

REPORT TO THE OFFICE OF MANAGEMENT AND BUDGET ON
THIRD-PERSON REPORTING OF HISPANIC ORIGIN AND RACE
IN A GROUP QUARTERS/ESTABLISHMENT CENSUS

by

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This paper reports the results of research undertaken by Census Bureau staff. The views expressed are attributed to the author and do not necessarily reflect those of the Census Bureau.

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INTRODUCTION

In 1995, staff from the Center for Survey Methods Research at the Census Bureau contacted personnel at the Office of Management and Budget working on the three-year review of the federally mandated race and Hispanic origin categories (OMB 1994) contained in Directive 15 (OMB 1977). We had two purposes in initiating this contact. The first was to share with OMB some of our early findings from an ongoing questionnaire redesign project that the quality and completeness of race and Hispanic origin data collected in an establishment census might be affected by different factors than those influencing data collection in household surveys. Most ongoing and previous research has focused on improving the collection of race and Hispanic origin data in household surveys where one household respondent typically reports on a small number of coresident relatives and/or friends well-known to him/her. Very little research has been done on the reporting of race in establishment data collections, where one third-person respondent may report race and Hispanic origin data on a large number of persons who may or may not be known personally to him/her. Our exploratory data suggested that factors affecting the quality of data from third-person respondents in establishments might be different from those influencing respondents in households, and might lead to a difference in the types of race and origin questions that work in these two types of data collections.

Our second purpose was to offer to incorporate the development and testing of experimental Hispanic origin and race questions into our already funded, wider questionnaire development pretesting cycle in our establishment census, if OMB would give us permission to do so. Personnel from the Office of Information and Regulatory Affairs at OMB approved this request. We agreed to keep OMB informed of our progress and to write an overall report on this research project.

¹ The author is the manager of the Children in Custody Questionnaire Redesign Project. Kathy Ott participated in the early exploratory research. Laurie Moyer joined in the first round of question development, testing, and analysis. Catherine Gallagher joined in the next round. Yukiko Ellis did much of the statistical analysis for the split-panel mailout test. The author thanks Joe Moone, Technical Advisor, at the Office of Juvenile Justice and Delinquency Prevention for the opportunity to include this research component on Hispanic origin and race in the Children in Custody Questionnaire Redesign Project. She also wishes to thank Eleanor Gerber and Theresa DeMaio for consultations as the work progressed and for their reviews of successive drafts of this paper. She also appreciates the reviews of earlier drafts by Elizabeth Martin, Joseph Moone, Laurie Moyer, and Martin Wulfe.

This document is the promised final report. The objective of this paper is to report the successive results of multi-stage questionnaire development and pretesting research conducted on third-person reporting of race and Hispanic origin in juvenile facilities between 1994 and 1997. This research was part of the wider Children in Custody Questionnaire Redesign Project that we conducted for the Office of Juvenile Justice and Delinquency Prevention (OJJDP) in the Department of Justice. Particular emphasis is placed in this report on 1) identifying general factors that may affect the accuracy and completeness of third-person reporting of Hispanic origin and race and 2) describing the development, testing and iterative revisions of experimental race and origin questions for this establishment census.

We start with a description of the project background and an overview of the four stages of research to develop, test, and finalize the Hispanic origin and race questions in the new facility questionnaire. We present a brief summary of the literature on third-person reporting of origin and race in non-household data collections and note the apparent lack of previous studies on the performance of race and origin questions in a residential facility data collection. We then identify six general factors that may affect the quality of third-person reporting of Hispanic origin and race. We show that the mix of factors affecting the quality of race and Hispanic origin data collected from residential juvenile facilities differs from the combination of factors influencing these data in household surveys. We describe the iterative development and testing with third-person reporters of first separate, then combined Hispanic origin and race questions in two rounds of cognitive interviews, and then summarize the performance of a combined Hispanic origin/race question in a mail-out test survey. We conclude that the best method for obtaining Hispanic origin and race data from third-person reporters in this establishment census is to use a combined Hispanic origin/race question, not the separate Hispanic origin and race questions recommended for use in household surveys by the Interagency Committee for the Review of the Racial and Ethnic Standards (OMB 1997a) and recently adopted by OMB for data collections based on self-reports (OMB 1997b). Finally, we suggest new research on this topic.

BACKGROUND

The research on Hispanic origin and race described in this paper was done as part of the large multi-stage project to redesign the nationwide Census of Juvenile Detention, Correctional, and Shelter Facilities, better known as the Children in Custody Census. This is a facility-level census that collects data on residential juvenile facilities and the juveniles housed in them. Types of facilities covered by this census include public and private: detention centers, training schools, group homes, reception and diagnostic centers, shelters, wilderness camps, boot camps, and others.² The 3600 or so facilities on the frame vary widely in the extent to which they house

² Facilities specifically identified as psychiatric hospitals, substance abuse centers, jails and prisons are excluded from the frame, even if some or all of their residents are juvenile

juvenile offenders--the subpopulation of primary interest to the sponsor--and nonoffenders, who are of secondary interest. The proportion of offenders to the total population per facility ranges from 1 to 100 percent. These facilities also vary enormously in the numbers of juveniles they can house: from 3 to more than 1200.

A self-administered questionnaire for each facility on the frame is mailed to designated contact persons. Some of these persons are "single reporters," completing a form for one facility. Others are "central reporters," completing forms for all facilities in their agencies and/or states. One "central reporter" completes forms for more than 40 facilities and more than 3,500 juveniles!

The questionnaire in use at the time our redesign project began requested aggregate-level data on characteristics of the facility and the juveniles housed in it. As shown in Attachment 1, aggregate-level data on race and Hispanic origin were to be broken out across the row by sex and offender group. Doing this four-way breakdown must have been difficult for respondents.

- The race and origin categories on Attachment 1 represent one way of meeting the OMB Directive 15 requirements in effect since 1977: having essentially one question set of response categories that incorporates the Hispanic origin question into the four mandated race categories of white, black, American Indian/Alaskan Native and Asian or Pacific Islander. The "Total Hispanic Origin" category in this question requests subdivisions for white and black Hispanics. Note that there are no categories for "Multiracial" or "Other" which are not permitted by Directive 15.

THE QUESTIONNAIRE REDESIGN PROJECT METHODOLOGY

The main objective of the overall project was to redesign the original aggregate-level questionnaire to request individual-level data on juveniles, primarily offenders. Since major design changes would be needed to meet this objective, we began the project with exploratory in-person interviews at 40 facilities in 10 states³ and the District of Columbia. Our Phase 1 goals included 1) identifying problems with key concepts, 2) finding out if and how respondents collected and maintained demographic data on juveniles, and 3) assessing the feasibility of asking facility respondents to provide individual-level data.⁴

offenders. Military and other federal facilities are also out-of-scope.

³ Phase 1 interviews were conducted in: Colorado, California, Florida, Maryland, Massachusetts, Michigan, New York, Pennsylvania, Texas, Washington, and Washington, D.C.

⁴ Full results of the Phase 1 exploratory research may be found in Schwede and Ott (1995).

From these semi-structured interviews in Phase 1, we identified several problem areas with third-person reporting of race and Hispanic origin: lack of standardized methods for collecting, recording, and maintaining race information; inconsistencies in degrees of fit between race/origin codes used by the facility and those mandated by Directive 15; and uniformly reports from our 40 respondents that they did not keep breakdowns of white and black Hispanics in their facility records.

These preliminary findings suggested the existence of factors affecting third-person reporting of race and origin in our residential facility census that differed from those influencing household surveys. Quality improvements in these data elements are very important to the sponsor of this census, because these data are critical elements used in the annual reports that OJJDP must submit to Congress on the numbers and characteristics of juveniles in facilities. These data elements might also be used to examine disproportionate minority sentencing, an OJJDP policy concern. Our sponsor was willing to experiment with alternative question wordings on race and Hispanic origin in our cycle of questionnaire pretesting. As a result, we shared these results with OMB staff and requested and received approval to write and test experimental questions that differed from the Directive 15 requirements.

We incorporated the testing of experimental origin and race questions into our overall pretesting cycle, using special concurrent probes and supplemental retrospective questions. In Phase 2, we developed and cognitively tested the first version of our new questionnaire with separate experimental race and origin questions at 18 facilities. In the early part of Phase 3, we revised the questionnaire, developed a combined Hispanic origin/race question with special "mark-all-that-apply" instructions, and cognitively tested the questionnaire again in 14 other facilities. In all, we conducted 40 exploratory interviews and 32 cognitive interviews in 18 states and the District of Columbia. We again revised the questionnaire and mailed it to a national sample of 385 single-reporter facilities in an October, 1996 test.⁵

LITERATURE REVIEW OF THIRD-PERSON REPORTING IN ESTABLISHMENT SURVEYS

To date, I have not found any previous study on the quality of race reporting in the types of residential facilities that would be included in the decennial census. There are a few studies on this topic in non-residential establishments or with administrative records. A mailout survey of schools was designed by the U.S. Department of Education (1996) and Westat to fit into the

⁵ Complete descriptions of the methodology and results of the exploratory and cognitive interviews may be found in Schwede and Ott (1995), Schwede and Moyer (1996) and Schwede and Gallagher (1996). The performance of an experimental combined race/origin question in a later split-panel test is found in Ellis and Schwede (1997) and in Schwede and Ellis (1997).

OMB Directive 15 race research.⁶ The purposes of this study were to determine the methods used by schools to classify the race and origin of students, to identify the race categories used, and to assess the degree of fit between those school-specific categories and the federally mandated categories. They found that about 75 percent of the schools collected self-reported race from the parents, the most reliable method, but that most of the other 25 percent determined race by observation only. They also reported that about 73 percent of public school respondents used only the five standard federal categories, while the remainder had additional nonstandard categories of "other" or "multiracial." The proposed change to the Directive 15 categories most frequently cited as an issue by school respondents was the addition of a general "multiracial" category.

Research on this topic has been done in the public health field. Hahn, for example, has done a series of papers on the validity and reliability of race, ethnicity, and ancestry data in current public health studies and calls for improvement in these concepts (1992). He and Stroup (1994) note that the lack of information on whether doctors determine race by patient self-report or by clinician observation raises questions about the validity of race data in a national public health surveillance system. In comparing ancestry data given by self, proxy, interviewer, and funeral director (on death certificates), Hahn et al. (1996) concluded that the low reliability of ancestry measures over time and across observers complicates analysis, especially for those neither white nor black. Hahn et al. (1992) compared race on birth and death certificates for infants and found that reporting inconsistencies were nearly 9 times higher for Hispanics than for whites or blacks.

FACTORS THAT MAY AFFECT THE QUALITY OF FACILITY RACE/ORIGIN DATA

During the two rounds of cognitive interviews on this project, we asked a series of supplemental retrospective questions to learn how race and Hispanic origin data were collected, maintained, and stored at the facilities. This information helped us to identify six general factors that may affect the quality and completeness of third-party reporting of race and origin in this establishment survey. These general factors provide the backdrop for the types of experimental Hispanic origin and race questions that we developed and tested.

Factor 1: Facility respondents vary in their ability to give accurate reports from memory of how resident juveniles would self-report race and origin. Some respondents in small facilities know their juveniles well and can give self-reports from memory. Others, especially single reporters at large facilities and central reporters who complete forms for many facilities, may have little or no personal contact with the children, relying on records for race and origin data. Whether or not they report from memory, all but one of the 72 respondents in both exploratory and cognitive interviews did collect race data on juveniles, at or near the time of admission to the facility.

⁶ This study was commissioned by the National Center for Education Statistics and the Office of Civil Rights in the Department of Education, and conducted by Westat.

Factor 2: Wide variation in methods used to collect race and origin data for the facility records. We found three basic methods of collecting facility record data: 1) self-reports of race by the juvenile or parent, 2) intake worker's ascription of race based on observation and/or last name, and 3) reliance on incoming administrative records prepared by persons in other locations or agencies. Table 1 shows the reported methods used in the 32 juvenile facilities included in our cognitive interview research. Eleven respondents obtained race and origin from self-reports by the juveniles or their parents. Fourteen relied mostly on incoming administrative records from police, probation officers, courts, referral agencies, other parts of their own agencies, or Vital Statistics Departments. Of these fourteen, ten relied solely on records, while the other four sometimes asked for self-reports as checks on, or in disagreements with, the incoming administrative record data. Four others reported using both incoming records and intake worker observation, with one using self-reports only when needed. Another used observation, with self-report requested only if necessary. Finally, two mentioned all three methods, but were vague about the primary method.

TABLE 1: METHODS USED IN FACILITIES TO COLLECT RACE AND ORIGIN DATA FOR FACILITY RECORDS

Method	Subtotals	Facilities
Self-report requested from juvenile or parent		11
Use of incoming administrative records:		14
a. with occasional self-reports	4	
b. self-reports not mentioned	10	
Use of incoming administrative records and intake workers' observation:		4
a. with self-reports, if necessary	1	
b. self-reports not mentioned	3	
Intake worker observation, with self-report only if necessary		1
No consistent answer on methods		2
TOTAL N OF FACILITIES		32

Of the three main methods, self-reports would produce the most valid and reliable data and is the method preferred by the Office of Management and Budget. Data collected by observation would be subject to inter-observer differences, introducing error both within the facility and among facilities. Observation alone would also be likely to underreport biracial juveniles and those of races rarely seen by personnel in their geographical area.

The third method--use of administrative records prepared elsewhere--raises the most concerns about validity and reliability, since we have no knowledge of how and when these data were originally collected. One respondent just copied into his records whatever the police officers recorded as the juveniles' race, but reported that problems sometimes arose when the police categories did not match those he used. He was not sure how the police obtained the data. Another said her facility used incoming records, including birth certificates, rather than asking the juvenile or parent about the sensitive topic of race. We have no sense of the validity of birth certificates issued years ago. We hypothesize that the further removed one is from using self-identified race, the greater the chance of error and misclassification of race and Hispanic origin.

The collection methods reported by our respondents seemed clear-cut, but variations in methods used may occur within facilities over time and among intake workers. It is clear that variation in methods used to collect race data for facility records is a factor with potentially large effects on the validity and reliability of race and origin data within and among facilities in this census.

Factor 3: Lack of standardized wording for requesting race and origin data. Respondents in facilities are there to provide services to young persons with problems. It is not likely that many of these respondents have ever considered the implications of the wording and sequencing of questions on Hispanic origin and race in their records. Intake forms in these facilities may just have the keyword "race" and either a set of race categories or just a blank line for an open-ended response. This lack of standardized wording affects the comparability of data among facilities.

Factor 4: The degree of fit between the federal categories and the facility categories. It should not be assumed that facilities use the federal categories for their own record keeping. Facility race categories may just evolve as new cases come in. We found a lack of standardization in race categories used in the facilities' internal records. One facility used 3 categories while another used 127! Respondents from four small facilities did not keep aggregate race data continuously; when aggregate data were needed for reports or surveys, they would do *ad hoc* counts from memory or from a review of the individual paper files. Most respondents who did keep continuous aggregate data used facility categories similar to those of OMB, but sometimes with different labels that may not completely overlap with the federal categories (Table 2). Some facilities did not have separate response categories for Asian/Pacific Islanders or American Indians. These respondents would include the rare incoming juveniles of these races in an "other" category.⁷ Other facilities in border states had special categories to separate legal from illegal Mexican immigrants, a distinction not made with the Directive 15 categories.

⁷ The lack of separate race categories for Asians and American Indians tended to occur in facilities in regions of the country with very low proportions of persons in these racial groups. American Indians and Asians are concentrated in the west and are thus under represented in the Midwest and northeast, according to 1990 Census results (Harrison and Bennett 1995).

TABLE 2: VARIATIONS IN FEDERAL AND FACILITY RACE AND ORIGIN LABELS

Federal Labels	Facility Labels
American Indian/Alaskan Native	North American Indian Indian Native Indian Native American
Asian/Pacific Islander	Asian Oriental
Black	African American
Hispanic	Latino Spanish American Mexican National Mexican American

Factor 5: The conceptual and operational definition of “Hispanic” as a race, rather than as a separate concept of culture or origin, as defined by OMB. The great majority of respondents told us that “Hispanic” was a race category in their records, along with white, black, and their other categories. We were not surprised to find that just 4 of the 32 cognitive interview respondents kept records disaggregating black and white Hispanics. In the earlier exploratory interviews, not one of the 40 respondents reported that they kept records distinguishing white from black Hispanics. This clearly suggests that a combined race/origin question should be used in this establishment census.

This conception of “Hispanic” as a race, rather than as a separate concept such as ethnicity or origin, has been identified as a factor affecting race/Hispanic responses in research on household censuses and surveys: in some studies by Hispanic respondents (Bates et al. 1995, Kissam et al. 1993, Elias-Olivares and Farr 1990, Martin et al. 1990, McKenney et al. 1988) and in others, by both Hispanic and non-Hispanic respondents (Gerber, de la Puente, and Levin 1997, McKay et al. 1996, and Gerber and de la Puente 1996). It is likely that this conception of “Hispanic” as a race affects the quality of race/origin reporting in establishment censuses and surveys of other types of residential facilities but this remains an hypothesis, given the apparent lack of any previous study on race reporting in a residential establishment survey.

In addition to keeping main categories similar to those of the Office of Management and Budget, quite a few respondents keep data in extra categories, such as “other,” “biracial,” and “unknown” (Table 3) that vary in the extent of being foldable into the five basic categories, as OMB

requires.⁸ Nineteen of the cognitive interview respondents included an “other” category in their facility race codes. These “other” categories covered persons and situations such as: less frequently encountered minorities (Asian/Pacific Islanders and/or American Indians/Alaskan Natives in some areas), refusals, and more rarely, juveniles of unknown race. Sometimes (but not always) these “other” categories used by facilities also included juveniles who could be identified in the general category “biracial,” without the specific mix of races.

TABLE 3: EXTRA RACE/ORIGIN FACILITY CATEGORIES NOT PERMITTED BY DIRECTIVE 15 (1977) FOR FEDERAL DATA COLLECTION REPORTING

Category	Facilities
Other	19
Biracial, multiracial	10
Unknown	7

Ten of the 32 respondents reported a separate “biracial” or “multiracial” response category in their records. At least five of these said that the label biracial is sufficient for their records, but they could disaggregate these to specify the race mixes by checking the individual paper files, if necessary. Other respondents, including one reporting on all of the several thousand juveniles in public facilities in his state, could not disaggregate the biracial juveniles. The differential ability of respondents to give specific mixes of biracial juveniles would introduce bias.

The decision to use a biracial category in a facility may be made either at the facility or the state level. At least seven states now have state-mandated “biracial” categories: Florida, Georgia, Illinois, Indiana, Michigan, Ohio, and North Carolina (*Emerge Magazine*, December/January 1996, p. 51). Respondents in facilities using “biracial” or “other” categories may have trouble translating juveniles in those categories in their files into the federally-mandated codes, especially if an “other, specify” line is not given on the Federal form.

Additionally, seven respondents used the category of “unknown,” mainly for refusals. One pointed out that race might be coded as “unknown” for some adopted children. Absent a Federal category for “unknown,” these respondents have no way of putting juveniles of unknown race into the Federal categories.

⁸ Additional, more detailed categories may be collected, if they can be aggregated into the 5 categories in reports.

Factor 6: Variations in the mode of record-keeping. In the cognitive interviews, those who relied on individual paper case files were more likely than those with computer records to decline to go through the files to find individual-level data during the in-person interviews. Some just estimated data, while others refused to complete the form. Some using electronic records had trouble if they had narrative case histories or had to keep switching among files and screens for each juvenile.

Another implication of record-keeping mode is whether or not multiple race codes can be entered. In individual paper case files, any number of races can be listed for each child. However, with electronic files, it is possible that only one fixed race code is allowed. At least 9 of the 32 facility systems allowed just one fixed race code. If mixed race juveniles can only be entered into computer files with one race, there would be no way to reidentify them by computer later, should some survey ask for numbers and specific mixes of biracial children.⁹

In this section, we have used the results of exploratory and retrospective questions to identify six factors that may affect the validity and reliability of race and origin data provided by third-person reporters in juvenile facilities:

- 1) the extent to which respondents can accurately report, from memory, juveniles' self-reported race and Hispanic origin;
- 2) the methods by which the facility obtains race and origin data on juveniles;
- 3) the extent to which race and origin question wordings are standardized within and among facilities;
- 4) the degree of consistency among categories used by the facility, the state and the federal government;
- 5) the variation in conceptual and operational definitions of "Hispanic" as a race, not as a separate concept of origin, ethnicity, or culture; and
- 6) the paper or electronic mode of keeping individual files.

We note that of these six factors, just two (conceptual and operational definitions of "Hispanic" as a race, and extent of respondents' personal knowledge of how persons would self-report) would also be germane to research in household surveys where one householder most often reports the race and origin for a small number of well-known coresidents. This suggests the possibility that the type of Hispanic race and origin question that works within a household survey may not necessarily be the type that works best within a group quarters or establishment survey. We will return to this observation later in the paper.

⁹ Respondents currently relying on facility computer files that allow just one race to be recorded for each young person will not be able to comply with the new "mark-all-that-apply" instruction in the race question recently approved by OMB (OMB 1997b), unless they have personal knowledge of how the juveniles would self report. To comply with OMB instructions, staff at these facilities or agencies would need to be notified of this OMB change and would have to change their database structures to record more than one race per person before the next census.

These general factors provide the context for examining the development and performance of specific experimental Hispanic origin and race questions in this research project. The next sections present the successive results of developing and testing experimental Hispanic origin and race questions in the two rounds of cognitive interviews and the mailout test.

PHASE 2: DEVELOPMENT AND COGNITIVE TESTING OF SEPARATE HISPANIC ORIGIN AND RACE QUESTIONS

As noted earlier, our sponsor's primary aim was to design the new questionnaire to obtain individual-level data on juvenile offenders in facilities. Collecting and recording the answers to the expected 11 to 13 data elements on each juvenile was expected to be labor intensive and time consuming, especially for respondents in the large facilities and for the central reporters. To reduce the expected burden on respondents in producing individual-level data, we decided to ask for individual-level data on just the target population--the offenders--and continue to request aggregate-level data on the nonoffenders. These decisions gave us an unexpected opportunity in Phase 2 to develop and cognitively test both aggregate- and individual-level Hispanic origin and race questions with the same third-person respondents in face-to-face interviews.

Rather than using the original questionnaire format of combining Hispanic origin and race into one question, we decided to use the alternative approach permitted by Directive 15: ask origin and race in separate questions. Directive 15 stipulates that if separate questions are used, "the number of White and Black Hispanics must be identifiable and capable of being reported in that category (OMB 1977). Following the example of Martin, DeMaio, and Campanelli (1990) we changed the 1990 decennial census demographic question sequence so that the Hispanic origin question immediately preceded the race question, in the hope of increasing the response rate on Hispanic origin. We also revised the race question categories to disaggregate Asian and Pacific Islander and to add an "other-specify" category. These latter changes were not permitted by the 1977 version of Directive 15 and needed special OMB approval.

The experimental Phase 2 aggregate Hispanic origin and race question wordings for the nonoffender subpopulation are shown below. The context of the questions may be seen by looking at the reproduction of the questionnaire page in Attachment 2.

Phase 2 Separate, Aggregate Hispanic Origin and Race Questions for Nonoffenders

11. Of the juveniles aged 21 and younger assigned to beds here on July 26 at 11:30 p.m. for REASONS OTHER THAN delinquent or status offenses, who were not staff, how many were
 - a. Of Hispanic origin?
 - b. Not of Hispanic origin?

12. Of the juveniles aged 21 and younger assigned to beds here on July 26 at 11:30 p.m. for REASONS OTHER THAN delinquent or status offenses, how many were in each of the following race categories:
- a. White
 - b. Black, African-American
 - c. American Indian or Alaska Native
 - d. Asian
 - e. Pacific Islander
 - f. Other, *Specify*

The Interaction of Separate Hispanic Origin and Race Questions

In Phase 2 we tested our new instrument in face-to-face cognitive interviews with 18 facility respondents who have in the past and/or will in the future complete the form in an actual census. These onsite interviews were conducted in a variety of facility types in the District of Columbia and 7 states: Georgia, Illinois, Indiana, Maryland, Missouri, New York, and Ohio (Schwede and Moyer 1996). These geographical areas were chosen to examine issues pertaining to the wider questionnaire redesign project; they turned out not to be as productive for testing the origin and race questions. In most of the states covered, it was a relatively rare occurrence for our facilities to house any Hispanic juveniles.¹⁰

Of the 18 respondents, only 4 reported housing any Hispanic nonoffenders and gave a clear impression of how they would classify these in our *aggregate* question. Two of these respondents correctly broke out the nonoffender subpopulation by Hispanics and non-Hispanics in the origin question, but then completed the race question for the *non-Hispanics* only, omitting the Hispanics altogether. It appears these respondents thought they had already given the race information for the Hispanics in the origin question, so they didn't need to include them in the race question. A third respondent considered that approach, then said he would count the Hispanics in the origin question and also write them in on the race question "other, specify" line, again as Hispanic. Technically, he completed both items, but in giving the same answer to both questions, he did not provide both the origin and race data OMB wants. The fourth respondent decided to estimate numbers for the aggregate Hispanic origin and race questions.¹¹ He estimated 3 Hispanics in the

¹⁰ Between 1985 and 1990, Hispanics migrated out of the North East, Midwest, and South Central states, primarily to Florida. According to 1990 census results, more than 75 percent of the Hispanics in this country live in just six states: California, Texas, Florida, New York, New Jersey and Illinois (Harrison and Bennett 1995).

¹¹ On the old questionnaire, instructions in the race question allowed a respondent to provide "reasonable estimates" if counts were not available from their records. These were to be indicated with an asterisk. There was no mention of estimation as an alternative method for

origin question, then went on to complete the race question estimation independently, for all of the nonoffenders, not just for the non-Hispanics as the first two respondents had done. This respondent appeared to have the right idea about recording origin and race, but we cannot be sure of this, since he was just estimating, not using actual data. Thus, only one (possibly) of the four respondents who answered the aggregate-level separate Hispanic origin and race questions appeared to conceptualize the task correctly for juveniles of Hispanic origin.

The *individual-level* Hispanic origin and race questions to be completed for the facility subpopulation of interest to the sponsor--the offenders--are shown below and in Attachment 3, where the actual questionnaire page is reproduced:

Phase 2 Separate, Individual-level Hispanic Origin and Race Questions for Offenders

6. Is this juvenile of Hispanic origin?
Mark (X) one

Yes

No

7. What is this juvenile's race?
Mark (X) one

1. White
2. Black
3. American Indian or Alaska Native
4. Asian
5. Pacific Islander
6. Other, *specify*

The individual-level questions have the same wording in the response categories as the aggregate-level questions, but are laid out horizontally on a grid, while the aggregate questions on the previous page and in Attachment 2 are positioned vertically. Additionally, the qualifiers specifying which juveniles to include in the individual question are located in the page header, rather than in the question itself, as was done with the aggregate questions.

In this part of the questionnaire, seven respondents rostered one or more offenders as Hispanic. Four of these seven answered "yes" to the Hispanic origin question and then answered the race question by writing in the word, "Hispanic," in the "other, specify" box.¹² With these cases, we

recording race or origin on the new questionnaire this respondent was completing for us.

¹² Two respondents completed both the aggregate- and individual-level questions. The first one did the aggregate and individual-level questions differently. In the aggregate set, she identified Hispanics in the origin question, but then left them out of the tallies completely on the race question. In the individual-level questions, she marked "yes" for the origin question and wrote in "Hispanic" on the race question. The second respondent completed the aggregate and individual

got redundant responses which superficially improved the raw response rate, but which did not give us the origin and race data OMB wants. The fifth respondent identified Hispanic in the origin question and then left the race question blank. Just 2 of the 7 respondents provided the correct origin and race information in the individual-level questions.

In the course of the interviews, several respondents asked us why we had separated out Hispanic origin from race. One said it was strange to do this. He thought about the separate Hispanic question for awhile and then triumphantly stated that he had just figured out the real reason we developed a new questionnaire and separated the Hispanics from the race question: the real goal was to identify illegal immigrants with a separate Hispanic question, because we would not be able to get away with asking for this directly! We were very surprised by this interpretation and made sure to tell him firmly that we had no such intent to identify illegal immigrants. Another respondent said we were discriminating against Hispanics by asking about them separately.

In summary, for our Phase 2 separate Hispanic origin and race questions at both the aggregate- and individual-levels, we found two answering patterns that strongly indicated that respondents regard Hispanic as a race and considered the separate questions to be asking for duplicative information on Hispanics. One pattern was to identify the Hispanics in the origin question and then leave them out of the race question altogether. The other pattern was to identify them in the origin question, then include them in the race question on the "other, specify" line by writing in "Hispanic." These same patterns have been found in the decennial census testing. It appeared that respondents might be less likely to leave the race question blank when they were completing the individual as compared to the aggregate data, but, as noted, the data in 4 of the 7 cases were redundant and did not provide race. Also, there are so few cases here that this difference could very well be due to chance.

Use of the "Other, specify" Lines in the Race Question

We also looked at the extent to which respondents made use of the "other, specify" line in the race questions. In the *aggregate-level* question (Attachment 2), we included 10 lines for write-ins. A total of nine respondents had nonoffenders to classify here and had the opportunity to write in alternative races. As noted, one respondent used this line to write in "Hispanic." Another used the line to write in "Haitian," which was included in her facility's list of race categories, but which is really a "nationality" and should be out of scope. Two respondents wrote in "biracial." When asked if they could provide the actual racial mix, one could do it (and answered "white/black"); the other could not. A final respondent wrote in "black/white." Hence, 3 of 9 respondents used the aggregate race question "specify" lines to indicate "biracial" juveniles.

sets the same way: by marking "yes" for the origin question as well as writing in "Hispanic" in the "specify" box.

In the *individual-level* race question, 16 respondents provided data on up to 8 juvenile offenders in their facilities. As noted, four of these used the “other, specify line” to write in Hispanic. One additional respondent used this to write in “biracial.” When asked, this person was able to say that this juvenile was white/black. This finding that respondents may use “other, specify” lines in a race question to write in Hispanics, rather than real multiracial combinations is consistent with earlier findings from a 1994 Survey of Income Program Participation test that a greater than expected number of Hispanics were recorded on race, write-in lines (Evinger 1995). This has been documented in testing for the decennial census as well.

PHASE 3 REVISION AND COGNITIVE TESTING OF A COMBINED, “MARK-ALL-THAT APPLY” HISPANIC ORIGIN/RACE QUESTION

Based on these results from Phases 1 and 2, we conceded that most respondents in facilities consider Hispanic to be a race. We thus developed a new combined origin/race question for the next round of cognitive interviews. The new question wording is shown below and the position of the question on the actual questionnaire page is shown in Attachment 4.

Phase 3 Cognitive Interview Combined, “Mark-all-that-apply” Origin/race Question

4. What is this person’s race? For persons who are biracial or multiracial, enter codes for ALL THAT APPLY.

For Hispanic persons, please enter the code for “Hispanic” AND the code for the appropriate additional race category.

1. White
2. Black or African-American
3. Hispanic
4. Asian
5. Pacific Islander
6. American Indian or Alaska native
7. Other- *Specify*

We included a special instruction for recording Hispanics: “For Hispanic persons, please enter the code for Hispanic AND the code for the appropriate additional race category.” We included this instruction for Hispanics to see if we could get the race/origin breakout for Hispanics that OMB wants, even though we suspected it might not work because many of our previous respondents considered “Hispanic” to be a sufficient race category in and of itself. This instruction, as well

as the "mark all that apply" instruction, allowed respondents to identify Hispanics in combination not just with white and black, but also with Asian, Pacific Islander, American Indian, and anything else the respondent wanted to write in on the "specify" line. We did not develop a new aggregate-level question, because the sponsor decided to discontinue collection of demographic data on nonoffenders in the facilities. We continued to split the Asian and Pacific Islanders into separate categories and to use the "other, specify" category as well, with OMB approval.

In Phase 3, we conducted 14 cognitive interviews in 4 states: Arizona, California, Minnesota and Virginia. We deliberately selected the first two states because of the expected high proportions of Hispanics. We wanted to see how respondents at facilities most likely to house Hispanic juveniles would classify them in our question and also in their own facility records (Schwede and Gallagher 1996).

The Interaction of Origin and Race in Cognitive Interviews

- In Phase 3, a total of 13 respondents listed one or more offenders on the grid and had to answer the combined race/origin question. Twelve of these thirteen respondents did mark the Hispanic code for at least one rostered juvenile. However, only four of these listed the two requested codes (Hispanic and a race code) on any of their resident Hispanics. One of these four provided codes for Hispanic and white consistently for both Hispanics he rostered. Another one listed his only offender as Hispanic and white because he knew this juvenile had one Hispanic and one Polish parent (he was reporting on what he thought was mixed race, not mixed origin and race). The remaining two respondents wrote in "Hispanic and white" for one rostered juvenile, but not for another. Both of these latter respondents said that they happened to know that one of their juveniles was mixed-race Hispanic and white, but they didn't know enough about the other rostered juveniles to comment on their races. Hence, they completed this task inconsistently, introducing error. These cases are concrete examples of how one factor discussed earlier--variations in the extent to which third-person respondents have personal knowledge of how resident juveniles would self-report--can influence the quality of origin and race data in this census.

Thus, just two of the twelve respondents in the Phase 3 cognitive interviews who rostered Hispanic juveniles consistently provided the origin and race data that OMB wants to obtain. It appears from these few cases that some respondents may mark two codes for Hispanics in a combined race/origin question 1) if they have personal knowledge of the juvenile or the facility records allow them to list more than one race, and 2) if they consider the juvenile to be of mixed race. Hence, these Hispanic juveniles get two codes if one parent is Hispanic and the other is something else.

Four respondents in Phase 3 expressed confusion about the special instructions for recording two codes for each Hispanic juvenile they rostered. One asked, "Is this a trick question?" Another said, "Why do we need another category for Hispanics? This must be here to confuse me!" A third said, "I'm not sure what they mean here." Yet another commented, "I don't understand what

the other code there might be. I would call the information number and find out what they want me to do.”

From these results, it was clear that the early Phase 3 combined multiple-response origin/race question with its special instructions for Hispanics to list two codes did not improve our ability to get respondents to record both Hispanic origin and race. Respondents continued to express confusion about needing two categories for Hispanics. We were not surprised by this, because we continued to hear what we now regard as the primary reason third-person reporters have trouble with questions asking for both origin and race; most third-person respondents simply regard “Hispanic” to be a valid race category that is sufficient in and of itself and they do not understand questions that ask them to separate out Hispanic origin and race. If they don’t understand the question, they are likely to either leave it blank, as some of our respondents did, or write in some answer that may be of questionable accuracy. Both of these outcomes reduce the quality and comparability of data in this census.

• The Use of the Other, Specify Boxes in the Early Phase 3 Cognitive Interviews

Of the thirteen respondents who provided individual-level race data on up to 12 juveniles housed in their facilities, only two respondents listed dual-race juveniles. One listed an American Indian/white and another rostered a white/Asian. Hence, our new “mark all that apply” question with an optional “other, specify” box produced just a small number of mixed-race juveniles.

PHASE 3 QUESTIONNAIRE REVISION AND THE MAILOUT SAMPLE SURVEY

In reviewing the results to this point, the sponsor was convinced that he should give up trying to force respondents to provide breakdowns of white Hispanics and black Hispanics that the great majority of respondents did not collect on their own. For our large-scale mailout test, he decided we should use the standard, combined question wording listed in OMB Directive 15 (1977) with two modifications we had already been using: 1) separation of Asian and Pacific Islanders into two categories and 2) inclusion of the “other, specify” code with a write-in line. This question, shown below and in the Attachment 5 questionnaire, is intended to obtain one answer only: we did not include the “mark-all-that-apply” option tested earlier. This combined question has a response category for “Hispanic” but does not require a breakdown by race. In fact, the only way that both origin and race may be recorded in this question for Hispanics is with use of the “other, specify” line. We received OMB approval to test this question.

Final Combined Individual-level Origin/Race Question for the Mailout Test

4. What is this person's race? Enter the code on the line.

1. White, not of Hispanic origin
2. Black, not of Hispanic origin
3. Hispanic origin (i.e., Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin)
4. American Indian/Alaskan Native
5. Asian
6. Pacific Islander
7. Other - *Specify on line*

This question was included on the revised, experimental questionnaire that was sent to 385 single-reporter respondents in our October, 1996 split-panel test of the new and original questionnaires.¹³ The nationwide sample was stratified on the basis of public/private management as well as size. A total of 312 respondents mailed in their questionnaires. Of these 312, 250 met the eligibility requirements of housing at least some juveniles because of offenses and also provided individual-level data on race for at least one of the resident young persons.

In the mailout test, we could not observe respondents' reactions to the question as they completed it as we had during the cognitive interviews. However, we were able to look at the item response rate for our combined origin/race question, using the raw data sent in by respondents before any editing or callbacks were performed by survey administrators. We were very pleased to see that the 250 respondents had answered the question for 99.2 percent of the total of 8223 juveniles reported! This very high response rate is a strong indicator that respondents understood the question and were able to answer it.

The mailout test results showed that 14 percent of the juveniles reported on the new questionnaire by respondents were classified in the "Hispanic" category. Eighty-two percent of the Hispanics were reported to be housed in public facilities and the remaining 13 percent in private facilities.

¹³ An additional 100 single-reporter respondents in the split-panel test received the original census questionnaire. The purpose of the test was to compare the overall response rates of the old and new forms and decide if the new form should replace the old one in the next census. Information on this test is found in Schwede and Ellis (1997) and Ellis and Schwede (1997).

Use of the "Other, Specify" Boxes

We found some very interesting results when we analyzed the use of the "other, specify" code in the mailout test. Of the 250 facility respondents, 43 (17.2 percent) marked the "other, specify" code for at least one of their resident juveniles. We found that 22 percent of the respondents from private facilities marked the "other, specify" code, compared to 10.4 percent of those from public facilities. The respondents using this "other, specify" code came from 26 states. Clearly, the use of the "other, specify" line is not limited to small geographical segments.

These 43 reporters used the "other, specify" code for 92 (1.12 percent) of the total of 8223 juveniles rostered in the test, which is roughly consistent with the proportions of respondents choosing a multiracial code in some recent household survey tests. Of these 92 juveniles, 61 percent were in private, and 39 percent in public, facilities.

We have write-in responses for 83 (87 percent) of these 92 juveniles. Table 4 shows the breakdown of write-in responses into 5 groups: specific race combinations, Hispanic origin/race combinations, ethnicity/nationality, non-specific race combinations and missing. Sixteen juveniles (17.4 percent) fell into the first group of specific race mixes, such as Native American/Black and White/Black.

Eighteen juveniles (19.6 percent) were recorded in the second category of valid "Hispanic origin/race combinations," such as Black/Hispanic and Hispanic/Native American.¹⁴ The total of 34 juveniles (37 percent) in these two categories would fit right into the guidelines proposed to OMB by the Interagency Committee for the Review of the Racial and Ethnic Standards to amend Directive 15 to allow multiple races to be marked (OMB July 9, 1997).

Fourteen young persons (15.2 percent) fell into the third category, "Ethnicity/nationality," because they had write-ins that erroneously listed ethnicities or nationalities, rather than races, such as Kurdish and American Indian/Italian. One of the write-ins in this category, African American, was really just an alternative term for the existing "black" response category in the question.

These write-in cases would require recoding by census analysts into OMB categories, but probably contain enough information that callbacks would not be needed to the respondents.

¹⁴ It is interesting to note that 33 percent of the juveniles listed in the "other, specify" line with both race and Hispanic origin in our mailout test had a combination that cannot be specified using the standard combined question listed in Directive 15 (1977): Hispanic and Native American.

TABLE 4: NUMBER OF JUVENILES IN PUBLIC/PRIVATE FACILITIES WITH “OTHER, SPECIFY” RESPONSES IN THE MAILOUT TEST COMBINED HISPANIC ORIGIN/RACE QUESTION

OTHER, SPECIFY RESPONSE	JUVENILES IN PRIVATE FACILITIES	JUVENILES IN PUBLIC FACILITIES	TOTAL JUVENILES
Specific race combinations			
White/Black	5	-	5
Biracial or mixed with White/Black specified	5	-	5
Caucasian/Native Amer	1	3	4
Caucasian/Indian/Black	1	-	1
Native Amer/Black	1	-	1
Hispanic origin/race combinations			
White/Hispanic	1	-	1
Caucasian/Hispanic	-	6	6
Caucasian/Mexican	-	2	2
Caucasian/Puerto Rican	-	1	1
Puerto Rican/White/Black	1	-	1
Black/Hispanic	1	-	1
Hispanic/Native American	1	4	5
Native American/Mexican	-	1	1
Ethnicity, Nationality			
African American	1	-	1
Algerian/White	1	-	1
American Indian/Italian	1	-	1
Cape Verdean	3	-	3
East Indian	1	-	1
Filipino	-	1	1
Iran	1	-	1
Kurdish	-	1	1
Laotian	1	-	1
Russian	-	3	3
Non-specific race combinations			
Biracial or multiracial with no race specifics	21	7	28
Mixed with no specifics	5	2	7
Missing (no write-in)	4	5	9
TOTALS	56	36	92

Thirty-five other juveniles (38 percent) were listed by respondents in the fourth category of “nonspecific race combinations”: multiracial, biracial, or mixed. An additional nine young persons (9.8 percent) marked as “other” on the race question did not have any write-in answers and fell into the fifth, “missing” category. The 47.8 percent of juveniles in these two categories do not have sufficient information for them to be reclassified into OMB categories. These cases would either require callbacks to respondents or imputation procedures.

Thus 52.2 percent of the write-ins gave sufficient information for OMB reporting without requiring any callbacks. The availability of the “other, specify” response category in our test enabled the respondents reporting on these juveniles to describe their young persons fully and accurately, without having to worry about how to fit them into just one race category.

Had there not been an “other, specify” line, these respondents would have had to choose just one of each juvenile’s multiple race and/or ethnic affiliations to answer the forced choice OMB combination question listed in the 1977 version of Directive 15 (the one without an “other, specify” category). If faced with such a forced choice, some respondents might ask the juvenile to choose one race, others might choose the race of the father (or mother), still others might just arbitrarily choose one of the races without asking the juvenile, and some might decide they can’t answer the question and leave the race question blank for these juveniles. Variability in methods used to report just one race on multiracial juveniles would lead to inconsistencies in the accuracy of data in this census.

Thus the lack of an “other, specify” line with the forced choice of one of 5 race/Hispanic origin categories would be likely to lead to inconsistent answers and lack of comparability among facilities, as well as a higher nonresponse rate on this question for the 92 juveniles of mixed race.

The 47.8 percent of juveniles marked as “other, specify” who did not have sufficient write-in data to allow recoding into the OMB categories were identified by 27 respondents in 21 states. The breakdown of these respondents and states by category of insufficient response (“non-specific write-in” and “missing”) is given in Table 5.

Twenty of these respondents from 14 states listed 1-4 juveniles as biracial, multiracial or mixed, with no additional information. Fourteen of these respondents were reporting on private facilities and the remaining 6 on public facilities.¹⁵ We do not know whether the non-specific terms of “biracial,” “multiracial,” or “mixed,” originate from the juvenile’s self-reports, observation by the respondent, or incoming administrative records. We do know that a biracial or multiracial category is required in Michigan and Ohio, two states from which we received questionnaires with

¹⁵ Respondents from private facilities using biracial, multiracial, or mixed were from Colorado, Iowa, Michigan, New York, North Dakota, Pennsylvania, Texas, Utah, Virginia, and Wisconsin. The public facility respondents were from Minnesota, Missouri, Ohio, and West Virginia.

juveniles listed as biracial. We do not know whether any of the other 18 states require the use of a biracial or multiracial category.

TABLE 5: NUMBER OF "OTHER, SPECIFY" ANSWERS WITH INSUFFICIENT DATA ON RACE/ETHNICITY BY TYPE OF INSUFFICIENT RESPONSE BY NUMBERS OF JUVENILES, RESPONDENTS, AND STATES

Categories of Race Data that are Insufficient for Determining Race/Ethnicity	Number of Juveniles	Number of Facility Respondents	Number of States
Non-specific write-in: Biracial, Multiracial, or Mixed	35	20	14
Missing data: no write-ins	9	7	7
TOTALS	44	27	21

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In this report, we have described the results of three years of multi-stage pretesting research on the collection of Hispanic origin and race data from third-person respondents in juvenile facilities. We have identified six general factors which affect the quality, completeness and comparability of race and origin data collected in this national census of juvenile facilities:

- 1) extent of respondents' personal knowledge of how juveniles would self-report;
- 2) variation in methods used to obtain data for facility records;
- 3) extent of standardization of question wordings and categories used by the facility respondents themselves;
- 4) degree of fit among facility, state, and federal categories;
- 5) conceptual and operational definitions of "Hispanic" as a race; and
- 6) variation in record keeping mode: paper or electronic files.

As mentioned previously, just two of these factors affecting the quality of this establishment census--"conceptual and operational definitions of 'Hispanic' as a race," and (to a much more limited extent) "extent of respondents' personal knowledge of how persons would self-report"--are also relevant to the data quality issue in household surveys where one householder typically reports

the race and origin data for a few well-known coresidents. The other four factors appear to be unique to data quality issues in establishment surveys.¹⁶

The results of our observations of respondents attempting to answer the Hispanic origin and race questions and our conversations with respondents on the unique factors that may affect how they answer these questions strongly suggest that the type of race/origin questions that would work well in this establishment survey differ from those found to work best in household surveys. In the Phase 2 cognitive interviews, it was found that the separate Hispanic origin and race questions that have been recommended for OMB adoption by the Interagency Task Force (OMB 1997a) and adopted by OMB for data collections based on self reports (OMB 1997b) did not work well in this establishment census context. In the early part of Phase 3, it was learned that the combined Hispanic origin and race questions requiring a multiple response for Hispanics (while allowing an optional multiple response for other categories) also did not work.

Despite the substantial changes we made to the questions to try to get both race and Hispanic origin data, just a very small number of our third-person respondents completed the origin and race questions correctly. Just 4 (19 percent) of 21 Phase 2 and 3 cognitive interview respondents who recorded Hispanics in either the aggregate- or individual-level questions provided both Hispanic origin and race data correctly and consistently for all relevant juveniles. Two more (10 percent) reported inconsistently, providing both origin and race on some, but not all, of their juveniles.

Our primary explanation for the failure of the separate, as well as combined, conditional “mark-all-that-apply” questions for Hispanics in the cognitive interviews is that these questions ask respondents to provide data that is not consistent with their views of what “race” means. As noted throughout this paper, many of these respondents simply think of “Hispanic” as a race category that is sufficient and do not understand the distinction we are trying to make between origin and race for Hispanics. The results of the 32 cognitive interviews confirm the preliminary exploratory findings from 40 exploratory interviews that we shared with OMB in 1995 that the great majority of third-person respondents in juvenile facilities do not disaggregate Hispanics by race within their own facility records. Many do not understand why we ask them to do these breakdowns because “Hispanic” is a category embedded in their race codes, not a separate data element. These findings raise considerable concerns about the accuracy, completeness and comparability of origin and race data obtained from third-person reporters in previous census rounds with the old instrument that forced respondents to break down Hispanics by race.

These results from the cognitive interviews led us to think that the best alternative we had for improving respondents’ understanding of the question as well as the comparability of the resulting data was by putting Hispanic into the race question in a combined format with an “other, specify”

¹⁶ For an overview of other differences between establishment surveys and household data collections, see Cox and Chinnappa 1995.

line, with no requirement to indicate a race for Hispanics. These principles were used in developing the final, mailout version of the question in the latter part of Phase 3.

The combined question used in the mailout test performed very well in terms of item response rates, with 99.2 percent of the more than 8,000 juveniles having an in-scope answer recorded on their roster lines. We also found from the mailout test that a sizable proportion of our respondents from facilities around the country made use of the experimental "other, specify" code and write-in race space. In this test, about 1/6 of our respondents reporting on facilities in 26 states marked the "other, specify" code in our experimental race question.

Of the 92 juveniles coded as "other" race by these respondents, 37 percent had combinations of race with or without Hispanic that would fit the new guidelines for modifying OMB Directive 15 proposed by the Interagency Committee for the Review of the Racial and Ethnic Standards (OMB July 9, 1997). Another 15 percent with other ethnicities/nationalities might be recodable into one race. The remainder had insufficient information and would require either callbacks or imputation.

A very important benefit of the "other, specify" line has not been discussed yet. Just under 1/5 of the juveniles with "other, specify" write-ins in the second category of Table 2, "Hispanic origin/race combinations," were identified as being of Hispanic origin and also in one of the race categories. These juveniles could not have been identified in this test with the existing approved OMB combined question with 5 fixed categories and no "other, specify" option.

The reason that the combined Hispanic origin/race question in OMB Directive 15 (1977) does not allow the identification of these juveniles is that the wording of response categories 1 and 2 (White, not of Hispanic origin; Black, not of Hispanic origin) negates category 3 (Hispanic origin). Respondents cannot logically choose both codes 1 and 3 or 2 and 3: they are mutually exclusive.

Without the ability to break down Hispanics by race, the 1977 combined OMB question does not produce categories that can be compared to the results netted by asking separate Hispanic origin and race questions, as is done in censuses and surveys of households. This disjuncture between the combined and separate origin/race questions would seem to undercut the intent of the Directive 15 guidelines: to produce comparable results on race across all federal data collections. If it is necessary to keep the qualifiers "not of Hispanic origin," attached to the white and black response categories, the most logical way of allowing respondents to record juveniles by Hispanic origin and race is by including the "other, specify" line in the standard combined question.

The mailout test results thus suggest that we may improve the accuracy and specificity of race reporting in juvenile facilities in this census with the use of the "other, specify" option.

In summary, our findings indicate that the combined Hispanic origin/race question with an "other, specify" category has the best potential for improving the completeness and accuracy of Hispanic origin/race reporting by third-person respondents in this census of juvenile residential facilities.

As mentioned, the separate Hispanic origin and race questions recommended for future use in household surveys and censuses by the Interagency Task Force (Office of Management and Budget 1997) did not work in this establishment census context. We appreciate OMB's review of these results in August, 1997 and the approval given by staff at that agency to use the combined question in the October, 1997 live census with the new questionnaire.

We had hoped to be able to put our results of this small-scale study into the context of other studies of the quality of third-person reporting of Hispanic origin and race in other residential establishment surveys. However, our search of the literature and our discussions with experts on collecting race data both inside and outside the Census Bureau to date have not identified any other relevant study. We think it is quite likely that factors similar to those identified here, as well as other, as yet unidentified factors might be affecting the quality of these data in other types of group quarter and establishment censuses. We strongly suggest the need for more research on the quality of third-person reporting of race and Hispanic origin data in surveys and censuses of other types of group quarters and establishments.

As a start toward this goal, we would propose a new research project that could be of benefit to the Office of Juvenile Justice and Delinquency Prevention, the Office of Management and Budget, and the Census Bureau as well. We propose that the next step in our research would be to design a survey to test the effects of the six general factors identified in this report by comparing the consistency of reported race and origin by third-person respondents and by self-reporting juveniles. Such a study would be useful to the sponsor in assessing the reliability, validity, and completeness of data used in its annual report to Congress on juveniles in facilities. It would be useful to OMB in obtaining data on the validity and reliability of its categories in a non-household census. And finally, such a study would be a starting point for evaluating the quality and completeness of race and origin data collected in group quarter censuses and surveys, since to my knowledge, no such study has been done within residential facilities. Improvements in the quality and completeness of data from group quarters might lead to coverage improvements for undercounted ethnic populations in the decennial census as well.

REFERENCES CITED

Bates, N., E. Martin, T. DeMaio, and M. de la Puente. 1995. "Questionnaire Effects on Measurements of Race and Spanish Origin," in *Journal of Official Statistics*, Volume 11, No. 4, pp. 433-459.

Cox, B.G, and Chinnappa, B. 1995. "Unique Features of Business Surveys," in *Business Survey Methods*, edited by Cox, Binder, Chinnappa, Christianson, Colledge, and Kott. John Wiley and Sons, Inc.

Elias-Olivares, L. and M. Farr. 1991. "Sociolinguistic Analysis of Mexican-American Patterns of Non-response to Census Questionnaires." Report submitted to the Census Bureau under Joint

Statistical Agreement 88-25, Ethnographic Exploratory Research Report 16.

Ellis, Y. and L. Schwede. 1997. Evaluation of the Redesigned Questionnaire for the Children in Custody Census. *1997 Proceedings of the Section on Survey Research Methods*. Alexandria, Virginia: American Statistical Association.

Evinger, S. 1995. "How Shall We Measure Our Nation's Diversity?" In *Chance*, Winter, 7-14.

Gerber, E. and M. de la Puente. 1996. "The Development and Cognitive Testing of Race and Ethnic Origin Questions for the Year 2000 Decennial Census." *1996 Annual Research Conference Proceedings*. Bureau of the Census.

Gerber, E., M. de la Puente, and M. Levin. 1997. "Race, Identity, and New Question Options: Final Report of Cognitive Research on Race and Ethnicity." Available from the Center for Survey Methods Research, Statistical Research Division, U.S. Bureau of the Census.

Hahn, R. 1992. "The State of Federal Health Statistics on Racial and Ethnic Groups," in *Journal of the American Medical Association* Volume 267, No. 2. January 8, 1992, pp. 268-271.

Hahn, R., J. Mulinare, and S. Teutsch. 1992. "Inconsistencies in Coding of Race and Ethnicity Between Birth and Death in U.S. Infants," in *Journal of the American Medical Association*, Vol 267, No. 2, pp. 259-263.

Hahn, R. and D. Stroup. 1994. "Race and Ethnicity in Public Health Surveillance: Criteria for the Scientific Use of Social Categories," in *Public Health Reports*, Volume 109, No. 1. January-February, pp. 7-14.

Hahn, R., B. I. Truman, and N. Barker. 1996. "Identifying Ancestry: The Reliability of Ancestral Identification in the United States by Self, Proxy, Interviewer, and Funeral Director," in *Epidemiology* January 1996, Volume 7, No. 1, pp.75-80.

Harrison, R. and C. Bennett. 1995. "Racial and Ethnic Diversity." Chapter 4 in *State of the Union, America in the 1990s, Vol. 2, Social Trends*. 1990 Monograph Series, Ed. R. Farley. New York: Russell Sage Foundation.

Kissam E., E. Herrera, and J. Nakamoto. 1993. "Hispanic Response to Census Enumeration Forms and Procedures." Report submitted to the U.S. Census Bureau under Contract No. 50-YABC-2-66027, Task Order No. 46-YABC-2-0001, March.

Martin, E., T. DeMaio, T. and P. Campanelli. 1990. "Context Effects for Census Measures of Race and Hispanic Origin," in *Public Opinion Quarterly* 54: 551-566.

McKay, R., L. Stinson, M. de la Puente, and B. Kojetin. 1996. "Interpreting the Findings of

the Statistical Analysis of the CPS Supplement on Race and Ethnicity." *1996 Annual Research Conference Proceedings*. Bureau of the Census.

McKenney, N., A. Cresce, and P. Johnson. 1988. Development of the Race and Ethnic Items for the 1990 Census. Paper presented at the Population Association of America Annual Meeting in New Orleans, Louisiana, April, 1988.

Office of Management and Budget. 1997a. "Recommendations from the Interagency Committee for the Review of the Racial and Ethnic Standards to the Office of Management and Budget Concerning Changes to the Standards for the Classification of Federal Data on Race and Ethnicity. July 9, 1997 Federal Register.

Office of Management and Budget. 1997b. "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity." Washington, D.C. Federal Register, Volume 62, No. 210. October 30, 1997.

Office of Management and Budget. 1994. "OMB Announces Review of Federal Racial and Ethnic Categories and Related Public Hearings." Washington, D.C. Federal Register, June 9, 1994.

Office of Management and Budget. 1977. Statistical Policy Directive Number 15, "Race and Ethnic Standards for Federal Statistics and Administrative Reporting." Adopted on May 12, 1977.

Schwede, L. 1997. Third-person Reporting of Hispanic Origin and Race in a Group Quarters/Establishment Census. Paper presented at the Association for Public Opinion Research Annual Meeting in Norfolk, Virginia. May 17, 1997. Forthcoming in the 1997 *Proceedings of the Section on Survey Research Methods*. Alexandria, Virginia: American Statistical Association.

Schwede, L. and K. Ott. 1995. Children in Custody Questionnaire Redesign Project: Results from Phase 1. Available from the Center for Survey Methods Research, Statistical Research Division, U.S. Census Bureau.

Schwede, L. and L. Moyer. 1996. Children in Custody Questionnaire Redesign Project: Results from Phase 2 Questionnaire Development and Testing. Available from the Center for Survey Methods Research, Statistical Research Division, U.S. Census Bureau.

Schwede, L. and C. Gallagher. 1996. Children in Custody Questionnaire Redesign Project: Results from Phase 3 Cognitive Testing of the Roster Questionnaire. Available from the Center for Survey Methods Research, Statistical Research Division, U.S. Census Bureau.

U.S. Department of Education. National Center for Education Statistics. *Racial and Ethnic Classifications used by Public Schools*. NCES 96-096 by Nancy Carey and Elizabeth Farris. Judi Carpenter, project officer. Washington, D.C. 1996.