



CENTRAL SURVEYS, INC.

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March 24, 1986

Mr. Chris Hansen
National Staff Counsel
American Civil Liberties Union
132 West 43rd Street
New York, New York 10036

Dear Chris:

I am enclosing a memo with our observations regarding Hickman's report on the Topeka survey.

In our view, most of his charges are trivial and intended to attract attention away from the findings.

Cordially,

Bob
Bob Longman

RWL:nm
Enc.

Observations Regarding
the Critique of the Topeka Survey
by R. Harrison Hickman

Central Surveys, Inc.

Mar.24, 1986

Mr. Hickman offers a number of criticisms of the survey regarding the Topeka Public Schools conducted in late 1984 by Central Surveys. In our professional judgment, some of the criticisms he offers are misleading. He intentionally ignores some facts that would run counter to his arguments. Also, some of his criticisms are valid but trivial.

Mr. Hickman describes what he regards as "problems" in the study and says, "However, there is no means to judge the impact these problems had on the overall results." Actually, there would have been a way. Mr. Hickman could have made a survey of Topeka residents on the subject matter under discussion. By using split-ballot techniques and any other methodology he might favor, it would have been possible to make such a judgment except, of course, for the fact that a survey done today would not tell what public attitudes were in 1984. We can assume that such a study was not conducted because Mr. Hickman and his client realized that the most likely outcome of the study would be a confirmation of the findings reported by Central Surveys.

SAMPLE DESIGN

Conducting surveys by telephone has certain limitations, of course. Mr. Hickman points out that 4 percent of the households within the Topeka city limits lack telephones, and that this includes 3.1 percent of the white households and 10.7 percent of the black households, according to the 1980 Census. The obverse side of this coin is that 96.9 percent of the white households and 89.3 percent of the black households in Topeka have telephones. By any rational standard, these proportions are very high. Telephone saturation would be much lower than this in many areas of the U.S.

In-person interviews conducted door-to-door provide much more serious sampling problems, primarily because it is difficult (sometimes dangerous) to conduct door-to-door interviewing during the evening hours when much of the population is at home and available. For this reason, Central Surveys and most other polling organizations have relied increasingly on telephone surveys over the past few decades.

We would venture a guess that Hickman-Maslin Research, the firm with which Mr. Hickman is associated, has conducted a number of telephone surveys and very few door-to-door surveys in recent years.

A telephone directory provides a convenient data source from which to draw a sample. Since it is arranged alphabetically, it is easy to distribute the sample throughout the alphabet, minimizing the chance of an ethnic bias that might otherwise occur. The directory was relatively new at the time the survey was conducted, so the number who had moved or had changed telephone numbers was not likely to be large.

In fact, figures tabulated by Mr. Hickman (Page 18 of his critique) show that only 154 out of 2,381 numbers were "not working or number changed." This amounts to about 6.5 percent. It is highly unlikely that these people, if they had been interviewed, would have differed so much from other Topekans as to materially change survey findings.

This figure does not account for some newcomers in the community who would have telephone listings too new to be included in the directory. In many opinion surveys, however, it is a common practice to exclude newcomers on the assumption that they would have had little time to develop informed judgments about local matters.

Random Digit Dialing, as suggested by Mr. Hickman, is a method that is sometimes used in order to be certain that newcomers as well as people with unlisted telephones are included in the sample. In this procedure, a computer generates random numbers that may or may not be telephone numbers in use. This procedure, in our experience, is very wasteful of time and money. Moreover, it usually produces survey results that closely approximate results that can be expected from a sample drawn from a fairly new telephone directory. The procedure cannot be justified unless there is a need for extreme precision, or there is an unlimited budget for the survey.

USE OF SCREENING QUESTIONS

Screening questions were used in this survey in order to avoid interviewing certain people who were not a part of the intended universe. The criticism of Mr. Hickman seems, in part, to be to the effect that there is no way to say anything about the opinions of groups that were excluded. For example, a screening question was used to eliminate teachers and other school employees. It seems not only possible but very probable that the "providers" and the "consumers" of educational services in the community may have very different opinions on some of the subjects covered in the study. This is not a criticism of the study, however. A survey of used car buyers would not necessarily include a proportionate representation of used car salesmen in order to be valid.

If the survey had purported to be a study of the attitudes of all of the residents of Topeka, then the use of screening questions could be regarded as a serious flaw. It did not, however. The survey report was careful to point out exactly how the survey was conducted and what people were in the universe, so that any reader of the report would know what population groups were being discussed. This information is not repeated on every page for the reason that it would be cumbersome (and boring) to have to read "Most Topekans, if they have children in school or have had children in school in recent years or if they have attended schools themselves in recent years and if they do not teach school or are not otherwise employed by the schools, believe...." each time a survey finding was discussed. Clearly, however, there was no attempt to mislead the reader. The survey report quoted the screening questions and referred to them more than once.

SAMPLE DEFINITION

It might have been desirable to limit interviewing to residents of District 501. In fact, surveying was limited to people in an area that was regarded by Central Surveys to be a reasonably close approximation of the district's configuration. We see no reason at this time to feel this was not the case. Some respondents occasionally refer to schools outside of the district, but it is our impression that these people, in many cases, are unaware that the schools in question are outside their district. We have found that people often cannot accurately name such things as the state legislative districts they live in or other public and quasi-public agencies that serve them. We would be surprised if all Topekans know they live in District 501, or have a good idea of where the district boundaries lie.

In any case, eliminating people who mention schools outside of this district on the (probably false) assumption that they all live outside of the district would not materially change the findings of the survey.

TIMING OF THE POLL

Mr. Hickman says that the August 27-September 1 period is a poor time to conduct a survey because many people are not at home. Our experience, at least here in the Midwest, differs. The problem would probably be much larger in the District of Columbia where we understand Mr. Hickman's firm is located. In any case, we did not experience an unusually great problem because of people not answering the telephone.

CALLBACKS

In conducting the study, Central Surveys used callbacks in an attempt to locate people who were not at home or otherwise unavailable when first called. No callbacks were used for the 36 pretest interviews. (In our opinion, these 36 should have been omitted by Mr. Hickman in his calculation of the percentage completed on first call.) Also, numbers attempted on the last day of interviewing were not called back.

Mr. Hickman calculates that 77 percent of the completed interviews in the survey were with persons reached on the first attempt and quotes a study saying that the figure normally would be about 24 percent. We have no idea what the "normal" figure would be in Topeka, but we are certain it would be much higher for interviews conducted from 5:00 to 9:00 p.m. than it would be for daytime interviewing, and all of the interviews in the Topeka study were done either in the evening or on Saturday when, in our experience, most people are usually at home.

There was an attempt to wind up the interviewing within a fairly short period of time. There was a very real concern that the survey might come to the attention of the news media, and this could seriously contaminate the results. It is for this reason that no callbacks were made on the last day. Thus, people "likely to be at home" may have been slightly overrepresented in the study, but there is no evidence that they think any

differently about the public schools than do people who are less likely to be at home. In some surveys, there would be a concern that eliminating callbacks on the last day would have meant that too many old people would have been interviewed on that day, since people "likely to be at home" are often elderly. That was not a concern in this survey, however. Screening procedures eliminated almost all elderly people from the sample.

RESPONSE RATE

Mr. Hickman calculates a "response rate" for the survey of 35 percent. In our judgment, this figure is misleading.

NOTE: It is important to keep in mind that the "response rate" is not simply the mirror image of the "refusal rate." Survey firms keep a close watch on the refusal rate. If it gets high, it could be caused by inadequate training of interviewers. The rate was low in the Topeka survey. Had it not been, we feel Mr. Hickman would have mentioned the fact.

Mr. Hickman calculates the response rate by dividing the number of completed interviews by the number of households attempted with working numbers. Quite properly, he does not include the 154 nonworking numbers in this calculation, or the 1133 individuals contacted who did not qualify for inclusion in the sample. There are at least two other adjustments that should be made, in our opinion, in order to obtain a clearer picture of the response rate. First of all, the 36 pretest interviews should be omitted from the tabulation. The decision on whether these should be used as part of the sample was made independently on other criteria and is not related to callback procedures or other aspects of survey administration. Secondly, the calculation used by Mr. Wickman will inevitably result in a low response rate whenever a large proportion of the listed phones are for people who do not qualify for inclusion in the sample.

Essentially, the response rate should give an idea of how close the completed sample comes to approaching the "primary sample" or original draw, but this is based on the assumption that the primary sample represents the universe being studied. In this instance, this is clearly not the case. Among the people actually contacted, a majority (many of them elderly people plus school employees) did not qualify for inclusion. It can therefore be assumed that a majority of those not contacted (refusals, busy signals, no answer, etc.) would also not have qualified and are not really part of the universe being studied.

The table on the following page is an estimate of the response rate for the actual survey universe. On this basis, the response rate is much higher than the one calculated by Mr. Hickman.

Completed interviews (Hickman's figure).....	387
Less: pretest interviews.....	36
Net completed interviews.....	351
Households attempted (Hickman's figure).....	1094
Less: pretest interviews.....	36
Less: estimate for others not properly in universe.....	500**
Net households attempted (in universe).....	558

**This figure is very rough, but also very conservative. It could easily have been 600 or more.

On this basis, the response rate is almost 63 percent, which is not bad considering the time and budget pressures of the survey.

ADJUSTING FOR HOUSEHOLD SIZE

The survey was defined as a measurement of the opinions of "heads of households" who meet certain criteria. Weighting these heads of households by the size of their families would have been something of a distortion.

RANDOM SELECTION OF RESPONDENT WITHIN THE HOUSEHOLD

Usually, only one or two individuals within a household may be called heads of households. Therefore, procedures for random selection of the respondent (oldest male, oldest female, youngest adult male, youngest adult female, etc.) have no effect except to assure that half of those interviewed are men and half are women. (This would not be true if interviews were being made with children, elderly people living with adult children, domestic employees, etc., but they were not.)

As pointed out, 64 percent of the respondents in the survey are women. In the 1980 Census, just 54 percent of the adult population of Topeka was female. In the universe studied in this survey, the "true" proportion is probably closer to 50 percent. Random selection of respondents or simple quotas based on the sex of the respondent would have served to insure that the sample included as many men as women. This was not done on the assumption that sex was probably not a crucial variable, and could easily be corrected for by weighting if it proved to be more important than had been anticipated.

On the following pages are the answers to several survey questions. In the first column are "weighted figures." These have been calculated to give equal weight to answers by men and by women. In the second are the "actual figures" based on raw survey data, as shown in the report. The questions are those selected by Mr. Hickman to emphasize differences in the answers given by male and female respondents. He evidently selected these questions because they show the largest differences. As can be seen, weighting has only a small effect on percentages. It would in no way have changed the interpretation of survey findings.

Q.17: Are there any schools in Topeka that you think of as black or minority schools?*

	<u>Weighted Results</u>	<u>Unweighted Results</u>
Yes, there are	62%	63%
No, there are not	34	33
No opinion	4	4

Q.18: Are there any schools in Topeka that you think of as white schools?

Yes, there are	59%	61%
No, there are not	38	36
No opinion	3	3

Q.19: (Regarding each school respondents say they are familiar with) Do you think of (name of school) as mainly a white school, a black or minority school, or a racially balanced school?

Topeka West High School

Mainly a white school	59%	59%
A black or minority school	1	1
A racially balanced school	20	19
No opinion, or not familiar	20	21

Highland Park High School

Mainly a white school	-	-
A black or minority school	29%	29%
A racially balanced school	44	43
No opinion, or not familiar	27	28

French Middle School

Mainly a white school	36%	36%
A black or minority school	1	1
A racially balanced school	10	9
No opinion, or not familiar	53	54

**Mr. Hickman refers to this as Q.10 rather than Q.17.

Q.19: (Continued)

	<u>Weighted Results</u>	<u>Unweighted Results</u>
Eisenhower Middle School		
Mainly a white school	4%	3%
A black or minority school	9	9
A racially balanced school	26	25
No opinion, or not familiar	61	63
Landon Middle School		
Mainly a white school	33%	34%
A black or minority school	1	1
A racially balanced school	12	10
No opinion, or not familiar	54	55
Belvoir Elementary School		
Mainly a white school	1%	1%
A black or minority school	15	15
A racially balanced school	5	5
No opinion, or not familiar	79	79
Crestview Elementary School		
Mainly a white school	17%	17%
A black or minority school	2	1
A racially balanced school	12	12
No opinion, or not familiar	69	70
Gage Elementary School		
Mainly a white school	17%	19%
A black or minority school	*	*
A racially balanced school	22	21
No opinion, or not familiar	61	60

*Less than 1/2 of 1 percent.

Q.19: (Continued)

	<u>Weighted Results</u>	<u>Unweighted Results</u>
Highland Park North Elementary		
Mainly a white school	2%	2%
A black or minority school	12	13
A racially balanced school	17	16
No opinion, or not familiar	69	69
Lafayette Elementary		
Mainly a white school	1%	1%
A black or minority school	16	17
A racially balanced school	12	11
No opinion, or not familiar	71	71
McCarter Elementary		
Mainly a white school	18%	19%
A black or minority school	-	-
A racially balanced school	10	10
No opinion, or not familiar	72	71
Whitson Elementary		
Mainly a white school	22%	23%
A black or minority school	1	1
A racially balanced school	9	9
No opinion, or not familiar	68	67
Quinton Heights Elementary		
Mainly a white school	7%	7%
A black or minority school	4	5
A racially balanced school	31	30
No opinion, or not familiar	58	58

It is our judgment at Central Surveys that weighting findings in the survey would have accomplished little except to make the survey report a bit more complex. Any interpretation of the findings would have been the same.

Mr. Hickman also suggests that answers by people living to the east of Topeka Avenue could have been weighted so that they would have had the same importance as answers given by people living in the western part of the city. To do so would seriously overrepresent the opinions of people in the eastern area, in our judgment. We do not have current data showing the geographic distribution of the population of Topeka. It is our understanding that the majority of the city's population lived to the west of Topeka Avenue six years ago, and that much of the growth in housing has taken place in that area. Based on our sample, we would guesstimate that at least two-thirds of the city's population lives in the western area.

USE OF THE PRETEST INTERVIEWS

There frequently are occasions where findings from a pretest cannot be used in a survey. They do not properly belong in a sample whenever there have been new questions added to the survey instrument or the questionnaire has undergone major reorganization or the people interviewed in the pretest are clearly different from those in the sample. (In some cases, pretests are made with residents of entirely different communities.) In this survey, only minor deletions were made from the pretest questionnaire. Moreover, the decision to include them in the sample was not made until after it had been determined that answers by the pretest respondents closely paralleled answers by other respondents, so these deletions did not affect replies to other questions.

If all 36 pretest questionnaires were eliminated, survey results would remain essentially unchanged.

ALLOWANCE FOR POSSIBLE SAMPLING ERROR

On Pages 36 and 37 of his analysis, Mr. Hickman quotes some survey results and argues that the apparent differences, at least in some cases, could be accounted for by normal sampling variation. Use of a somewhat different formula (The significance of the difference between two proportions) shows that several of the findings he refers to have a higher degree of statistical significance than he indicates, but this is not the major problem on these pages. By concentrating on schools that are frequently rated about alike (Topeka High and Highland Park High, for example, or some of the middle schools), he avoids showing widely divergent responses. If he had merely included answers about Topeka West High in showing answers to Q.2a, 2c, 3, 6, 7 and 11, his argument on these pages would fall apart because statistically significant differences would be found for each of these questions.

His comparison of "ranges" on Page 38 is also a poor evaluation of the table. It exaggerates the likelihood that the proportions in question may really be the same. Even if the most extreme assumptions in his ranges were accepted, however, the general pattern of the survey findings would not be greatly different. Topeka West High would still be rated very favorably. Belvoir and Lafayette would not be.

CORRELATION COEFFICIENT

There are several problems with Mr. Hickman's discussion of the correlation between answers to different questions. Any such correlation seems to measure a "cause and effect" relationship, but whether such a relationship exists must ultimately be a judgment call.

As Mr. Hickman points out, the possible range of a correlation coefficient is from +1.00 to -1.00. If two items correlate perfectly, the coefficient is +1. This may occur in physics but never in public attitudes. Not all Democrats voted for Mondale. People who plan to buy new automobiles during the coming year will not necessarily do so. Mr. Hickman calculates the correlation between school quality ratings and the percentage who say the school is "mainly white" at .899. It is our opinion that this is extremely high. No such computation (or claim) was made in the report of the survey, but we are certain that important decisions are made in advertising and marketing based on data that do not show nearly this high of a correlation.

As Mr. Hickman indicates, this high level of correlation is based on aggregate totals. It does not necessarily show whether individuals who give one answer are more likely to give another. This is the case, even though it was not brought out in the survey report. For example:

Highland Park High School is rated as "only fair" or "poor" by 42 percent of those who say the school is "mainly black" and by 26 percent of the others asked to rate this school.

Eisenhower Middle School is rated as "only fair" or "poor" by 43 percent of those who say the school is "mainly black" and by 20 percent of the others asked to rate this school.

Belvoir Elementary School is rated as "only fair" or "poor" by 57 percent of those who say the school is "mainly black" and by 32 percent of the others asked to rate this school.

Lafayette Elementary School is rated as "only fair" or "poor" by 59 percent of those who say the school is "mainly black" and by 33 percent of the others asked to rate this school.

Mr. Hickman quite correctly points out that evaluations of schools also relate to other factors such as place of residence as well as the sex and race of the respondent. This is hardly a surprise, but the fact that perception of the quality of the schools relates to whether they are seen as "mainly white" or "mainly black" does not cease to exist simply because it also relates to other factors.

IN SUMMARY

In our opinion, Mr. Hickman tries to discredit the survey by suggesting sampling procedures that would have been needlessly time consuming and complex and by including statistical tests that would have made the report appear more "scientific" but less comprehensible, without really altering any survey findings significantly.