + Refusals + Call Back/Respondent Not Available + Premature Termination. Correspondingly, the refusal rate (RFR) used the following equation:

$$RFR = \frac{\text{Number of Refusals (Ref)}}{\text{Total Number of Eligible Calls (EC)}}$$

and are shown in Table 1. Compared to national figures (response rate, 70%–85%; refusal rate, 20%–25%; cf. Frey, 1983), the obtained response rates (29%–67%) seemed substantially lower whereas the refusal rates (8%–46%) varied considerably from one list to another. Also, there were ethnic differences in these rates. For example, although Korean and Vietnamese respondents were more likely to agree to an interview (47% and 67%, respectively) than other groups (Chinese, 31%; Japanese, 41%; and Pilipino, 29%), they showed somewhat higher rates of premature termination of interviews by direct request or by simply hanging up (8% and 16% for Koreans and Vietnamese, respectively). This pattern of respondent cooperation among Koreans and Vietnamese, whose interviews were conducted primarily in their native language, may pose a problem in interpreting the findings on substantive issues of interest. Previous research has indicated that because of unfamiliarity with “scientific methods,” and problems with self-disclosure to “strangers” (i.e., interviewers), ethnic minority groups avoid being interviewed or refuse to participate in surveys (e.g., Milburn, Gary, Booth, & Brown, 1991; Vernon, Roberts, & Lee, 1984; Ying, 1989). However, for those less-established, relatively new monolingual respondents of immigrant or refugee status, a direct refusal to participate in a telephone survey may *not* be a socially viable option because it tends to induce “loss of face” for the interviewer especially if the latter is of the same ethnic/linguistic background (cf. Zane, 1991). Therefore, although respondents who are mostly monolingual or closely tied to the Asian culture may initially agree to a phone interview, they may simply hang up the phone, or worse yet, they may complete the interview, but with questionable data quality. These issues need to be addressed in future investigations using phone survey methods with AA respondents who vary in terms of acculturation levels and/or generational status. According to postinterview discussions with interviewers, one indication of such ambivalence toward phone interviewing among newly arrived Asians is that all respondents, especially Koreans, Vietnamese, and Pilipinos, showed eagerness and willingness to contribute to the study. In some Vietnamese interviews, the respondents wished to continue talking with the interviewer regarding personal issues or concerns even after the interview had been completed. Hence, future research on the issue of respondent cooperation with phone surveying must address respondents’ compliance behavior to find out if their cooperation is primarily because of their actual willingness to contribute to the study, and/or because of their needs for interpersonal contact.

In a similar vein, although the role of acculturation in survey compliance needs to be discussed in relation to response and refusal rates, it was not possible to test empirically its exact effect because a measure of acculturation was not included in the present study. However, on the basis of debriefing sessions with phone interviewers, it can be speculated that first-generation respondents felt “cared for” when a “stranger” of the same ethnic/linguistic background made a personal phone contact, and thus complied with an interview in appreciation of the interviewer’s effort (cf. Sue & Zane, 1987). Additionally, the respondents appeared to trust an interviewer once they found out that the latter was affiliated with a nationally known academic institution (UCLA). This is reflective partly of Asians’ cultural values that emphasize educational achievement (cf. Sue & Okazaki, 1990). Therefore, it can be said that the AA respondents generally comply with an interview so long as the available phone number lists contain surnames that are clearly unique to a particular Asian group; however, cultural factors such as “face” issues must be considered in the actual implementation of phone surveys.

In order to understand factors related to response rates and refusal rates with AA respondents, future research must be conducted to clarify the processes in which specific cultural factors influence respondent compliance with a phone interview. For example, a future study may examine the interactive effects of specific psychological (e.g., response sets) and contextual (e.g., interviewer bias) factors among newer immigrant groups as well as among more established Asian groups.

Also, although the present study used local mass media to make an advance announcement about the phone survey in order to enhance cooperation, it may be that those who were contacted but refused may not have been exposed to such media. In future investigations, the efficacy related to the use of ethnic mass media in local communities must be assessed in comparison to the use of local social networks (e.g., "word of mouth") as a potential source of respondent cooperation with an interview. With the latter method, general interest and awareness of social issues may be heightened among target community populations. It is often the case that Asian respondents are unable or unwilling to answer questions because of perceived "unimportance" or "seriousness" of a survey topic (Sasao, 1991, 1992a; Sasao, Sue, Zane, & Gleason, 1994), which itself raises important conceptual and methodological issues requiring further research.

### *Designing Interview Protocols*

All questionnaire items were first written in English, translated into Chinese, Japanese, Korean, Pilipino (Tagalog), and Vietnamese, and then back-translated into English according to the procedures suggested by Brislin, Lonner, and Thorndike (1973). The back-translation was compared to the original for equivalence of meaning and wording, and revised if discrepancies were deemed significant. The length of the questionnaire was adjusted after extensive pilot testing and focus group discussions in the local communities, so that interviewing time, on the average, would be no more than 15 minutes. The length of an interview seemed appropriate in each ethnic group. Discussions with phone interviewers revealed no procedural problems in using the translated versions of the questionnaire although some respondents who were primarily monolingual immigrants or refugees had difficulty answering "Yes/No" type questions. This may reflect Asian cultural traditions in which individuals tend to avoid taking distinct positions on certain social issues in consideration of other individuals' reactions (Hurr & Kim, 1985; Markus & Kitayama, 1991), or simply are not willing to endorse a particular position (Yes or No) on an issue unless they are well informed or are particularly interested. Additionally, based upon recommendations from a series of community focus group discussions prior to the implementation of the survey, we decided that the survey was to be introduced as a "health survey" rather than a "drug use survey" in order to reduce respondent reactivity and increase compliance with interviews. Thus, each interview began with a set of health-related questions before questions related to ATOD use were asked. Postinterview discussion with interviewers revealed that introducing the survey focusing on health issues was appealing to many respondents, and it also contributed to respondents' willingness and trust.

### *Interviewer Biases and Topical Sensitivity*

Although we initially anticipated some response biases due mainly to the interviewer's gender and age, these problems were minimal. For each ethnic group, both male and female interviewers with the mean age of 24 (range: 21–29) were used. None of the mean differences on all items by interviewer gender (male versus female) and no Pearson

correlation coefficients with age were statistically significant (overall  $p > .35$ ). Interviewer debriefing revealed a few cases in which the interviewer attributes may have affected the responses. For example, when a 25-year-old female Korean interviewer reached a middle-aged Korean male respondent, the respondent was extremely hesitant in disclosing his personal information, especially to a female stranger. In another interview, a 21-year-old male Pilipino interviewer had difficulty obtaining compliance for an interview from an older Pilipino male respondent. These cases certainly call for a systematic study of gender- and age-match between interviewers and respondents.

In terms of bilingual capabilities of interviewers, there were no apparent methodological problems in interviewing because all interviewers were carefully selected and monitored for their ability to conduct bilingual interviews prior to hiring and during actual interviews. However, it should be noted that because the level of the interviewer's language capability may interact with the respondent's cooperation with or completion of an interview (cf. Pierson & Bond, 1982), it is crucial that an interviewer should be fully bilingual *and* feel comfortable in "code-switching" between two linguistic/cultural modes if deemed necessary. For instance, an American-born Asian who speaks an Asian language with an "American" accent may be looked down upon by a native-born Asian respondent, thus unduly influencing interview compliance and response validity.

Another issue related to interviewer effects is that although the present phone survey was conducted using a paper-and-pencil questionnaire, a computer-assisted telephone interviewing (CATI) system for Asian languages may be developed in future implementation of phone survey methodology, especially to minimize the probability of error by lessening the number of administrative steps needed to transfer data from an interview to a database system for analysis. Fortunately, the rate of data entry error for the present study was minimal (less than 2%).

A relatively unexplored source of response bias for the AA respondents is the effect of topics that are potentially "sensitive." In general, topics of survey research may affect the respondent's willingness to comply with an interview over the phone (cf. Mangione, Hingson, & Barrett, 1982; Sieber & Stanley, 1988). It is usually assumed that ethnic minorities do not respond to socially sensitive issues (e.g., substance abuse, sexual orientation); however, some individuals of Asian background may *not* view certain topics with the same underlying social values as researchers (cf. Lee & Renzetti, 1993). For example, social drinking among Asian males is a well-accepted social tradition in many Asian cultures and is often encouraged (e.g., Kitano & Chi, 1985). In the present study, the focus groups, consisting of local community residents of Northern and Southern California, were assembled to assess the potential "sensitivity" of drug-use items (e.g., "Have you ever smoked a total of 100 cigarettes, cigars, or other tobacco products in your lifetime?" "Have you ever had more than 10 alcoholic beverages, meaning beer, wine, or liquor, in your entire life?" "Have you ever tried marijuana (cocaine or crack)?"). Those items identified as culturally sensitive or inappropriate were not included in the final questionnaire. In order to test the socially sensitive nature of some of these ATOD use items, thereby providing an indirect check on the accuracy of responses to these items, response distributions of ATOD use items, especially high proportions of "refused" and "don't know" responses as proxy variables indicating sensitivity, were compared with those of four "nonsensitive" health-related questions (e.g., "Compared to other people your age, would you say that your health is excellent, good, fair, or poor?" "In the last year, how many times have you been sick with a cold or flu?"). Chi-square ( $\chi^2$ ) analyses indicated virtually *no* differences in the numbers of "refused"

or "don't know" responses in any of these variables. Therefore, responses to the ATOD use items were considered valid although the possibility of underreporting cannot be ruled out and should be explored in future investigations (cf. Aquilino, 1992; Gfroerer & Hughes, 1991).

Also, as additional evidence for response validity and reliability, it was found that for all Asian groups, phone respondents' self-reported ATOD use and perceived severity of communitywide drug use were generally consistent with qualitative information obtained in focus group interviews at three geographical locations (San Francisco, Los Angeles, and San Diego regions) in another component of the needs assessment study (see Sasao, 1991; Sasao et al., 1994).

### *Cost of Survey*

The total estimated cost of phone interviewing, including interviewer and supervisor time, phone connection, printing of survey forms, and data entry/management, was approximately \$35-\$40 per completed interview. This figure is much lower than that of face-to-face interviews typically conducted by survey research organizations (approximately \$200-\$500 per interview), especially survey interviews involving bilingual interviewers (Michael Greenwell, Center for Computer-Assisted Studies, Institute for Social Science Research, University of California, Los Angeles, personal communication, July 21, 1992). Thus, it was apparently efficient in obtaining sizeable samples given limited operational costs.

### *Conclusions*

Although there is general reluctance, among researchers and community residents, to use telephone survey methodology in AA communities, this large-scale telephone survey of Chinese, Japanese, Korean, and Vietnamese respondents in California suggests that personal information may be collected reliably by telephone, cost-efficiently, and in a relatively short period of time (9 weeks) as long as phone number lists for Asians with clearly identifiable surnames are accessible and available to the researchers. For the Pilipino community, the feasibility of using a telephone survey must be further investigated because the list included too many ineligible telephone numbers. Moreover, because the phone survey method can "electronically" penetrate "hard-to-reach" AA communities, it is more efficient and less expensive than face-to-face interviewing. Although it is acknowledged that the telephone interview may be limited in its scope and the range of information that can be obtained, it can be useful in initiating community entry (cf. Vernon & D'Augelli, 1987). Also, it should be noted that no one method is sufficient on its own, nor does it lead to perfect empirical generalizations (Brewer & Hunter, 1989; Shadish, 1989). Perhaps future research can make use of the dual-frame sampling procedure to further enhance sampling of "rare and elusive" populations such as AA groups (cf. Sasao, 1994). Also, when supplemented with other qualitative methods (e.g., case study, focus group approach, community forum, participant observation), findings from telephone surveys in AA communities gain more strength in advancing our empirical knowledge base (Maton, 1993; Sasao & Sue, 1993).

### *References*

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