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Evaluating the Public Information Campaign for the 1980 Census--Results of the KAP Survey

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1980 Census

PRELIMINARY EVALUATION RESULTS MEMORANDUM NO. 31

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Subject: Evaluating the Public Information Campaign for the 1980 Census--Results of the KAP Survey

I. PURPOSE AND BACKGROUND

Despite the mandatory nature of the decennial census, its success is ultimately dependent upon the voluntary support and cooperation of the American public. Historically, that cooperation and support has been forthcoming to a degree unmatched by comparable programs either within or outside the federal government. And yet, the stakes are so high--most importantly for the continued representativeness of our representative form of government--that public support simply cannot be taken for granted. Thus, for a period of about six months surrounding Census Day--April 1, 1980--the Bureau of the Census, with the assistance of the Advertising Council, mounted a massive public information campaign regarding the 1980 Decennial Census. Among the primary purposes of the campaign were the following: 1) to give notice to the American people that a census was to be taken; 2) to inform the people how and why they were to be counted; 3) to foster favorable attitudes toward the census and census taking; and 4) to elicit the appropriate cooperative response to the census.

The Knowledge, Attitudes, and Practices (KAP) Survey constituted a major part of the effort undertaken by the Census Bureau to evaluate the effectiveness of the 1980 public information campaign. In addition to all the obvious reasons for evaluation, there was the additional impetus of the "undercount problem," which dominated so much of the planning, preparation, and procedures for the 1980 Census. Specifically, it has been hypothesized that the 1970

undercount--or, more precisely, the unequal distribution of the 1970 undercount--was in part due to an ineffective public information effort, which failed to reach or impress Black Americans in particular, and probably Hispanics as well. Although there was no evidence gathered in 1970 to support or reject this hypothesis, the 1980 campaign was planned and executed with the dominating concern that no segment of the population be overlooked in the promotion effort, and that the traditionally difficult-to-enumerate receive an extra measure of attention.

II. STUDY DESIGN

A. Survey design

The KAP project employed a pre/post survey design, with an accompanying record check (see Attachment A). The "pre" or Phase 1 interviews were conducted in late January and early February of 1980, prior to any major buildup of the public information campaign. The "post" campaign (Phase 2) interviews were conducted about two months later, in late March, at the approximate peak of campaign activity. Households were included in either the Phase 1 or Phase 2 sample, but not both.[1/] In order to minimize any bias of auspices, all interviews were conducted by an outside contractor.

At the conclusion of the census, an attempt was made to match all households selected in the Phase 2 sample to census records, so that behavior in the 1980 Census (mail return, enumerator assistance, non-response) could be assessed objectively. This design permitted analysis of the effectiveness of the public information campaign in meeting all four of its basic goals: 1) increased awareness of, 2) knowledge about, and 3) more favorable attitudes toward the census (as indicated by the differences in the replies of "before" and "after" respondents); and 4) a positive influence on census behavior (as indicated by the relationship--direct and indirect--of exposure to the campaign and mail response to the census).

B. Sampling

The KAP Survey employed a 50 PSU, multi-stage, national area probability sample design, in which the ultimate sampling element was the dwelling unit. Included in the sample frame were all areas of the United States to be enumerated in the census by mail-out, mail-back techniques. In order to insure adequate representation of Black and Hispanic households, oversampling was carried out in areas estimated to have large concentrations of these sub-populations. Sampling was identical for Phase 1 and Phase 2 down to the block level; within a selected block (or its non-SMSA counterpart), non-overlapping clusters of dwelling units were designated for interview in either Phase 1 or Phase 2.[2/] Due to

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1/In point of fact, a small, random subsample of households was designated for interview in both Phase 1 and Phase 2, for purposes not directly related to the evaluation of the public information campaign. Because of the likely conditioning biases of the first interview experience, cases interviewed in both phases have been excluded from the Phase 2 estimates. For present purposes, therefore, the two samples are totally non-overlapping.

2/See footnote 1.

confidentiality restrictions, existing Census Bureau samples could not be tailored for use in this study, and thus the KAP sample was designed, listed, and selected "from scratch" by the outside contractor. (For a complete description of the sample design see "Knowledge, Attitudes, and Practices Survey: Sample Design and Selection," DAMANS and Associates, Inc., September, 1980.)

C. Method, Timing, and Outcome

Interviews were conducted either in person or by telephone, with one respondent per household. The desired respondent was the male or female household head, but interviews were permitted with any responsible adult member of the household if the desired respondent were not available after repeated attempts. As noted previously, all interviews were conducted by an outside contractor, using an instrument developed by the Census Bureau (Attachment B).

Phase 1 interviews were conducted from January 25 through February 6, 1980. Out of 3772 eligible dwelling units selected, interviews were obtained from 2431 respondents, for a response rate of 64%. Phase 2 was carried out from March 22 through 27, 1980.3/ Over this six-day period, 2446 interviews were completed in 3115 eligible dwelling units, for a response rate of 79%. The final data gathering step in the KAP project was the match to census records for the purpose of determining the census behavior of each Phase 2 household. A successful match was achieved for 85% of the completed Phase 2 interview cases.

The low response rate of Phase 1 relative to Phase 2 casts some doubt on the comparability of the two samples. Although a comparison on the basis of the race/ethnicity and household income distributions of the two samples indicates no significant differences, it is possible that a positive relationship exists between the ease with which an individual can be located and persuaded to be interviewed and such variables as census awareness, knowledge, and attitudes. Such a bias might help to explain anomalous results such as apparent knowledge decreases from Phase 1 to Phase 2 (see, for example, Table 6, part B, for high income Blacks), by artificially elevating the estimates derived from the Phase 1 results.

III. ANALYSIS

A. Weighting

Prior to the analysis of the KAP Survey results, weights were applied to the data to project the results to population totals.4/ These weights were calculated from sample selection probabilities at each of the five sampling stages, and also included non-response adjustment factors. (For a complete description of the weighting scheme for KAP see "Weights for Knowledge, Attitudes, and Practices Survey," memo from Mary Mulry-Liggan and David Chapman to Jeffrey Moore, December 2, 1981.) For both interview phases, the weighting procedures

3/ As a point of reference, census forms were mailed out on Friday, March 28. Census Day--the day the forms were supposed to be mailed back--was the following Tuesday, April 1.

4/In this case, the population to be projected consists of all households in mail-out, mail-back census areas.

produced population totals of approximately 80 million households, which compares favorably with the official estimated universe of 77 million occupied housing units.

Although the data weights project the KAP sample to reasonably accurate population totals, there was fairly substantial attrition from the sample available for analysis due to incomplete demographic information. An attempt was made to define each interviewed household in terms of both race/ethnicity and total household income, either through the KAP Survey itself or the subsequent census record check. . In each interview phase, approximately 15% of the completed interviews lacked data on one or both of these variables. For informational purposes, all tables in this report present unweighted and weighted results for the entire interview sample; statistical analyses, however, are restricted to just those cases for which both race/ethnicity and household income data could be obtained.

B. Analytical techniques

The primary statistical technique employed in the analysis of the KAP data was log-linear analysis using the program CPLX (Contingency Table Analysis for Complex Sample Designs) developed at the Census Bureau by Robert E. Fay III. This program extends the traditional log-linear techniques applicable to a simple random sample design to more complex samples such as the one employed in the KAP Survey. The statistical tests computed by CPLX take into consideration both the weights applied to the sample cases and the manner in which the sample was selected.

CPLX evaluates the fit of hierarchical log-linear models to observed cross-classified data, and also the contribution of a specific set of parameters to the fit of a model. The statistical significance of the fit of the model or of the contribution of specific parameters can be tested by comparing the calculated jackknifed chi-square statistic (G_j) to the appropriate critical values. (For a table of these critical values, and a more complete description of the CPLX program, including examples of specific applications with regard to KAP, see "Contingency Table Analysis for Complex Sample Designs (CPLX): Program Documentation," Robert E. Fay III, July 1982.)

The analyses contained in this report describe relationships among race/ethnicity, household income, timing of interview, and a variety of outcome variables having to do with awareness of, knowledge about, attitudes toward, and behavior in the 1980 Decennial Census. The particular CPLX techniques employed permit consideration of the combined effects of several variables on each other simultaneously, as well as more simple relationships. The CPLX analysis summaries accompanying the tables in the report refer to both a "Marginals Analysis" and a "Multivariate Analysis." The former evaluates only the observed marginals (e.g., race/ethnicity) in the cross-classification, without regard to the controlling influence of other variables on the observed marginal effects. In essence, the "marginals" analysis is an analysis of only the "bottom line"--were Whites better informed than non-Whites?--while the "multivariate" analysis addresses possible underlying explanations for the observed effects--after adjusting for differences in income, were Whites better informed than non-Whites?

A different analytical technique--multiple regression using the program Super Carp--was employed for the analysis of several composite indices

constructed through a combination of individual items. Of primary interest in the examination of these indices was the mean level (of exposure, for example, or knowledge, or attitudes), and differences in means associated with interview timing, race/ethnicity, and household income. In other words, the objectives were the same as in the analysis of the individual items; however, in this case the dependent variable was not merely categorical, but continuous, and thus the mean statistic was both meaningful and informative. Although log-linear analysis could have been applied to these data (by recasting the continuous index into discrete categories), it was felt that multiple regression techniques would be more appropriate and more easily interpretable. Super Carp is a multiple regression program for the analysis of complex sample surveys which, like CPLX, takes into account both sample design and data weights in statistical testing. (A more complete description of this program can be found in Super Carp (Sixth Edition), by Michael A. Hidiroglou, Wayne A. Fuller, and Roy D. Hickman, Iowa State University, 1980.)

IV. RESULTS

A. Campaign Penetration

By this first-level measure of effectiveness--simply reaching people with census messages--the public information campaign for the 1980 Census appears to have been a success. As shown in Table 1, even though awareness of the census was already very high before the campaign began (over 90% in almost all segments of the population), marked increases in awareness took place between Phase 1 and Phase 2. Based on these results, about three-and-a-half million more households had heard of the census in late March than had two months earlier.

Despite the appearance of larger gains among low income and non-White households in the proportion who had ever heard of the census, statistical analysis detects no differences by race/ethnicity or income in the extent of change. Thus, there was no reduction of the advantage in awareness of the census enjoyed by White and high income households which predated the campaign. As shown in part C of Table 1, regardless of income, significantly greater proportions of Black and Hispanic than White[5/] households received their census forms "cold"--that is, without ever having heard of the census before. Similarly, regardless of race/ethnicity, lower income households were significantly more likely than those with higher incomes to have received a census form before they had ever heard of the census. (It should be noted that, in absolute terms these differences--particularly the latter--are quite small.)

As shown in Table 2, reported "recent" exposure to census information showed an even more dramatic increase, from about 40% of all households in Phase 1 to three-fourths of all households in Phase 2. This shift was particularly pronounced for Hispanic households, among whom reported recent awareness more than tripled. For all groups, however, the change in recent awareness from Phase 1 to Phase 2 was positive and highly significant.

5/Throughout this report, "White" will be used to refer to Whites not of Hispanic origin, "Black" to Blacks not of Hispanic origin, and "Hispanic" to all people of Hispanic origin regardless of race.

As shown in part C of Table 2, according to respondents' reported recent awareness, the campaign appears to have been less effective overall at reaching Black households than White or Hispanic households. (No differences are evident in the penetration of the campaign according to household income.) Closer inspection reveals that this disadvantage is actually true only among the poorest households; among middle and high income households there are no detectable differences among the three racial/ethnic groups. The fact remains, however, that relative to other groups, the campaign did not effectively reach low income Black households, of whom only about half reported recent exposure in Phase 2. Three facts temper somewhat this negative assessment: first, these households were not unaware of the census (about 85% reported ever having heard of the census--see Table 1), they were simply less effectively reached by the current campaign; second, the end of Phase 2 interviewing did not coincide with the end of the campaign, which had at least a week more of its most visible and active period in which to improve its penetration of low income Black households; and third, even though this group represents the "worst case" regarding recent census exposure, their level of such exposure at Phase 2 was still substantially greater than it had been at the outset of the campaign.

In addition to these general indicators of how well the campaign reached people, the KAP survey also examined the performance of seven specific channels of information: newspapers, magazines, television, radio, meetings of community groups, posters and signs, and informal conversations [9a-g][6/]. Across the two-month interval between Phase 1 and Phase 2 there occurred large, consistent, positive changes in reported exposure to census information through virtually every medium examined. These changes were evident for all racial/ethnic and income subpopulations. Where differences could be detected in the increase in exposure through a particular medium, the greatest change invariably occurred in lower income or non-White households. For most media, there were no apparent differences in level of penetration at Phase 2, as census forms were about to be mailed out. Such differences as were found suggest reduced but still significant income differences (with more extensive exposure at higher incomes), but greater effectiveness in non-White than in White households.

In addition to examining the performance of each specific channel of the campaign across different population subgroups, another useful way to look at the KAP results is to examine the relative effectiveness of the various channels within each population subgroup. In essence, the former analysis addresses the question: "How did medium X perform among the various strata of the American public?" while the latter asks: "What was the relative effectiveness of the various channels in reaching subgroup A?" and "How does the ordering of channel effectiveness for subgroup A compare with other population subgroups?" Answers to these latter questions can provide insights regarding very practical questions of the type: "What is the best way to reach low income Hispanics?" and "If resources are applied to the media which best reach low income Hispanics, is this done at the expense of other segments of the population?"

6/Throughout this report, bracketed numbers will indicate the relevant survey questionnaire items.

Table 3 presents the rank orderings within each population subgroup of the proportion reporting exposure to the public information campaign at Phase 2 through each of the six[7] channels investigated. The most striking aspect of these results is their consistency. For example, irrespective of any differences in television's ability to reach various population subgroups, this medium was, for all groups, the most frequently cited source of information about the census. Radio and newspapers generally shared the second and third positions, followed by posters, magazines, and meetings. As shown below Table 3, a statistical test confirms what is obvious to the eye--that the rank orderings are highly consistent across the nine population subgroups.[8]

This consistency of relative effectiveness has important implications for the design of a public information effort directed toward all segments of American society, since it suggests that different segments need not be played off against each other in selecting a maximum impact media mix. Even though there may be differences between groups in the level of penetration of a particular channel, that channel's relative effectiveness is about the same for all groups. If channel X is the best way to reach Hispanics it is likely also to be the best way to reach Whites.[9]

Table 4 also addresses the issue of the relative performance of the various channels of the campaign for the total population and within each subgroup, although from a slightly different perspective. This table summarizes for each channel the reduction in exposure to the campaign that could be expected had that channel not been used in the campaign. Essentially, these data indicate the extent to which a channel was for each "recently exposed" respondent the sole source of information about the census. Although no statistical significance tests have been made on these data, there is clear support in

7/A seventh channel--informal conversations--was also investigated in the KAP Survey. This channel is not included here because it is really more a by-product than a channel of the public information campaign, and also because the level reported in Phase 2 (before the mail-out of census forms) is likely to vastly underestimate the final extent of such conversations.

8/Technically, this analysis indicates that the null hypothesis cannot be rejected--the null hypothesis here being that the nine rank orderings are indistinguishable from nine random samples from a single population.

9/Unfortunately, this simple conclusion ignores the differences which exist between channels in the extent to which they are likely to be demographically targeted. Although the medium of radio reached Whites and Hispanics with equal effectiveness (relative to other channels), it is likely that the particular radio stations which carried the campaign to Whites differed greatly from those which reached Hispanics. For radio, then, only careful planning and execution will ensure equal effectiveness. This is in contrast to a medium such as television, for which a single blanket approach is more likely to reach all groups about equally. (Even television, however, is becoming more susceptible to this process, as the number of Spanish-language stations increases.)

these results for the conclusions reached in the previous table. For all subgroups (disregarding an obvious anomaly--posters for middle income Whites), television was far and away the most important channel of the campaign. Had no effort been made to promote the census through this medium (assuming all other efforts had remained the same), there would have been often serious repercussions in the overall rate of exposure to the campaign.

As a proxy indicator of the total amount of exposure to the public information campaign, each respondent was assigned a score according to the number of different sources of census information cited.. Thus, the possible range of scores on this index was from zero (no exposure to the campaign--including those who had never heard of the census) to seven (exposure through all channels investigated). As shown in Table 5, across all types of households, the index increased by 250% from Phase 1 to Phase 2, a clear indication that the campaign was getting the message out to the people through multiple channels. Statistical analysis reveals that the extent of change on this total exposure index was a complex function of both race/ethnicity and income. The increase appears to have been about the same at all income levels among Whites, greater at high and middle incomes among Blacks, and greater at low and middle incomes among Hispanics. Despite these differences, however, the dominating aspect of these results is substantial positive change in reported exposure to the campaign for all segments of the population.10/

At Phase 2, by the time census forms were to be mailed out, there were no significant racial/ethnic differences in extent of exposure to the campaign, but household income was strongly associated with scores on the exposure index. In general, the campaign penetrated higher income households more effectively than lower income households. Although this relatively straightforward effect was predominant, it does not tell the whole story. The relationship between income and exposure to the campaign held only among White and Black households; among Hispanics there were no significant income differences.

B. Census Knowledge

Although penetration was the primary goal of the public information campaign, it was not the only goal. The campaign also sought to enhance people's understanding of the basic facts of census taking, and the purposes and uses of census data. Research prior to the 1980 Census had suggested that cooperation with the census may be inhibited by a lack of understanding of what the census is all about: Who is asking all these questions? Why do they want to know? What are they going to do with my answers?

The KAP Survey included six items designed to test knowledge of the basic facts of the census, including such topics as how often a census is taken, who is responsible for taking the census, the confidentiality of individual

10/Only for high income Hispanics is there doubt about the statistical significance of the effect. The small number of cases in this cell and the fairly large observed difference (a smaller difference among low income Blacks, for example, is found to be significant) would seem to argue against the null hypothesis.

replies, and whether response to the census is voluntary or mandatory [10, 11, 12a, 12b, 14, 16]. Analysis of these individual items yields a set of complex effects which are often difficult just to describe, let alone to interpret. In general, however, these results lend themselves to three conclusions: 1) Knowledge of these basic facts of census taking was indeed quite limited, even after substantial public information campaign activity. For example, despite the importance of confidentiality and its emphasis in the Census Bureau's public relations posture, only about half of all households were aware on the eve of census form mail-out that no one outside the Census Bureau could see their personal information. Only about 15% could identify the Census Bureau as the agency responsible for taking the census. 2) Although there was no instance in which an item showed a significant overall increase in correct replies from Phase 1 to Phase 2, several items did indicate knowledge gains for particular demographic subgroups--typically among lower income and/or non-White households. 3) Even where such gains did occur, however, they were not of sufficient magnitude to erase the pre-existing "knowledge gaps" separating White from non-White households, and rich from poor.

In order to measure more reliably the impact of the public information campaign on knowledge of basic census facts, a knowledge index was constructed by summing the number of correct replies to the six individual items. Scores on this index are summarized in Table 6. Analysis suggests that although change was trivial overall, it was clearly not equivalent in all segments of the population. Although the pattern of change is complex, a fairly straightforward description which fits the data reasonably well is as follows: over the course of the public information campaign knowledge of the basic facts of the census increased among lower income non-Whites, but not among high income non-Whites, or among Whites at any income level.

Regardless of this pattern of change--which in general favored non-White households--Whites were still the most knowledgeable as the census drew near. This effect is statistically marginal, however, as well as income-dependent. Thus, the racial/ethnic difference in knowledge favoring Whites is most clear among households with the highest incomes; among middle income households Whites and Blacks together were the most knowledgeable, while among the poorest households Whites and Hispanics scored highest on the knowledge index.

There is, of course, more than one way to address the question of whether the public information campaign imparted to the public some increased understanding of the basic facts of the census. A second approach involves an examination of the degree of association between knowledge about the census and exposure to the campaign. The primary advantage in an estimate of this sort is that it does not depend on the accuracy of the baseline (i.e., Phase 1) measurement in addressing the issue of change.[11/] However, a definite disadvantage is that causal inferences (of the type: "The campaign produced increases in knowledge") are not justified.

11/See section II.C. for a discussion of a possible source of bias in the Phase 1 estimates.

The results summarized in Table 7 support the conclusion that the public information campaign informed people about--and not merely of--the census.12/ All of the correlation coefficients13/ in the table are positive, and except for those based on very few cases, all are statistically significant. In other words, those with greater exposure to the public information campaign were also more knowledgeable about the census.

As shown below Table 7, a statistical test indicates the presence of significant differences among the nine population subgroups in the strength of the exposure/knowledge relationship. Although no further statistical tests have been carried out on these data, two tendencies are quite clear. Exposure to the campaign and knowledge were more strongly related among Blacks and Hispanics than among Whites, and among low and middle income households than among those with high incomes. These trends support the earlier conclusion based on the observed changes between Phase 1 and Phase 2 that the campaign was most effective at increasing knowledge about the census in lower income and non-White households. These analyses of the knowledge index suggest that high income and White respondents had learned about the census in other ways--through better education, for example, or a more thorough early socialization in mainstream American culture--while Blacks and Hispanics and those with lower incomes were more likely to have experienced the campaign as a "crash course" in knowledge of the basic facts of the census.

A second series of knowledge items was designed to test understanding of the uses of census results. These items examined awareness of the fundamental purpose of the census (apportionment of the House of Representatives), the less formalized uses of the census which have developed over time (the census as social barometer and planning tool), and its uses--or rather non-uses--with specific reference to the issue of confidentiality ("Is the census used to catch welfare cheaters?") [13a-g]. Again, analysis of the items individually yields a complex set of results, but in general the same conclusions are supported as in the case of the "basic facts" items (above): limited understanding of the uses of the census; some gains in understanding over the course of the public information campaign, especially among non-White and lower income households; and, notwithstanding the latter, large gaps in understanding the uses of the census at the end of the campaign between Whites and non-Whites, and rich and poor.

12/Again, causality cannot be inferred from these results, and other plausible conclusions are also supported (e.g., that those who already knew the most about the census were thus better prepared to receive and recall the census messages in their environment).

13/In the calculaton of correlation coefficients--here and throughout this report--an adjustment was made to the data weights to compensate for the weighting to population totals (see section III.A.). By dividing the weight for each case by the average weight for all cases, the appropriate ratio of weights based on probabilities of selection was maintained, but the number of cases was reset to the actual number of completed interviews.

As before, a uses index was constructed by summing the number of correct replies to the seven items; scores on this index are summarized in Table 8. For the total population, there is no evidence of any increase in understanding the uses of the census over the two-month interval between Phase 1 and Phase 2. The analysis suggests, however, that this "no increase" conclusion does not apply equally to all population subgroups. Although there is no evidence of change among high income households, or among Whites at any income level, the campaign does appear to have increased understanding of the uses of the census among lower income Blacks and Hispanics, the key targets of the campaign who were least well informed at the outset.

These changes effectively erased any initial advantage of Whites, so that by the time census forms were to be mailed out there were no detectable differences by race/ethnicity in understanding the purpose of the census and the uses of census results. The same cannot be said of differences associated with household income, however. Across all three racial/ethnic groups, those with the highest incomes knew most about what the census is used for, and those with the lowest incomes knew least.

Table 9 presents the results of a correlational analysis of the uses and total exposure indices. Once again, except for the very small high income Hispanic cell, all coefficients are significantly positive, which means that respondents with more exposure to the campaign also exhibited greater understanding of the uses of the census. The test summarized below the table indicates the presence of significant differences among the coefficients for the nine subgroups. No additional statistical tests have been carried out on these data, but visual inspection suggests that the pattern of differences differs somewhat from the "census facts" results. In general (and especially at the lower income levels), the degree of association is again strongest among Hispanics, and is weakest among those with the highest incomes. However, there are no consistent differences between Whites and Blacks in the strength of the exposure/ uses relationship, and across all three racial/ethnic groups the strongest relationship appears at the middle income level.

Both the relative weakness of the relationship in high income (i.e., high education) households, and its relative strength among Hispanics, fit well with the prior knowledge/"crash course" dichotomy suggested previously. However, the general blurring of both the racial/ethnic and household income differences in these results suggest that, relative to knowledge of the basic facts of the census, there was a more general tendency for everyone to have to learn about the uses of the census from the public information campaign. This explanation makes good intuitive sense, given the less formalized status of many of the uses of the census, their relatively recent origin, and their susceptibility to change.

C. Census Attitudes

Another important secondary goal of the public information campaign was to ensure a favorable climate of public opinion in which to conduct the census. To measure the effectiveness of the campaign on this score, the KAP Survey contained a series of twelve agree/disagree attitude items. These items were intended to sample a wide range of potential concerns, including

perceptions about the general importance of the census, the likely beneficiaries of the census, motivations to cooperate, confidentiality, and the usefulness of the census [17a-1].

Based on the analyses of the individual items, there is only scant and inconsistent evidence that the public information campaign had positive effects on people's attitudes toward the census. Seven of the twelve items showed no significant change between Phase 1 and Phase 2 in the proportion of favorable replies, three showed clear positive shifts, one showed an overall positive shift but with a complex pattern of race/ethnicity by income differences, and for one item a significant change toward a more negative attitude was indicated. The effectiveness of the campaign, however, must be judged in relation to the existing public opinion context into which it was launched, and here--as opposed to the situation with regard to awareness that the census was coming, or knowledge about the census--there was relatively little work for the campaign to do. As measured by the KAP Survey, attitudes toward the census were overwhelmingly favorable even at the outset of the campaign. Across all 12 items, and in both interviewing phases, favorable replies outnumbered nonfavorable (i.e., neutral or negative) replies by about a three-to-one ratio. Thus, it may be the case that the campaign served to maintain the good will of the public in the face of the occasionally hostile publicity which attended the census, but this interpretation goes well begond the available evidence.

As with the exposure and knowledge items, a global attitude index was constructed by summing the number of favorable replies to the twelve individual items; scores on this attitude index are summarized in Table 10.[14/] The analyses summarized in part B of Table 10 suggest that attitude change over the course of the campaign--which was trivially positive for all types of households combined--was a complex function of both race/ethnicity and household income. Specifically, across all three racial/ethnic groups, those with high incomes actually appear to have grown somewhat less favorably disposed toward the census as the campaign progressed. On the other hand, middle and low income households--with the exception of low income Black households--were at the same time becoming increasingly positive. It should be noted, however, that these apparent changes are rather marginal statistically. Part C of Table 10 indicates that attitude levels at Phase 2 were slightly higher among Whites than among non-Whites, but this effect, too, is of marginal statistical significance. Especially in this instance, the focus on differences should not obscure the essential and most obvious fact about these data; namely, that respondents in both interviewing phases expressed overwhelmingly favorable attitudes toward the census. According

[14/] Appropriate consideration has been made for the fact that a favorable attitude was in some instances indicated by an "agree" response, and in some instances by a "disagree" response. Scores for respondents who failed to respond to one or more items were "projected" to a twelve-item total. For example, a respondent who gave favorable replies to six items, nonfavorable replies to four items, and did not respond to the remaining two items, was assigned a score of seven, as follows: (6/10) x (12) = 7.2 = 7 (rounded to the nearest integer value).

to Table 10, the most "anti-census" segment of the population on the eve of Census Day still responded favorably to two-thirds of the attitude items.

In assessing the extent of attitude change between Phase 1 and Phase 2--and thus the effectiveness of the public information campaign at creating a favorable climate of public opinion--there are two important methodological considerations which may serve to mask any real positive attitude shifts which may have occurred. In two important respects, the Phase 1 and Phase 2 respondent bases available for the analyses summarized in Table 10 differed. Both the low rate of response in Phase 1, and the fact that attitudes were only asked of those who reported ever having heard of the census, may have worked to skew the Phase 1 sample toward a higher proportion of cooperative, responsive people, with long-term awareness of (and probably more favorable attitudes toward) the census. The results of a correlational analysis which short-circuits these problems are presented in Table 11. These data support the conclusion that the campaign was effective at producing more favorable attitudes across all population subgroups, although in absolute terms the association is very weak. Certainly there is in these results no indication of the negative effects which appeared among high income households in the previous analysis. Perhaps the most reasonable conclusion to draw from all this is that the campaign may have had some positive impact on attitudes toward the census, but in general there is only weak evidence of a weak effect.

D. Census Behavior

The "bottom line" goal of the public information campaign was to contribute to a more complete count of the American people. Although there are no data available to assess directly the effectiveness of the campaign in meeting this goal, the relationship of exposure to the campaign and mail response behavior is a reasonable proxy indicator. The assumption of a direct relationship between census coverage and mail response is predicated on two suppositions: a) that greater mail response is indicative of a greater desire or willingness on the part of the people to be included in the census count; and b) that greater mail response freed up otherwise limited resources which could then be redirected to other efforts to obtain a complete count.

There is evidence--albeit neither abundant nor overwhelmingly strong--that the 1980 public information campaign did stimulate cooperative behavior, especially among the low income and non-White segments of the population which were the primary targets of the campaign. Table 12, for example, summarizes the rate of mail response for those who were and were not exposed to the campaign. For all types of households, although the trend is in the desired direction, those who reported recent exposure to the campaign did not mail their forms back at a significantly higher rate than those who were not exposed.[15/] However, this conclusion is not warranted among all groups

15/ According to the analysis of the marginals, the difference in rate of mail response for the "exposed" and "not exposed" groups--92.0% and 86.4%--is significant at the $p<.10$ level. The multivariate analysis, however, which controls for race/ethnicity by income differences in mail response, fails to detect this effect.

of the population. Across all racial/ethnic groups, low income households show a highly significant positive relationship between exposure and mail response, which is clearly not the case at higher income levels.[16]

Additional examples of the positive effects of the campaign can be seen in the analyses of the individual channels of the campaign, although certainly not in every instance. None of the print media exposure variables, for example--newspapers, magazines, posters/signs/handbills--shows any significant association with mail response, either for the population as a whole or for any population subgroups. On the other hand, the broadcast media do appear to have elicited cooperation. Across all segments of the population, those who saw something about the census on television mailed back their census forms at a higher rate than those who were not exposed; a similar difference is evident in the results for radio.[17] Not surprisingly, perhaps, the campaign was most clearly effective when delivered through personal contact. Households containing someone who heard about the census at a meeting of some community group showed a significantly higher rate of mail response than those not so exposed, even in an analysis restricted to those who ever attend such meetings.

Table 13 summarizes the relationship between the index of total exposure to the public information campaign and census mail response. As with the item assessing "recent" exposure, there appears to be no significant overall relationship between total exposure and mail response, but there are significant differences in this relationship by household income. Once again, the mail response behavior of low income households appears to have been significantly affected by the campaign. Although the primary differences are between those reporting no exposure and those reporting any exposure, further analysis indicates a significant linear trend in mail response among low income households with increasing exposure to the campaign. No such trend is evident at higher income levels.[18]

Evidence regarding the effectiveness of the campaign at eliciting greater mail response through indirect means can also be assessed in the KAP Survey results. That is, if a positive relationship between mail response and census knowledge or attitudes can be demonstrated, and these variables have

[16] In fact, there is the suggestion of a negative relationship among middle income households, although analysis places this effect at only borderline statistical significance.

[17] This effect is only apparent when analysis is restricted to those who report ever listening to radio. When those who never listen are included in the "not exposed" category, the significance of the difference in mail response disappears, which suggests a positive relationship between *not* listening to radio and mail response.

[18] Although differences appear to exist by amount of exposure among high income households--at least at marginal levels of significance--there is clearly no linear trend in the rates of mail response. Analysis of the middle income groups indicates no differences in mail response among the categories of exposure.

previously been shown to have been positively influenced by the campaign, this constitutes evidence that the campaign was effective. As shown in Table 14, the campaign as it operated through knowledge of the basic facts of census taking does not appear to have influenced mail response. Although for the total population the mail response trend with increasing knowledge is in the desired direction, statistical analysis detects no differences in mail response rates among those who gave zero or one correct answer, two or three correct answers, or four or more correct answers.[19] There is evidence that knowledge operated differently on mail response among different racial/ethnic and income subgroups, but detailed analysis reveals no significant effects among any of the lower income non-White groups, which were the only segments of the population for which the campaign appeared to increase knowledge of census facts.

A rather more positive picture emerges from the analysis of the second set of knowledge items, those concerned with the purpose of the census and the uses of census results. Table 15 summarizes the relationship between mail response and understanding the uses of the census. Here we find a significant relationship, but only among low income households. Furthermore, this relationship is significantly linear--greater mail response with increasing understanding. Since the campaign did appear to increase understanding of the uses of the census among lower income Blacks and Hispanics, these results suggest that--at least for the poorest Black and Hispanic households--the campaign had a positive impact on mail response by answering questions about why the census is taken.

Finally, Table 16 presents rates of mail response by ranges of scores on the global attitude index. By visual inspection, the results for the total population suggest a positive and linear association between attitudes and mail response, but according to statistical analysis this effect is trivial. The analysis instead indicates a highly complex interaction involving all three independent variables--race/ethnicity, household income, and attitude. Only among low income Whites, however, does there appear the sort of trend which would clearly evidence a positive relationship between census-related attitudes and mail response, and even this effect is of marginal statistical significance. Especially in light of the weak evidence that the public information campaign affected attitudes positively, the most appropriate conclusion to draw from these data is that whatever salutary effects the campaign had on mail response did <u>not</u> operate through people's attitudes toward the census.

V. CONCLUSIONS

As noted at the outset of this report, the public information campaign for the 1980 Decennial Census had four primary goals, and the KAP Survey was designed to evaluate the effectiveness of the campaign in meeting each of these goals. Here, then, are four answers to the question: Was the campaign effective?

[19] The marginals analysis does suggest such differences, as well as a possible interaction with household income. These effects disappear, however, in the multivariate analysis, which controls for race/ethnicity by income differences in rates of mail response.

Goal A--"to give notice to the American people that a census was to be taken"

There can be no doubt that the campaign effectively made people aware that a census was coming. Both awareness of the census and reported exposure to the campaign increased significantly over the course of the campaign in every population subgroup examined. The conclusion is a little more mixed, however, with regard to the campaign's relative effectiveness for its key target groups. Although the campaign effectively penetrated all types of households, it still appears to have left White and high income households more aware of the census than non-White and low income households, and across all racial/ethnic groups levels of exposure in lower income households did not match those achieved in high income households. Low income Black households were least effectively reached, although increases in awareness and exposure were quite clear even in this "worst case" group.

Goal B--"to inform the people how and why they were to be counted"

Knowledge of the basic facts of census taking and of the purposes and uses of the census increased significantly over the course of the campaign among lower income non-Whites, who were the least well informed at the start of the campaign; there were no such gains in White or high income households. Although the campaign accomplished much in this regard, it still left much undone. Even after substantial campaign activity, knowledge of some of the most basic issues of census taking was still quite limited, and despite their gains, lower income and non-White respondents tended to be less knowledgeable than their high income and White counterparts.

Goal C--"to foster favorable attitudes toward the census and census taking"

As measured by the KAP Survey, attitudes toward the census were highly favorable from the outset of the campaign among all segments of the population, and remained largely unchanged over the course of the campaign.

Goal D--"to elicit the appropriate cooperative response to the census"

The public information campaign does appear to have had beneficial effects on mail response behavior, which were primarily evident among lower income and non-White households. Mail response seems to have been influenced both by the sheer amount of exposure to the campaign, and by the campaign's ability to instruct people regarding the purpose and uses of the census.

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KAP Survey Questionnaire

Brief Summary of KAP Project Design

Survey Design:
a) non-overlapping, pre/post survey
b) record check of census behavior for "post sample"

Sampling:
a) 50 PSU, national area probability sample of households
b) sample frame covered all mail-out, mail-back areas
c) over-sampling in high concentration Black and Hispanic areas

Method:
a) primarily (but not exclusively) in-person interviews
b) adult, household respondent
c) interviews conducted by outside contractor

Outcomes:

	Phase 1	Phase 2
a) interviewing period	1/15 to 2/6	3/22 to 3/27
b) interviews completed	2431	2446
c) response rate	64%	79%
d) record check match rate	NA	85%

Analysis:
a) data weighted to population totals; weights based on probabilities of selection, with nonresponse adjustment
b) primary analytical technique: log-linear analysis

Form Approved: O.M.B. No. 41-S79069

FORM D-897
(1-14-80)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

KNOWLEDGE, ATTITUDES, AND PRACTICES SURVEY

20th Decennial Census – 1980

INTRODUCTION

(Hello,) My name is_____, and I'm from ___(Contractor)___. *(Show ID)* We are conducting a study for the United States Department of Commerce to find out how good a job the government has done informing people about its events and programs. This study is authorized by title 15 of the United States Code, and your participation is strictly voluntary. Your answers are confidential, and no information that can identify you or your family can be given to anyone.

1. Let's begin by asking about some of the ways that news of current events reaches you. First, how many days a week do you read a newspaper?

_____ Days a week } *Mark reference tab for NEWSPAPERS on page 6*
8 ☐ No regular pattern; can't say
9 ☐ None; does not read newspapers

2. How about magazines – do you read one magazine a week, more or less than that, or none at all?

1 ☐ One magazine a week
2 ☐ More than one
3 ☐ Less than one
4 ☐ No regular pattern; can't say } *Mark reference tab for MAGAZINES*
5 ☐ None; does not read magazines

3. About how many hours a day do you watch television?

_____ Hours a day } *Mark reference tab for TELEVISION*
8 ☐ No regular pattern; can't say
9 ☐ None; does not watch television

4. About how many hours a day do you listen to the radio?

_____ Hours a day } *Mark reference tab for RADIO*
8 ☐ No regular pattern; can't say
9 ☐ None; does not listen to radio

5. Do you ever go to the meetings of any community groups, like a church service, social club, union, PTA, or some other community group?

1 ☐ Yes – *Mark reference tab for MEETINGS*
2 ☐ No

6. Next, I would like to ask you about three government programs that you may or may not be familiar with. Have you ever heard of –

	Yes	No	Don't know
a. the Energy Conservation Program?	1 ☐	2 ☐	3 ☐
b. the U.S. Savings Bond drive?	1 ☐	2 ☐	3 ☐
c. the Census of the United States?	1 ☐ – *SKIP to item 8*	2 ☐	3 ☐

Ask item 7

7. The census is the count of all the people who live in the United States. Have you ever heard of that before?

1 ☐ Yes
2 ☐ No } *SKIP to item 18*
3 ☐ Don't know

8. Have you seen or heard anything recently – within the last month or so – about –

	Yes	No	Don't know
Ask only if "Yes" to item 6a			
a. the Energy Conservation Program?	1 ☐	2 ☐	3 ☐
Ask only if "Yes" to item 6b			
b. the U.S. Savings Bond drive?	1 ☐	2 ☐	3 ☐
c. the Census of the United States?	1 ☐	2 ☐	3 ☐
		SKIP to item 10	

9. Let's talk about what you've run across recently about the census.

(FOR ITEMS a–e, ASK ONLY IF REFERENCE TAB IS MARKED FOR –

	Yes	No	Don't know
NEWSPAPERS)			
a. Did you see something about the census in a newspaper?	1 ☐	2 ☐	3 ☐
		SKIP to b	
Do you remember what you have seen in the papers? For example, have you seen any –			
(1) ads for the census?	1 ☐	2 ☐	3 ☐
(2) news items about the census?	1 ☐	2 ☐	3 ☐
(3) pictures?	1 ☐	2 ☐	3 ☐
(4) editorials?	1 ☐	2 ☐	3 ☐
(5) letters to the editor?	1 ☐	2 ☐	3 ☐
(6) or some other kind of story or announcement?	1 ☐ Describe	2 ☐	3 ☐
MAGAZINES)			
b. Did you see something about the census in a magazine?	1 ☐	2 ☐	3 ☐
TELEVISION)			
c. Did you see something about the census on television?	1 ☐	2 ☐	3 ☐
		SKIP to d	
Do you remember what you have seen? Have you seen any –			
(1) ads or commercials about the census?	1 ☐	2 ☐	3 ☐
(2) news stories about the census?	1 ☐	2 ☐	3 ☐
(3) interviews or "talk show" appearances by census officials?	1 ☐	2 ☐	3 ☐
(4) or some other type of TV broadcast?	1 ☐ Describe	2 ☐	3 ☐
RADIO)			
d. Did you hear something about the census on the radio?	1 ☐	2 ☐	3 ☐
		SKIP to e	
Which of the following types of radio broadcasts have you heard? Have you heard any –			
(1) ads or commercials about the census?	1 ☐	2 ☐	3 ☐
(2) news stories about the census?	1 ☐	2 ☐	3 ☐
(3) interviews or "talk show" appearances by census officials?	1 ☐	2 ☐	3 ☐
(4) or any other kind of radio broadcast?	1 ☐ Describe	2 ☐	3 ☐
MEETINGS)			
e. Did you hear something about the census in a meeting of some community group?	1 ☐	2 ☐	3 ☐
(ASK ALL RESPONDENTS ITEMS f–h)			
Did you see or hear something about the census –			
f. on a poster, sign, handbill, or some other type of printed advertisement?	1 ☐	2 ☐	3 ☐
g. in conversations with friends, neighbors, or co-workers?	1 ☐	2 ☐	3 ☐
h. or anyplace else?	1 ☐ Describe	2 ☐	3 ☐

10. As you may know, every few years many countries in the world make a count or census of all the people who live there. Do you know how often a census is taken in the United States?

1 ☐ Yes, every 10 years
2 ☐ Yes, every 5 years
} *Ask item 11*

3 ☐ Yes, other – *Explain* . . . . . _____
} *SKIP to item 12a*

4 ☐ No; don't know . . . . . .

11. As far as you know, has it always been every (5/10) years?

1 ☐ Yes
2 ☐ No – *Explain* _____
3 ☐ Don't know

12a. Do you happen to know whether State governments, the Federal government, or some other group has the job of taking the census?

1 ☐ Federal – *Ask b*
2 ☐ State . . . . . .
3 ☐ Other – *Explain* . . . . . _____
} *SKIP to item 13*

4 ☐ No; don't know . . . . . .

b. Do you know which government agency runs the census?

1 ☐ Yes – *Explain* _____
2 ☐ No; don't know

13. People have different ideas about what the census is used for, and I'm going to read you some of them. As I read each one, please tell me whether YOU think the census is used for that purpose.

	Yes	No	Don't know
a. The first one is: to find areas of the country that need government help. Do you think the census is used for that purpose?	1 ☐	2 ☐	3 ☐
b. How about: to catch welfare cheaters. Is the census used for that?	1 ☐	2 ☐	3 ☐
c. Is the census used to decide how many representatives each State will have in Congress?	1 ☐	2 ☐	3 ☐
d. Is it used to see what changes have taken place in the United States?	1 ☐	2 ☐	3 ☐
e. Do the police and FBI use the census to keep track of troublemakers?	1 ☐	2 ☐	3 ☐
f. Is the census used to help businesses and governments plan for the future?	1 ☐	2 ☐	3 ☐
g. How about: to locate illegal aliens. Is the census used for that?	1 ☐	2 ☐	3 ☐

14. After the Census Bureau collects the information about you, can anyone outside the Census Bureau look at it?

1 ☐ Yes
2 ☐ No
3 ☐ Don't know
} *SKIP to item 16*

15. Who else do you think could see it?

DO NOT READ; MARK ALL THAT APPLY.

PROBE: **Anyone else?**

1 ☐ Congress/Politicians/Government
2 ☐ President/White House
3 ☐ Internal Revenue Service (IRS)/Tax department
4 ☐ Police/FBI
5 ☐ Welfare department
6 ☐ Immigration and Naturalization Service (INS)
7 ☐ Private business/rich people
8 ☐ Other – *Explain*

_____

9 ☐ Don't know

16. Do you happen to know what the law says about answering the census questions? Do you have to answer the questions, or can you choose not to?

1 ☐ Have to answer the questions
2 ☐ Can choose not to
3 ☐ Don't know

17. Next I'm going to read some opinions about the census. As I read each one, please tell me whether you agree or disagree with the opinion. Here is the first one:

	Agree	Disagree	No opinion
a. Census information is used to help all of the people of the United States. *PROMPT AS NECESSARY:* **"Would you say that you agree or disagree with that opinion?"**	1 ☐	2 ☐	3 ☐
b. Most people answer the census questions only because the law says they have to.	1 ☐	2 ☐	3 ☐
c. The Census Bureau's promise of confidentiality can be trusted.	1 ☐	2 ☐	3 ☐
d. Most people wouldn't care if they weren't counted in the census.	1 ☐	2 ☐	3 ☐
e. The census is very important to the country.	1 ☐	2 ☐	3 ☐
f. Only politicians and businessmen benefit from the census.	1 ☐	2 ☐	3 ☐
g. The census is an invasion of privacy.	1 ☐	2 ☐	3 ☐
h. One purpose of the census is to keep track of people who might cause trouble for the government.	1 ☐	2 ☐	3 ☐
i. People's answers to the census cannot be used against them	1 ☐	2 ☐	3 ☐
j. Filling out a census form is a patriotic thing to do.	1 ☐	2 ☐	3 ☐
k. The census serves no good purpose that I can see.	1 ☐	2 ☐	3 ☐
l. It's in everyone's best interest to cooperate with the census.	1 ☐	2 ☐	3 ☐

18. **We want to be sure that this study includes a good cross section of people from all across the country. I need to verify some information about your household and where you live.**

First, what is your street address? *EXAMPLE*

Number	Street name	Type	Direction
5844	Queen	Ave.	So.

Number	Street name	Type	Direction

19. **Do you have an apartment number, or is that the full address?**

_____ Apartment number

2 ☐ Full address; no apartment number

20. **What are the names of the nearest cross streets or intersecting streets on either side of your home?**

Intersecting streets

1) 2)

21. **And what is the name of the city or town and State in which you live, your ZIP code, and the county?**

City/town	State	ZIP code	County

22. **Including yourself, how many people live in your household?**

_____ Number of people

IF PERSONAL INTERVIEW: OBSERVATION ONLY

23. **What is your racial background? Are you White, Black, Spanish, Asian, or do you belong to some other racial or ethnic group?**

1 ☐ White
2 ☐ Black
3 ☐ Spanish
4 ☐ Asian
5 ☐ Some other racial or ethnic group – *Describe*

_____

24a. **For last year – 1979 – was the total income of your household BEFORE TAXES more or less than $17,000?**

1 ☐ More than $17,000 – *Ask b*
2 ☐ Less than $17,000 – *Ask c*
3 ☐ Don't know
4 ☐ Refused
} *SKIP to item 25*

b. **Was it more than $22,000?**

1 ☐ Yes, more than $22,000
2 ☐ No, less than $22,000
} *SKIP to item 25*

c. **Was it more than $12,000?**

1 ☐ Yes, more than $12,000
2 ☐ No, less than $12,000

25. **Finally, may I please have the family name?**

_____ Family name

IF PERSONAL INTERVIEW: OBSERVATION ONLY

26. **And what is your approximate age? Are you under 30, 30 to 39, 40 to 49, 50 to 59, 60 or older?**

1 ☐ Under 30
2 ☐ 30 to 39
3 ☐ 40 to 49
4 ☐ 50 to 59
5 ☐ 60 or older

FOR ALL INTERVIEWS: OBSERVATION ONLY

27. Sex of respondent

1 ☐ Male
2 ☐ Female

▶ ***PERSONAL INTERVIEWS*** – *Go to item 28 on next page*

▶ ***TELEPHONE INTERVIEWS*** – *END INTERVIEW*

THANK YOU VERY MUCH FOR YOUR COOPERATION

▶ *PERSONAL INTERVIEWS ONLY*

28. There is a possibility that we may need to contact you again to update our information.

a. Do you have a telephone here?

1 ☐ Yes – *Ask b*

2 ☐ No – *END INTERVIEW*

b. What is your telephone number?

Telephone
Area code | Number

END INTERVIEW – **THANK YOU VERY MUCH FOR YOUR COOPERATION.**

Notes

MEDIA HABITS REFERENCE TAB

Respondent reports . . .

☐ Reading NEWSPAPERS

☐ Reading MAGAZINES

☐ Watching TELEVISION

☐ Listening to RADIO

☐ Attending MEETINGS

Table 2 (continued):

B. Phase 1 to Phase 2 Change Analyses

		Marginals Analysis		Multivariate Analysis	
Effect	df	G_j	p	G_j	p
(non-interactive model)	12	-	-	0.43	good fit
Phase	1	7.42	***	7.68	***
Race x Phase	2	1.32	(*)	2.34	**
Income x Phase	2	-0.29		-0.11	
Race x Income x Phase	4	-	-	0.33	

Post-hoc analyses: Race x Phase

Trend Contrasts	t(44)	p	t(44)	p
W = B (marginals)	1.39			
W > B (multivariate)			2.18	*
W < H	2.14	*	2.51	*
B < H	2.64	*	3.12	**

Individual Trends	df	G_j	p	G_j	p
W	1	6.43	***	6.81	***
B	1	3.77	***	3.85	***
H	1	5.70	***	5.72	***

C. Phase 2 Levels Analyses

		Marginals Analysis		Multivariate Analysis	
Effect	df	G_j	p	G_j	p
Race	2	1.48	*	1.59	*
Income	2	0.23		0.15	
Race x Income	4	-	-	1.13	(*)

Post-hoc analyses: Race

Contrasts	t(43)	p	t(43)	p
W > B	2.50	*	2.45	*
W = H	0.22		0.61	
B < H	2.01	(*)	2.10	*

Table 2 (continued):

C. Phase 2 Levels Analyses (continued)

Post-hoc analyses: Race x Income

Differences by race among ...	df	G_j	p	Contrasts	t(43)	p
High income	2	1.12	(*)	W = B	0.08	
				W = H	0.22	
				B = H	0.29	
				W = B/H	0.08	
Middle income	2	-0.54				
Low income	2	3.08	**	W > B	3.13	**
				W = H	1.18	
				B = H	1.35	
				W > B/H	2.37	*

Table 3: Rank Ordering of the Effectiveness of the Various Channels of the Public Information Campaign

	Television	Radio	Newspapers	Posters	Magazines	Meetings
TOTAL, all respondents (unweighted)	1	3	2	4	5	6
TOTAL, all respondents (weighted)	1	2	3	4	5	6
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):						
Total, all respondents	1	2	3	4	5	6
High income ($22,001 and above)	1	2	3	4	5	6
Middle income ($12,001 - $22,000)	1	3	2	4	5	6
Low income ($12,000 and below)	1	3	2	4	5	6
White, not Hispanic	1	2	3	4	5	6
High income	1	2	3	4	5	6
Middle income	1	4	2	3	5	6
Low income	1	3	2	4	5	6
Black, not Hispanic	1	3	2	4	5	6
High income	1	2	3	5	4	6
Middle income	1	2	3	4	6	5
Low income	1	3	2	4	5	6
Hispanic	1	2	3	4	5	6
High income	1	3	4	2	5	6
Middle income	1	3	2	6	5	4
Low income	1	2	3	4	5	6

Kruskal-Wallis one-way analysis of variance by ranks: $\chi^2 = 6.85$, 8 df, $p > .50$.

Table 4: Reduction in Percent "Recently" Exposed at Phase 2 if...[channel]... Had Not Been Used in the Public Information Campaign[1]/

	Television	Newspapers	Radio	Posters	Meetings	Magazines
TOTAL, all respondents (unweighted)	10.7%	3.6%	2.2%	0.8%	0.5%	0.3%
TOTAL, all respondents (weighted)	12.4	3.1	2.1	3.6	0.1	0.1
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):						
Total, all respondents	13.9	2.7	2.4	4.0	0.1	0.1
High income ($22,001 and above)	5.5	4.2	0.8	#	0	0.2
Middle income ($12,001 - $22,000)	6.7	2.3	1.2	11.0	0.1	#
Low income ($12,000 and below)	27.4	1.9	4.7	0.5	0.3	0.1
White, not Hispanic	15.0	3.0	2.4	4.7	#	0.1
High income	5.0	4.6	0.8	#	0	#
Middle income	6.7	2.6	1.4	12.8	#	0
Low income	33.2	1.9	5.2	0.6	#	0.1
Black, not Hispanic	7.2	1.6	2.5	0	0.4	0.5
High income	5.0	0	0.5	0	0	3.0
Middle income	8.6	0.7	0.5	0	0.3	0.2
Low income	7.0	2.4	4.0	0	0.6	#
Hispanic	9.6	0	0.3	0.3	1.9	0
High income	30.5	0	0	0	0	0
Middle income	1.8	0	0.7	0	0	0
Low income	9.2	0	0	0.6	3.9	0

= less than .01%

1/Figures in the table should be read as follows: "The rate of reported recent exposure to the campaign at Phase 2 among high income Whites would have been reduced by 5.0 percentage points had television not been used to carry the campaign."

Table 5: Number of Different Sources of Information About the Census[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	0.88	1.92
TOTAL, all respondents (weighted)	0.69	1.69
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	0.72	1.78
High income ($22,001 and above)	1.03	2.21
Middle income ($12,001 - $22,000)	0.71	1.79
Low income ($12,000 and below)	0.54	1.43
White, not Hispanic	0.71	1.74
High income	0.99	2.14
Middle income	0.71	1.70
Low income	0.49	1.41
Black, not Hispanic	0.83	1.84
High income	1.69	3.25
Middle income	0.82	2.17
Low income	0.73	1.33
Hispanic	0.61	2.44
High income	1.76	2.54
Middle income	0.32	2.76
Low income	0.57	2.11

[1/]The range of possible scores on this index is from zero (no reported exposure to the campaign) through seven (reported exposure through all sources investigated--newspapers, radio, television, magazines, meetings, posters, and informal conversations).

Table 5 (continued):

B. Phase 1 to Phase 2 Change Analyses

Effect	df	F	p
Race x Phase	2, 44	2.11	
Income x Phase	2, 44	1.27	
Race x Income x Phase	4, 44	3.29	*

Post-hoc analyses: Race x Income x Phase

Individual Trends		t(44)	p
White	High	8.21	***
	Middle	2.54	*
	Low	5.75	***
Black	High	2.36	*
	Middle	4.79	***
	Low	2.35	*
Hispanic	High	1.50	
	Middle	11.62	***
	Low	2.23	*

C. Phase 2 Levels Analyses

Effect	df	F	p
Race	2, 43	1.98	
Income	2, 43	16.39	***
Race x Income	4, 43	2.39	(*)

Post-hoc analyses: Income

Contrasts	t(43)	p
H = M	1.14	
H > L	5.11	***
M = L	0.94	
H > M/L	3.78	***

Table 5 (continued):

C. Phase 2 Levels Analyses (continued)

Post-hoc analyses: Race x Income

Differences by income among...	Contrasts	t(43)	p
Whites	H = M	1.03	
	H > L	4.08	***
	M = L	0.69	
	H > M/L	2.38	*
Blacks	H > M	2.17	*
	H > L	3.86	***
	M > L	3.13	**
Hispanics	H = M	0.37	
	H = L	0.53	
	M = L	0.98	
	H = M/L	0.22	

Table 6: Number Correct--Knowledge of Census Facts[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	1.91	2.26
TOTAL, all respondents (weighted)	2.16	2.30
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	2.20	2.37
High income ($22,001 and above)	2.64	2.59
Middle income ($12,001 - $22,000)	2.25	2.57
Low income ($12,000 and below)	1.92	2.01
White, not Hispanic	2.39	2.48
High income	2.64	2.67
Middle income	2.46	2.60
Low income	2.15	2.17
Black, not Hispanic	1.37	1.75
High income	3.10	1.68
Middle income	1.18	2.60
Low income	1.26	1.31
Hispanic	0.89	1.75
High income	1.47	1.43
Middle income	1.27	1.64
Low income	0.54	1.94

[1/]The range of possible scores on this index is from zero (no knowledge items answered correctly) through six (all knowledge items answered correctly). Respondents who reported never having heard of the census were assigned a score of zero (i.e., no knowledge), even though they were not, in fact, asked the knowledge questions.

Table 6 (continued)

B. Phase 1 to Phase 2 Change Analyses

Effect	df	F	p
Race x Phase	2, 44	1.46	
Income x Phase	2, 44	0.18	
Race x Income x Phase	4, 44	4.88	**

Post-hoc analyses: Race x Income x Phase

Individual Trends		t(44)	p	
White	High	0.10		
	Middle	0.16		
	Low	0.10		
Black	High	-2.22	*	[Note: Reverse effect]
	Middle	5.26	***	
	Low	0.28		
Hispanic	High	-0.05		
	Middle	1.09		
	Low	3.78	***	

C. Phase 2 Levels Analyses

Effect	df	F	p
Race	2, 43	2.55	(*)
Income	2, 43	2.25	
Race x Income	4, 43	2.27	(*)

Post-hoc analyses: Race

Contrasts	t(43)	p
W > B	2.43	*
W > H	2.09	*
B = H	0.00	

Table 6 (continued)

C. Phase 2 Levels Analyses (continued)

Post-Hoc analyses: Race x Income

Differences by race among...	Contrasts	t(43)	p
High income	W > B	1.70	(*)
	W > H	3.65	***
	B = H	0.43	
Middle income	W = B	0.00	
	W = H	1.12	
	B > H	2.16	*
Low income	W > B	3.87	***
	W = H	0.64	
	B > H	1.87	(*)

Table 7: Correlation (Pearson r) of Census Facts Index and Total Exposure Index (Phase 2 only)

		r
TOTAL, all respondents	(unweighted)	.4299
TOTAL, all respondents	(weighted)	.3778
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents		.3620
High income	($22,001 and above)	.2243
Middle income	($12,001 - $22,000)	.3510
Low income	($12,000 and below)	.4265
White, not Hispanic		.3666
High income		.2813
Middle income		.3573
Low income		.4172
Black, not Hispanic		.4106
High income		(.1374)
Middle income		.4661
Low income		.4473
Hispanic		.5208
High income		(.3625)
Middle income		.4348
Low income		.6591

Note: ( ) indicates non-significant coefficient: $p > .05$.

Test of hypothesis that the nine subgroup r's are derived from the same population: $\chi^2 = 16.56$, 8df, $p < .05$.

Table 8: Number Correct--Understanding the Uses of Census Results[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	4.03	4.37
TOTAL, all respondents (weighted)	4.19	4.27
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	4.28	4.31
High income ($22,001 and above)	5.21	4.98
Middle income ($12,001 - $22,000)	4.30	4.29
Low income ($12,000 and below)	3.72	3.79
White, not Hispanic	4.50	4.37
High income	5.24	5.01
Middle income	4.47	4.27
Low income	3.99	3.88
Black, not Hispanic	3.28	3.99
High income	4.70	4.73
Middle income	3.43	4.65
Low income	3.03	3.46
Hispanic	2.72	3.73
High income	4.30	4.27
Middle income	3.54	3.69
Low income	1.94	3.59

[1/]The range of possible scores on this index is from zero (no uses items answered correctly) through seven (all uses items answered correctly). Respondents who reported never having heard of the census were assigned a score of zero (i.e., no understanding of census uses) even though they were not, in fact, asked the uses questions.

Table 8 (continued):

B. Phase 1 to Phase 2 Change Analyses

Effect	df	F	p
Race x Phase	2, 44	2.33	
Income x Phase	2, 44	0.13	
Race x Income x Phase	4, 44	2.25	(*)

Post-hoc analyses: Race x Income x Phase

Individual Trends		t(44)	p
White	High	-0.53	
	Middle	-0.17	
	Low	-0.48	
Black	High	0.05	
	Middle	3.39	**
	Low	1.69	(*)
Hispanic	High	-0.03	
	Middle	0.34	
	Low	2.50	*

C. Phase 2 Levels Analyses

Effect	df	F	p
Race	2, 43	0.50	
Income	2, 43	40.91	***
Race x Income	4, 43	0.99	

Post-hoc analyses: Income

Contrasts	t(43)	p
H = M	0.75	
H > L	4.22	**
M = L	0.56	
H > M/L	1.91	(*)

Table 9: Correlation (Pearson r) of Census Uses Index and Total Exposure Index (Phase 2 only)

		r
TOTAL, all respondents (unweighted)		.4165
TOTAL, all respondents (weighted)		.4113
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents		.4354
High income	($22,001 and above)	.3016
Middle income	($12,001 - $22,000)	.4914
Low income	($12,000 and below)	.3576
White, not Hispanic		.4463
High income		.3149
Middle income		.5066
Low income		.3531
Black, not Hispanic		.4227
High income		.3912
Middle income		.3916
Low income		.3585
Hispanic		.4839
High income		(.2275)
Middle income		.5866
Low income		.4601

Note: ( ) indicates non-significant coefficient: $p > .05$.

Test of hypothesis that the nine subgroup r's are derived from the same population: $\chi^2 = 20.11$, 8df, $p < .01$.

Table 10: Number of Favorable Replies--All Attitude Items[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	8.68	8.78
TOTAL, all respondents (weighted)	8.75	8.86
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	8.92	9.09
High income ($22,001 and above)	9.55	8.82
Middle income ($12,001 - $22,000)	8.85	9.39
Low income ($12,000 and below)	8.56	9.08
White, not Hispanic	9.08	9.18
High income	9.54	8.82
Middle income	9.19	9.46
Low income	8.64	9.28
Black, not Hispanic	7.85	8.60
High income	9.69	9.05
Middle income	6.88	9.07
Low income	8.24	8.19
Hispanic	8.63	8.66
High income	10.28	7.97
Middle income	8.29	8.84
Low income	8.37	8.79

[1/]The range of possible scores on this index is from zero (no favorable reply to any attitude item) to twelve (favorable replies to all attitude items). No assumptions have been made about the attitudes of respondents who reported never having heard of the census (and thus, who were not asked the attitude questions). Such respondents are excluded from the above table and from the analyses.

Table 10 (continued):

B. Phase 1 to Phase 2 Change Analyses

Effect	df	F	p
Race x Phase	2, 44	0.51	
Income x Phase	2, 44	2.94	(*)
Race x Income x Phase	4, 44	2.88	*

Post-hoc analyses: Income x Phase

Trend Contrasts	t(44)	p	
H < M	2.11	*	
H < L	2.32	*	
M = L	0.04		
Individual Trends	**t(44)**	**p**	
H	-1.74	(*)	[Note: Reverse effect]
M	1.26		
L	1.53		
M/L	1.96	(*)	

Race x Income x Phase

Individual Trends		t(44)	p	
White	High	-1.60		
	Middle	0.58		
	Low	1.55		
Black	High	-0.94		
	Middle	2.09	*	
	Low	-0.16		
Hispanic	High	-2.63	*	[Note: Reverse effect]
	Middle	0.56		
	Low	0.52		

Table 10 (continued):

C. Phase 2 Levels Analyses

Effect	df	F	p
Race	2, 43	2.66	(*)
Income	2, 43	0.63	
Race x Income	4, 43	1.32	

Post-hoc analyses: Race

Contrasts	t(43)	p
W > B	1.77	(*)
W = H	1.41	
B = H	0.20	
W > B/H	1.79	(*)

Table 11: Correlation (Pearson r) of Attitude Index and Total Exposure Index (Phase 2 only)

	r
TOTAL, all respondents (unweighted)	.1769
TOTAL, all respondents (weighted)	.1129
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):	
Total, all respondents	.1011
High income ($22,001 and above)	.1553
Middle income ($12,001 - $22,000)	.1472
Low income ($12,000 and below)	(.0245)
White, not Hispanic	.0918
High income	.1612
Middle income	.1647
Low income	(-.0189)
Black, not Hispanic	.1842
High income	(.1273)
Middle income	(.1140)
Low income	.1707
Hispanic	(.1339)
High income	(.0287)
Middle income	(.0923)
Low income	(.2308)

Note: ( ) indicates non-significant coefficient: $p > .05$.

Test of hypothesis that the nine subgroup r's are derived from the same population: $\chi^2 = 12.87$, 8df, $p > .10$, not significant.

Table 12: Mail Response Rate by Reported Recent Exposure to Information About the Census

	Reported Recent Exposure[1/]	
	Yes	No
TOTAL, all respondents (unweighted)	87.0%	76.0%
TOTAL, all respondents (weighted)	91.1	86.7
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	92.0	86.4
High income ($22,001 and above)	96.3	89.3
Middle income ($12,001 - $22,000)	88.4	96.0
Low income ($12,000 and below)	90.9	73.5
White, not Hispanic	93.8	89.7
High income	97.3	90.5
Middle income	90.3	97.0
Low income	93.1	76.5
Black, not Hispanic	81.2	71.0
High income	82.5	52.5
Middle income	82.7	86.0
Low income	79.7	68.2
Hispanic	79.1	67.2
High income	93.4	--
Middle income	74.9	74.2
Low income	77.9	63.7

[1/]The "Yes" category includes all respondents who replied "yes" to Q8c: "Have you seen or heard anything recently--within the last month or so--about...the census of the United States?" The "No" category includes all other replies, including the assumed "no" of respondents who reported never having heard of the census.

Table 12 (continued):

B. Mail Response Analyses

Effect	df	Marginals Analysis G_j	p	Multivariate Analysis G_j	p
(non-interactive model)	8	-	-	1.27	(*)
"Recent"	1	1.04	(*)	0.41	
"Recent" x Race	2	-0.48		-0.53	
"Recent" x Income	2	2.22	*	2.35	**
"Recent" x Race x Income	4	-	-	-0.26	

Post-hoc analyses: "Recent" x Income

Trend Contrasts	t(44)	p	t(44)	p
H > M	1.69	(*)	1.78	(*)
H = L	0.13		0.17	
M < L	2.13	*	2.02	*

Individual Trends	df	G_j	p	G_j	p
H	1	0.54		0.80	
M	1	1.05	(*)2/	0.99	(*)2/
L	1	2.89	**	2.35	**

2/[Note: Reverse effect]

Table 13: Mail Response Rate by Number of Different Sources of Information

	Number of Different Sources of Information[1/]		
	0	1-2	3-7
TOTAL, all respondents (unweighted)	76.7%	86.8%	87.6%
TOTAL, all respondents (weighted)	87.1	93.0	87.9
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):			
Total, all respondents	86.9	93.3	89.9
High income ($22,001 and above)	90.0	98.2	93.3
Middle income ($12,001 - $22,000)	96.1	87.8	88.6
Low income ($12,000 and below)	75.5	92.3	87.5
White, not Hispanic	90.0	94.4	92.7
High income	91.2	98.2	95.6
Middle income	97.1	88.7	91.7
Low income	78.7	94.1	90.1
Black, not Hispanic	72.7	81.6	80.2
High income	52.5	96.9	77.9
Middle income	87.9	87.2	78.1
Low income	69.6	75.2	83.6
Hispanic	68.5	79.6	78.8
High income	100.0	100.0	91.3
Middle income	75.5	72.1	75.9
Low income	62.8	83.9	76.3

[1/]An attempt was made to define categories of approximately equal size for the "sources" variable. For the total population, the proportion of all respondents in each category is as follows: (0) 29.0%; (1-2) 44.8%; (3-7) 26.2%.

Table 13 (continued)

B. Mail Response Analyses

Effect	df	Marginals Analysis G_j	Marginals Analysis p	Multivariate Analysis G_j	Multivariate Analysis p
(non-interactive model)	16	-	-	1.07	good fit
"Sources"	2	1.24	(*)	0.20	
"Sources" x Race	4	-1.48		-1.46	
"Sources" x Income	4	2.16	*	2.22	*
"Sources" x Race x Income	8	-	-	-0.10	

Post-hoc analyses: "Sources" x Income

Individual Trends and Contrasts Within Trends

Marginals Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	1.50	*	0 < 1,2	1.83	(*)		
				0 = 3-7	0.57		0.57	
				1,2 > 3-7	1.93	(*)		
Middle	2	0.90						
Low	2	2.11	*	0 < 1,2	2.36	*		
				0 < 3-7	2.56	*	2.56	*
				1,2 = 3-7	0.90			

Multivariate Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	1.33	(*)	0 < 1,2	1.84	(*)		
				0 = 3-7	0.93		0.93	
				1,2 > 3-7	1.93	(*)		
Middle	2	0.86						
Low	2	2.11	*	0 < 1,2	2.03	*		
				0 < 3-7	2.48	*	2.48	*
				1,2 = 3-7	0.54			

Table 14: Mail Response Rate by Knowledge of Census Facts

	Number of Knowledge Items Answered Correctly[1/]		
	0,1	2,3	4-6
TOTAL, all respondents (unweighted)	79.0%	85.3%	91.4%
TOTAL, all respondents (weighted)	86.9	90.8	92.8
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):			
Total, all respondents	87.4	91.9	92.9
High income ($22,001 and above)	89.3	97.2	95.9
Middle income ($12,001 - $22,000)	92.8	84.1	94.9
Low income ($12,000 and below)	80.7	91.2	87.4
White, not Hispanic	91.4	93.4	93.7
High income	92.4	97.6	96.2
Middle income	95.2	83.7	96.9
Low income	85.3	93.7	87.4
Black, not Hispanic	74.2	80.8	84.7
High income	75.0	75.7	96.7
Middle income	80.7	87.2	79.9
Low income	72.9	76.5	84.3
Hispanic	72.6	74.7	91.1
High income	100.0	100.0	64.5
Middle income	67.0	78.3	100.0
Low income	66.0	71.5	91.0

[1/]An attempt was made to define categories of approximately equal size for the "facts" variable. For the total population, the proportion of all respondents in each category is as follows: (0,1) 32.0%; (2,3) 41.7%; (4,6) 26.3%.

Table 14 (continued):

B. Mail Response Analyses

Effect	df	Marginals Analysis G_j	p	Multivariate Analysis G_j	p
(non-interactive model)	16	-	-	1.25	(*)
"Facts"	2	1.11	(*)	-0.99	
"Facts" x Race	4	-1.02		-1.23	
"Facts" x Income	4	1.15	(*)	1.06	
"Facts" x Race x Income	8	-	-	1.18	(*)

Post-hoc analyses: "Facts" x Race x Income

Individual Trends and Contrasts Within Trends

Race x Income		df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
White	High	2	0.03						
	Middle	2	1.62	*	0,1 > 2,3 0,1 = 4-6 2,3 < 4-6	1.79 0.55 2.19	(*) *	0.55	
	Low	2	0.44						
Black	High	2	0.00						
	Middle	2	-0.65						
	Low	2	-0.86						
Hispanic	High	2	2.88	**	0,1 = 2,3 0,1 > 4-6 2,3 = 4-6	0.00 2.92 0.90	 **	-2.92	**
	Middle	2	0.61						
	Low	2	0.54						

Table 15: Mail Response Rate by Understanding the Uses of the Census

	Number of Uses Items Answered Correctly[1/]		
	0-3	4,5	6,7
TOTAL, all respondents (unweighted)	78.6%	84.7%	89.4%
TOTAL, all respondents (weighted)	85.7	91.8	91.4
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):			
Total, all respondents	86.8	92.1	92.0
High income ($22,001 and above)	90.0	95.5	96.3
Middle income ($12,001 - $22,000)	95.4	88.8	88.8
Low income ($12,000 and below)	78.3	91.2	90.1
White, not Hispanic	89.6	94.7	93.0
High income	88.2	97.4	96.4
Middle income	97.3	90.2	90.3
Low income	81.4	94.6	91.3
Black, not Hispanic	73.6	78.5	84.2
High income	97.7	67.4	93.8
Middle income	80.7	90.1	77.3
Low income	69.3	76.7	88.4
Hispanic	76.4	76.8	77.6
High income	100.0	75.0	100.0
Middle income	75.5	71.8	82.3
Low income	66.8	82.6	66.7

[1/]An attempt was made to define categories of approximately equal size for the "uses" variable. For the total population, the proportion of all respondents in each category is as follows: (0-3) 25.8%; (4,5) 45.1%; (6,7) 29.1%.

Table 15 (continued):

B. Mail Response Analyses

Effect	df	Marginals Analysis G_j	p	Multivariate Analysis G_j	p
(non-interactive model)	16	-	-	1.22	(*)
"Uses"	2	0.73		-0.01	
"Uses" x Race	4	-0.66		-0.40	
"Uses" x Income	4	1.32	(*)	1.59	*
"Uses" x Race x Income	8	-	-	1.14	

Post-hoc analyses: "Uses" x Income

Individual Trends and Contrasts Within Trends

Marginals Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	-0.84						
Middle	2	0.40						
Low	2	2.06	*	0-3 < 4,5 0-3 < 6,7 4,5 = 6,7	2.11 3.21 0.29	* **	3.21	**

Multivariate Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	-1.22						
Middle	2	0.50						
Low	2	2.23	*	0-3 < 4,5 0-3 < 6,7 4,5 = 6,7	2.40 2.42 0.54	* *	2.42	*

Table 16: Mail Response Rate by Number of Favorable Attitudes

	Number of Favorable Replies[1/]		
	0-8	9,10	11,12
TOTAL, all respondents (unweighted)	84.1%	84.2%	88.8%
TOTAL, all respondents (weighted)	87.0	89.8	92.1
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):			
Total, all respondents	87.7	90.7	92.4
High income ($22,001 and above)	92.4	96.8	94.6
Middle income ($12,001 - $22,000)	94.3	86.2	87.2
Low income ($12,000 and below)	81.7	85.9	94.7
White, not Hispanic	89.4	93.5	93.7
High income	92.0	98.6	94.3
Middle income	95.7	89.1	88.9
Low income	84.0	88.6	96.5
Black, not Hispanic	81.6	73.0	81.1
High income	91.4	62.8	100.0
Middle income	92.2	77.5	78.0
Low income	74.9	74.7	76.7
Hispanic	85.8	71.8	72.1
High income	100.0	76.9	100.0
Middle income	83.0	65.8	72.9
Low income	81.5	76.7	43.5

[1/]An attempt was made to define categories of approximately equal size for the "attitude" variable. For the total population, the proportion of all respondents in each category is as follows: (0-8) 31.1%; (9,10) 41.3%; (11,12) 27.6%.

Table 16 (continued)

B. Mail Response Analyses

Effect	df	Marginals Analysis G_j	p	Multivariate Analysis G_j	p
(non-interactive model)	16	-	-	1.86	*
"Attitude"	2	0.21		-0.86	
"Attitude" x Race	4	0.58		0.25	
"Attitude" x Income	4	1.88	*	1.68	*
"Attitude" x Race x Income	8	-	-	1.94	*

Post-hoc analyses: "Attitude" x Income

Individual Trends and Contrasts Within Trends

Marginals Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	-0.18						
Middle	2	1.08	(*)	0-8 > 9,10	1.94	(*)	-1.76	(*)
				0-8 > 11,12	1.76	(*)		
				9,10 = 11,12	0.23			
Low	2	1.34	(*)	0-8 = 9,10	0.88		1.93	(*)
				0-8 < 11,12	1.93	(*)		
				9,10 = 11,12	1.32			

Multivariate Analysis	df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
High	2	-0.54						
Middle	2	1.45	*	0-8 > 9,10	2.15	*	-1.98	(*)
				0-8 > 11,12	1.98	(*)		
				9,10 = 11,12	0.02			
Low	2	0.86						

Table 16 (continued):

B. Mail Response Analyses (continued)

Post-hoc analyses: "Attitude" x Race x Income

Individual Trends and Contrasts Within Trends

Race x Income		df	G_j	p	Contrasts	t(44)	p	Linear t(44)	p
White	High	2	1.44	(*)	0-8 < 9,10	1.88	(*)		
					0-8 = 11,12	0.59		0.59	
					9,10 = 11,12	1.62			
	Middle	2	0.49						
	Low	2	1.22	(*)	0-8 = 9,10	0.78			
					0-8 < 11,12	2.00	(*)	2.00	(*)
					9,10 = 11,12	1.26			
Black	High	2	2.20		0-8 = 9,10	1.58			
					0-8 = 11,12	1.03		1.03	
					9,10 < 11,12	2.36	*		
	Middle	2	0.12						
	Low	2	-0.33						
Hispanic	High	2	2.68	**	0-8 > 9,10	2.07	*		
					0-8 = 11,12	1.54		-1.54	
					9,10 = 11,12	1.27			
	Middle	2	-0.57						
	Low	2	0.47						

TABLES

Explanatory Notes:

(a) In Part B of Tables 1 through 11, post-hoc analyses describing "Trend Contrasts" and Individual Trends" are to be interpreted as follows:

Trend Contrasts: analyses of the differences between groups in extent of change on the variable in question from Phase 1 to Phase 2 (example: "W < H" indicates that the change from Phase 1 to Phase 2 for Hispanics was significantly greater than the corresponding change among Whites).

Individual Trends: analyses of the significance of the change from Phase 1 to Phase 2 for specific population groups, irrespective of other groups.

(b) In Part C of Tables 1 through 11, post-hoc analyses describing "Contrasts" are simply analyses of the differences between groups at Phase 2 (example: "W > B" indicates that the level of the variable in question was significantly greater at Phase 2 for Whites than it was for Blacks).

(c) In Part B of Tables 12 through 16, post-hoc analyses describing "Trend Contrasts" and "Individual Trends" are to be interpreted as follows:

Trend Contrasts: analyses of the differences between groups in the degree of positive relationship between the variable in question and mail response to the census (example: "H > M" indicates that the variable in question had a greater positive association with mail response among high income households than among middle income households).

Individual Trends: analyses of the significance of the relationship of the variable in question and mail response for specific population groups, irrespective of other groups.

(d) In all analysis summaries, statistical significance is indicated as follows:

(*) $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

Table 1: Percent Who had "Ever Heard" of the Census--
Aided Recall[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	88.9%	92.7%
TOTAL, all respondents (weighted)	90.8	95.4
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	92.0	96.0
High income ($22,001 and above)	93.3	99.0
Middle income ($12,001 - $22,000)	93.9	97.5
Low income ($12,000 and below)	86.8	92.1
White, not Hispanic	94.1	97.2
High income	98.4	99.0
Middle income	94.2	98.1
Low income	91.0	94.7
Black, not Hispanic	83.6	90.2
High income	94.1	99.3
Middle income	93.7	96.7
Low income	76.7	84.5
Hispanic	70.7	85.2
High income	100.0	100.0
Middle income	93.7	96.7
Low income	55.4	77.9

[1/]% of all respondents replying "yes" to Q6c or Q7: (Q6c) "Next, I would like to ask you about three government programs that you may or may not be familiar with. Have you ever heard of . . . the census of the United States?" (Q7) "The census is the count of all the people who live in the United States. Have you ever heard of that before?"

Table 1 (continued):

B. Phase 1 to Phase 2 Change Analyses

		Marginals Analysis		Multivariate Analysis	
Effect	df	G_j	p	G_j	p
(non-interactive model)	12	-	-	-0.72	good fit
Phase	1	3.32	***	3.85	***
Race x Phase	2	-1.12		-0.88	
Income x Phase	2	-0.89		-1.08	
Race x Income x Phase	4	-	-	-0.05	

C. Phase 2 Levels Analyses

		Marginals Analysis		Multivariate Analysis	
Effect	df	G_j	p	G_j	p
Race	2	4.34	***	3.46	***
Income	2	4.69	***	3.98	***
Race x Income	4	-	-	-0.63	

Post-hoc analyses: Race

Contrasts	t(43)	p	t(43)	p
W > B	3.60	***	2.63	*
W > H	3.96	***	3.73	***
B = H	1.10		1.45	

Income

Contrasts	t(43)	p	t(43)	p
H = M	1.31		1.16	
H > L	4.01	***	3.61	***
M > L	2.53	*	2.38	*
H > M/L	2.62	*	2.36	*

Table 2: Percent Who had Heard of the Census "Recently--Within the Last Month or So"[1/]

	Phase 1	Phase 2
TOTAL, all respondents (unweighted)	46.8%	76.6%
TOTAL, all respondents (weighted)	40.7	72.5
ALL RESPONDENTS OF KNOWN RACE/ETHNICITY AND INCOME (WEIGHTED):		
Total, all respondents	42.2	76.9
High income ($22,001 and above)	60.1	89.1
Middle income ($12,001 - $22,000)	43.3	70.1
Low income ($12,000 and below)	31.0	73.8
White, not Hispanic	43.3	78.3
High income	59.6	88.7
Middle income	43.5	68.6
Low income	31.5	78.7
Black, not Hispanic	40.0	66.5
High income	67.9	91.4
Middle income	48.1	77.2
Low income	32.1	54.7
Hispanic	23.3	79.7
High income	74.4	100.0
Middle income	19.2	85.3
Low income	16.3	68.2

[1/]% of all respondents replying "yes" to Q8c: "Have you seen or heard anything recently--within the last month or so--about . . . the census of the United States?"