

To: NES Board of Overseers & 1987 Pilot Study Committee  
& SSRC Committee on Cognition and Survey Research

From: Robert Abelson

Re: Results of Experiment on Improving the Accuracy of Self-Reported Turnout

This research summary embodies the results of a field experiment on self-reported vote turnout proposed by Robert Abelson, Beth Loftus, and Robert Pearson of the Social Science Council's Committee on Cognition and Survey Research, and carried out in the 1987 Pilot Study of the National Election Study. The summary is divided into three parts: 1) a review of the purpose and design of the experiment; 2) an outline of the (alas, negative) results; 3) an epilogue on where the matter now stands, and what else might be tried in the future.

#### Purpose and Design of Experiment

When survey respondents are asked to give retrospective reports of their behavior, accuracy is especially uncertain because of the fallibility of human memory, combined with self-presentation artifacts. An important question often used in election studies asks whether the respondent has voted in a past election, and answers to this question have proven to be notoriously inaccurate. The present experiment offered a test of a method for improving the accuracy of self-reports of turnout, based on a suggestion which seems to be effective in other contexts.

A large proportion of those who do not vote (as determined by checks of local voting records) actually report in the NES having done so -- 27 percent in 1964, 31 percent in 1976, 23 percent in 1978, and 27 percent in 1980. The most frequently offered explanation for these false reports is that voting is perceived to be a socially desirable behavior that people are inclined to report to an interviewer even when they did not actually vote. It is noteworthy, however, that attempts to minimize the presumed social undesirability of nonvoting by using convoluted question wordings have apparently failed. The following version appears in the 1984 and 1986 NES post-election surveys (and has been worded thus, with only minute modifications, for many years previous):

"In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. How about you -- did you vote in the elections this November?"

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A new approach to the overreporting tendency seemed warranted, capable of handling either a social desirability artifact or other error tendencies in retrospective vote reporting.

A technique has recently been discussed which seems to reduce false alarm rates in reports of past behavior. We refer to this technique as the "two time frame" procedure, which had its genesis in the work of Crespi and Swinehart (presented at AAPOR in 1982). These investigators asked respondents which of several actions (had blood pressure checked, had physical exam, had eye exam, etc.) they had taken in the past two months. Other respondents were first asked whether they had engaged in each behavior during the past six months, and then asked the two-month question. When the two-month question was asked alone, affirmative responses averaged 12% more than when the two-month question was preceded by the six-month question. The two time frame procedure, in other words, reduced the tendency to report very recent medical activity.

Later studies both replicated the basic finding and furthermore suggested that the less frequent behavioral reports from the two time frame procedure tended also to be more accurate than reports from the single time frame question. Assuming that the lower figures are more accurate, we can ask why the two time frame procedure leads to more accurate reporting. One possibility is that the two time frame procedure impresses upon the respondent the need for more precise information (roughly two months ago is not good enough). This might tend to inhibit what cognitive psychologists call "forward telescoping" -- the impression that events occurred more recently in time than was actually the case. Another possibility is that the respondent wants to answer affirmatively, and the two time frame procedure permits an affirmative response that does not need to be repeated when answering about the shorter time period.

A direct application of the two time frame procedure to reports of voting behavior suggests itself. Consider a respondent who is asked, "Did you vote in the Congressional election of 1986?" The well-known direction of response error is the false alarm -- people say yes when they should say no. This could occur because of the social desirability attached to fulfilling one's citizen obligation. People want to say that they vote, and if they voted in a fairly recent election (say, two years before), they will answer this question "yes". This reasoning suggests that permitting respondents to report that they have voted in some unspecified prior election(s) will relieve some of the need to falsely report yes to the 1986 election.

Voting on the national level differs from health care in that

opportunities for behavior arise only once every two years. Therefore the comparison between a single time frame and two time frames requires modification. We used a 'single election' question (here labeled SE), and a 'multiple election' question (labeled ME), worded as follows:

(SE): "Did you vote in the 1986 elections for United States Congress last November?"

(ME): "Thinking back over the last four national elections, that is, the Presidential elections of 1980 and 1984, and the Congressional elections of 1982 and 1986, did you vote in any of these elections?"

The core of our proposal is the comparison between (SE) asked alone and (SE) asked following (ME). The major hypothesis to be tested is that responses to (SE) are more accurate when preceded by (ME). Such a test is possible because NES has actual data for the respondents in the 1987 Pilot Study. To maintain comparability with other NES data, the same introductory sentence preceding (SE) and (ME) was used as in the past. The exact details are described in the next section.

#### Procedure

The sample was randomly split by question form; as it turned out, 220 respondents answered SE alone, and 235 answered SE preceded by ME. (These respondents were from Wave I, conducted in May, 1987). On Form 1 (actually Form A by NES notation), SE was preceded by 30 other questions, and on Form 2 (Form B), the ME-SE pair was preceded by 15 other questions. The immediately prior questions, however, were the same, and concerned party identification.

The wording for the key question(s) on the two forms is indicated below:

(Form 1) "In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. How about you --  
 (SE1) Did you vote in the 1986 elections for United States Congress last November?"

(Form 2) "In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. How about you --  
 (ME) Thinking back over the last four national elections, that is, the Presidential elections of 1980 and 1984, and the Congressional elections of 1982 and 1986, did you vote in any of these elections?"  
 (SE2) Did you vote in the 1986 elections for United States Congress last November?"

The response alternatives for (SE1), (ME), and (SE2) are simply yes and no. Another available voting self-report question on this sample is a question (call it PE) from the post-election survey, exactly the same question as SE, but asked in November, 1986. We will include this in our analysis, below.

After setting aside 104 cases of people who reported (on the post-election survey) that they weren't even registered, the records of actual voting by panel respondents were traced laboriously by NES back to their widely scattered voting districts. Of the 349 remaining respondents, there were ambiguities in 40 cases as to whether the person had voted or not. In the majority of these cases, no record of registration was found, which could be interpreted either as a confusion as to the proper election district, or as evidence of actual non-registration. We played the matter safe, and confined attention to cases where a registration was found and the voter's name either was or wasn't marked as an actual voter on Election Day of 1986. This yes/no variable we denote V. Thus we have four dichotomous variables of interest: V, PE, SE, and Form (which differentiates the experimental variants SE1 and SE2). Our results, then, will be based on an analysis of the 2x2x2x2 classification of these variables, and subtables thereof, based on 309 respondents. Parenthetically, we should note that answers (on Form 2) to the lead-in ME question itself are not interesting to analyze, because only 53 of 235 respondents said they hadn't voted in any of the last 4 elections, and of these, 42 were self-reported as not registered to vote.

### Results

Of primary interest is the comparison between Form 1 and Form 2 respondents of accuracy of voting self-report. Table 1 below gives the cross-tallies of V and SE separately for the two forms:

Table 1  
Voting Report Accuracy by Experimental Condition

|                     |                  | Actual V   |             | Total        |
|---------------------|------------------|------------|-------------|--------------|
|                     |                  | Voted      | Didn't vote |              |
| Form 1<br>(SE only) | SE: Yes, I voted | 95 (84.8%) | 17 (15.2%)  | 112 (77.8%)  |
|                     | No, I didn't     | 4 (12.5%)  | 28 (87.5%)  | 32 (22.2%)   |
|                     | Total            | 99 (68.8%) | 45 (31.2%)  | 144 (100.0%) |

Vote overreporting: (Reported % - Actual %) = 9.0%

|                         |                  | Actual V    |             | Total        |
|-------------------------|------------------|-------------|-------------|--------------|
|                         |                  | Voted       | Didn't vote |              |
| Form 2<br>(SE after ME) | SE: Yes, I voted | 108 (83.1%) | 22 (16.9%)  | 130 (78.8%)  |
|                         | No, I didn't     | 4 (11.4%)   | 31 (88.6%)  | 35 (21.2%)   |
|                         | Total            | 112 (67.9%) | 53 (30.1%)  | 165 (100.0%) |

Vote overreporting: (Reported % - Actual %) = 10.9%

We see that the effect of the "two time-frame" manipulation is virtually nil. Vote overreporting for 1986 is no less within the Form 2, SE after ME sample than within the Form 1, SE only sample. In fact, it's a (nonsignificant) couple of percentage points higher. Our hypothesis is not supported --we do not discourage the socially desirable testimony of having voted in the last election by offering an opportunity to give such testimony covering any of the past four elections.

If we include data from the immediate post-election self-report of vote (PE), an interesting trend is evident. The simplest way to see what is happening is to tabulate the later self-reports of actual non-voters--first, pooling Form 1 and Form 2 respondents:

Table 2  
Later Self-Reports Of Actual Non-Voters

| (SE)         | (PE)         |              | Total       |
|--------------|--------------|--------------|-------------|
|              | Yes, I voted | No, I didn't |             |
| Yes, I voted | 12           | 27           | 39 (39.8%)  |
| No, I didn't | 4            | 55           | 59 (60.2%)  |
| Total        | 16 (16.3%)   | 82 (83.7%)   | 98 (100.0%) |

Superposed on the correlation between the yes/no tendencies on PE and SE is a sharp shift in the marginals: whereas only 16.3% of 1986 non-voters tell a white lie a week or two after the election, fully 39.8% are lying or misremembering by May of 1987. Both the correlation and the marginal shift are statistically significant (one d.f. likelihood ratio chi-squares of 9.83 and 19.13, respectively; both p's <.01).

The increased inaccuracy the longer the elapsed time since the election is not surprising. If for no other reason, memory is worse after longer delays. Of course, the inaccuracy is asymmetric, with non-voters 'remembering' voting to much greater extent than voters 'remember' not voting. (This comparison is not shown in Table 2, but was clear in Table 1). The asymmetry could be due to social desirability factors, but also to the difference between events and non-events: It is events, not non-events, which are telescoped forward in memory. A respondent asked six months later about voting in 1986 might conceivably misremember a 1984 vote as applicable.

We originally thought that the two time-frame procedure would discourage forward telescoping. If this were true, and the decreased accuracy after greater time delay were a telescoping phenomenon, we should expect the decay of accuracy over time to be less for the Form 2 respondents than the Form 1 respondents. This turns out not to be the case. When the display in Table 2 is broken down by Form, no significant interactions with Form are found.

### Epilogue

The failure of the two time-frame procedure to lower false reports is hard to interpret. To the extent that vote overreporting partakes of social desirability pressures, perhaps the premise we attached to the two time-frame procedure is wrong. Perhaps the multiple election question, rather than relieving the pressure to give a desirable response, reinforces such pressure. Once you say you are good citizen going back many years, why not be consistent and present

your actions favorably for the most recent election, too?

This line of thinking led me to reexamine the elaborate wording of the lead-in to the voting question. Note that the question lead-in provides excuses (sickness, other activities) to make non-voting socially acceptable. The lead-in justifying non-voting is followed, however, by a question about voting. This is a semantic switch which breaks the continuity of thought. It's like saying, "There are many causes of failure. Did you succeed?" To say yes, the respondent must deny that the inhibitory causes were operative. To say no, the respondent is almost in a position of having to reject a denial of inhibitory causes--a triple negative!

It would seem much more natural to follow the lead-in with a question on whether the respondent failed to vote, requiring simply an affirmation of the application of an inhibitory cause. This suggests the following voting item:

"In talking to people about elections, we often find that a lot of people miss out on voting because they weren't registered, they were sick, or they just didn't have time. How about you -- did you miss out on voting in the 1986 elections for Congress?"

Above and beyond my perhaps tortured semantic analysis, such a question has the virtue of tallying a seductive 'yes' answer as a non-vote, thereby tending to lower self-reported voting percentages.

With such a revised question, a two time-frame procedure might well operate more successfully. But perhaps one wouldn't even need a two time-frame procedure. At any rate, it is one more thing to try for the tenaciously refractory problem of vote overreporting.