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Response Privacy and Elapsed Time Since Election Day as Determinants for Vote Overreporting

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Abstract:

Survey respondents have consistently been found to overreport their participation in political elections. Lots of research has been done about the sociodemographic correlates of vote overreporting, but only a few studies analyzed determinants which survey researchers have under their control in order to reduce the problem. Theoretical explanations have assumed memory failure and social desirability bias to explain overreporting. Taking these explanations as a starting point, we tested firstly whether asking retrospective questions about the participation in elections which date back longer in time leads to more overreporting. The second hypothesis is that ensured response privacy eliminates the need for positive self-presentation and thus reduces overreporting. Using data from a field experiment, we found that even when already a substantial time has elapsed between the election under consideration and the survey interview, increasing this time lag still increases the probability of vote reports. This was as well the case when the data was collected interviewer- rather than self-administered. Thus, conducting the survey interview as soon as possible after the political election and using an administration mode which ensures response privacy successfully reduces vote overreporting.

1. Introduction

A good deal of research about the determinants of electoral participation relies on survey respondents' self-reports about whether they voted or not. However, the validity of such survey measures has been challenged, since studies with individual-level validation data have shown the presence of substantial response bias (Belli et al., 1999; Presser & Traugott, 1992). In particular, virtually all response errors are in the direction of overreporting. For the period between 1964 and 1990, it has been found with data from the American National Election Study (NES) that between 7.8 and 14.2% of all subjects incorrectly reported to have voted, but only between 0.0 and 1.4% failed to report to have voted when they actually did (Belli, Traugott, & Beckmann, 2001). Outside the U.S., overreporting is less common. Researchers found for Great Britain in 1987 that 3%, and for Sweden in the period between 1979 and 1988 that between 3.2 and 5.9% of the respondents falsely claimed to have participated in national elections (Granberg & Holmberg, 1991; Swaddle & Heath, 1989). Since in the U.S. the true participation rates are in general lower compared to those in European countries, more overreporting in American surveys results from more respondents at risk to do so (Anderson & Silver, 1986).

Vote overreporting leads to a systematic overestimation of the prevalence of electoral participation in a survey sample. The more serious problem is that it biases results about which factors are antecedent conditions of voting as well as conclusions about the relative importance of these conditions. Accordingly, the association between the respondents' education and their political involvement on the one hand, and their propensity to vote in political elections on the other, were found to be substantially stronger when self-reported rather than when validated voting behavior was included into the analysis (Abramson & Claggett, 1984, 1989; Cassel, 2003; Bernstein, Chadha, & Montjoy, 2001; Presser & Traugott, 1992). For political participation research, it is prohibitively costly and often impossible because of data-protection laws only to use validated voting data. It is thus of great importance to find effective means to avoid or at least to reduce vote overreporting and thus to preserve the usability of survey data in political research.

2. Determinants of Vote Overreporting

Most research about the determinants of vote overreporting has concentrated on its sociodemographic correlates. Accordingly, it was found that subjects who overstate their electoral participation are on average younger, more educated and less wealthy than respondents who correctly reported whether they voted in the election under consideration (Granberg & Holmberg, 1991). Another very consistent finding from U.S.-American studies is that African-Americans are more prone to vote overreporting, compared to other citizens (Abramson & Claggett, 1984, 1991; Anderson, Silver, & Abramson, 1988; Belli, Traugott, & Beckmann, 2001; Bernstein, Chadha, & Montjoy, 2001).

These results provide important insights into which groups of respondents are more vulnerable to overreporting and thus offer valuable guidance when researchers try to correct this bias after data collection. However, they do not provide advice about how vote overreporting can be avoided or at least reduced during the fieldwork. The latter task requires knowledge about why vote overreporting occurs, from which practical measures can be derived for how this response bias can be minimized. Two theoretical approaches predict such reasons for vote overreporting.

2.1 Memory Failure

The first, cognitive explanation for vote overreporting assumes this bias to result from respondents being only imperfectly able to remember whether they participated in the election under consideration (Belli, Traugott, & Beckmann, 2001). However, in order to explain why memory failure leads in nearly all cases to over- but rarely to underreporting, additionally the source-monitoring framework has been applied (Belli et al., 1999). Here, people who answer retrospective questions about their participation in elections firstly are assumed to search their memory for representations of this kind of behavior. When successful, they have to attribute this memory trace in a second step to a particular situationally or temporarily defined source and so to determine when and where the behavior took place (Johnson, Hashtroudi, & Lindsay, 1993). These attributions are done in a heuristic, little effortful and often completely automatic way of information processing. As a result, the source of a particular memory trace is easily misattributed to a wrong election. Respondents who participated in any election before the survey interview or those who only had an intention to vote may misattribute memory traces about these instances as

evidence for having voted in the election under consideration. Since actual non-voters can be expected to be very likely to have voted at least once in their prior life, attribution errors will lead more frequently to over- than underreporting. As the true source of existing memory traces can be less reliably judged when more time has elapsed since the behavioral episode, the likelihood of vote overreporting is predicted to increase when survey interviews are conducted more distant in time from the election day.

Abelson and colleagues (1992) analyzed the cognitive explanation of overreporting with NES post-election data from the U.S.-presidential elections in 1986 and 1988, as well as from the 1988 primary election. With individual-level validation data from the official voter register, it was shown that 5 months after the election held in 1986, the percentage of non-voters who reported to have voted was 16.3%, and this proportion increased to 40.0% when respondents were asked about their electoral participation 6.5 months after this election. The results for the primary election in 1988 were similar: 3 months after the election 31.6%, but 8 months later 57.1% of the non-voters answered that they voted. However, in the case of the presidential election in 1988, the percentage of non-voters who reported to have voted increased just from 54.3% to 57.3% when the surveys were conducted 5 instead of 8 months after the election. This difference did not prove to be significant.

More evidence for the hypothesis that a longer time period between the election day and the survey interview leads to more vote overreporting was found in a second study using two data sources (Belli et al., 1999). The first was a telephone survey conducted with a nationwide sample after the U.S.-presidential election in 1996. The fieldwork for this survey started at the day after the election and took 85 days to be completed. It was found that shortly after the election in November, 59.8% of respondents reported to have voted, and this figure increased significantly to 74.9% at the end of the survey in January 1997. This strong increase in vote reports provides evidence for more overreporting when the election is longer ago. The second data source was a survey which was conducted in Oregon after the senate election in 1996, where individual-level validation data was available. The fieldwork started directly after the election and lasted 42 days: In the first week, 15.5%, but later 29.2% of the respondents overreported their electoral participation.

The available evidence supports the cognitive explanation of vote overreporting and suggests that response bias can be minimized when retrospective self-reports about electoral participation

are collected as soon as possible after the election day. This has however only been shown for periods of elapsed time up to 8 months. Yet, respondents are in some cases asked about whether they voted in elections which were as long as 7 years ago or even about their participation in the first election they were at an eligible age (Butler & Stokes, 1974; Verba, Schlozman, & Brady, 1995). It is thus a relevant question whether a delay in conducting the survey interviews has still a marginal effect on the probability of overreporting, when the elapsed time since the election day is in the magnitude of years rather than of months. We are not aware of any study where this question has been addressed.

2.2 Social Desirability Bias

Social desirability bias (SD-bias) has been assumed to be the second reason why survey respondents overreport their participation in political elections (Bernstein, Chadha, & Montjoy, 2001; Presser & Traugott, 1992). Accordingly, norms of civil engagement prescribe such a participation to be a citizen's duty, so that the act of voting is positively evaluated in society. Survey respondents who, for whatever reason, failed to vote may thus feel pressures not to admit their nonconformity with the participation norm and instead simply to report to have voted. Socially desirable responding may result either from the respondents' need for self-deception or because they want to create a positive impression in others (Paulhus, 2002). Self-deceptive SD-bias is a defensive, unconscious and self-directed distortion of survey responses, where the subjects' aim is to preserve a positive self-concept. In contrast, the respondents' motivation underlying impression-management strategies is to manipulate an external audience's evaluation of the own person and in this way to gain social approval from these others. Self-deception can be expected to bias survey reports in the direction of social norms, irrespective of whether evaluative reactions from others have to be expected. However, in the case of impression-management-based SD-bias, vote overreporting is only to be expected when others are present, able to perceive the answers and thus in the position to sanction these answers.

Only a few empirical results provide support for the hypothesis that SD-bias is the causal mechanism which underlies vote overreporting. In an experimental study, subjects were instructed to answer questions about their participation in past elections either in a way as to provoke the most positive or the most negative evaluations from others (Holbrook, Green, & Krosnick, 2003). It was found that subjects under the 'fake good'-instruction significantly more often

claimed to have voted than under the 'fake bad'-condition. Thus, subjects regarded reporting have voted to be more instrumental for creating a positive impression than not doing so. Furthermore, it has been shown with validated vote reports from Great Britain, New Zealand and the U.S. that respondent who reported a stronger sense of civil duty and thus a stronger obligation to participate in political elections showed a higher probability of vote overreporting (Karp & Brockington, 2005).

The study from Belli and colleagues (1999) tested with two datasets whether modifications in the question wording reduce vote overreporting. In the experimental question wording, respondents were first asked to think about details of the election day and than to consider carefully whether they really voted in the respective election. Beside the response options 'yes' and 'no', the additional alternatives 'I thought about voting this time but didn't' and 'Usually I vote but didn't this time' were added. Compared with the standard NES-question wording, the experimental wording reduced the differences between the self-reported and validated electoral participation in a survey conducted after the 1996 senate election in Oregon. Furthermore, the modified question reduced the probability of respondents from a nationwide telephone survey to report to have voted in the 1996 U.S.-presidential election. The authors offered a cognitive interpretation of these wording effects: The cued recall and improved motivation for more intensive memory search reduced the incidence of errors when recalling the electoral participation. An alternative or additional explanation could be that the more elaborated question wording reduced SD-bias. Thus, the appeal for correctness may have increased the respondents' accuracy motivation and led them to abandon self-presentation strategies. The additional response options may furthermore have offered an excuse for not having voted and thus may have reduced the felt undesirability of such a failure.

Impression-management-based SD-bias depends on whether others are able to perceive, to evaluate and possibly to sanction the response behavior. Thus, more vote overreporting can be expected under the condition of low response privacy. Such privacy effects have been found for a great number of other sensible survey topics (cf. Currivan et al., 2004; Epstein, Barker, & Kroutil, 2001; Hewitt, 2002). Whether more response privacy leads to reduced vote overreporting is an undecided question. Visser and colleagues (1996) compared the predictive power of the Columbus Dispatch Newspaper pre-election mail survey for the outcome of the state election with that of two statewide telephone surveys. In the time period between 1980 and 1994, the mail survey, despite lower cooperation rates, was consistently more successful in predicting the elec-

tion results than the telephone surveys. The good performance of the mail survey was attributed to the more private response situation, which discourages respondents, who in fact did not intend to vote, to report a candidate preference, and in this way to bias the survey results.

A more direct test of privacy effects was undertaken in an early study with individual-level validation data. Here, the probability of overreporting the participation in the 1972 primary election between three different modes of administration was compared (Locander, Sudman, & Bradburn, 1976). These modes were self-administered drop-off pick-up questionnaires on the one hand, and non-private interviewer-administered telephone and face-to-face interviews on the other. According to the results, self-administration led to 3 percentage points less overreporting compared to the face-to-face mode, but to 5 percentage points more than in the telephone interviews. However, none of the differences were statistically significant. Another study with a locally defined random-probability sample compared the percentage of respondents who admitted that they do not intend to vote in the next federal election in Germany between different administration modes (Reuband & Blasius, 1996). This was the case for 14.8% of the respondents in interviewer-administered face-to-face interviews, for 16.7% in telephone-interviews and for 16.8% when self-administered mail questionnaires were used for data collection. Whether these differences are statistically significant has not been reported.

3. Empirical Study

This study has the aim to analyze whether we find a stronger deviation between the survey-based electoral turnout and official figures when (a) longer time has been elapsed between the election and the survey interview and (b) when the privacy of the response situation is low.

3.1 Method

The respondents in our study were a multi-stage local random-probability sample of residents from a metropolitan area in Germany (about 480.000 inhabitants). Households were first listed with a random-walk procedure, and than the respondents were selected using the last-birthday method. Respondents were included into the sample who were at least 18 years old, German citizens and thus eligible for participating in political elections in Germany. The 400 realized inter-

views took place at the respondents' homes and were conducted computer-assisted. The survey was realized in two field periods, the first having taken place from August 2001 to March 2002 (N=223) and the second from September 2002 to January 2003 (N=177). Each part of the study was realized with independent samples from the same population and with exactly the same sampling procedure. The cooperation rate, calculated according to the AAPOR standard response-rate definition (RR1), was 45.0%. Respondents were asked the questions about their participation in political elections after they had answered about two-thirds of the questionnaire, which took on average 47.4 minutes to be completed.

- *Time distance between the election and survey interview:* Two sources of variation were utilized in order to operationalize differences in the time distance between the election day and the survey interview. Firstly, the respondents were asked about whether they participated in the last three parliamentary elections on the federal level in Germany. These elections took place in September 1998, in October 1994 and in December 1990. Thus, the elections were held on average 44.2, 91.7 and 147.7 months before the respondents answered the questions about whether they voted. The second source of variation for how much time was elapsed since the election day was whether the respondents were interviewed during the first or second period of the field work. For respondents who took part in the second field period, each of the elections was on average 11.2 months longer ago, compared to the subjects who participated in the first field period (cf. table 1). The combination of both sources of variation leads to considerable differences in how long the respondents had to remember back in order to answer the questions about their electoral participation: For respondents interviewed in the first field period about their participation in the most recent election in 1998 this behavioral episode was "only" 35 months ago, whereas these are 155 months for subjects who answered the question about their participation in the 1990 election during the second field period. In the following analyses, we utilized (a) the election year and (b) whether the respondents were interviewed in the first or second field period of the survey as indicators for the severity of memory problems when answering the electoral participation questions.

-- Table 1 about here –

- *Privacy of the response situation:* Whether the respondents' answers about their electoral participation were private or discernable by others was varied by using either a self- or interviewer-

administered mode of data collection. In order to avoid any form of self-selection of the respondents according to the administration mode and any differences in how the interviewers behaved during the contact phase, neither the interviewer nor the respondent knew at the beginning of the interview the mode under which the electoral participation questions were administered. For all respondents, the interviews started interviewer-administered, where the interviewer read out the questions and recorded the answers into a laptop-computer (CAPI). After about one third of the questions, the interview software randomly assigned the respondent to a condition where either the CAPI-interview was continued, or where the mode was changed into self-administration (CASI). In the CASI-mode, subjects were asked to read the questions from the laptop screen and to type in the answers by themselves. The interviewer remained present in the room and answered, when necessary, clarifying questions asked by the respondents. However, they were instructed to maintain a sufficient distance to the respondents, so as not to be able to observe their response behavior. Between the final assignment of the administration mode and the questions about the participation in political elections, the respondents answered 50 other questions from unrelated topics.

- *Criterion for the respondents' susceptibility to vote overreporting:* In Germany, as in many other countries, data protection laws prohibit the access to official voter registers and thus do not allow the validation of individual respondents' answers about their participation in political elections. In order to gain knowledge about the determinants of vote overreporting in such institutional settings as well, researchers have tested whether possible determinants of vote overreporting explain to what degree the survey-based turnout measures deviate from the true turnout observed for the population which was the basis of the survey sample (Burden, 2000). However, aside from vote overreporting, sample-selection bias due to nonresponse is another reason why survey-based and official turnout figures may differ (Marsh, 1985). Since it has been shown that subjects who are more likely to vote are as well more likely to participate in survey interviews, one can expect that nonresponse bias inflates survey-based measures of electoral participation (Knack, 1992; Voogt & Saris, 2003).

3.2 Results

- *Sample-selection bias:* In the first step of our analysis, we compared the sociodemographic characteristics of our sample with those found in the German Microcensus from 2002 for exactly the population of our study.[1] Since the participation in the Microcensus is required by law, this data is not affected by nonresponse bias and the composition of the respondents' traits can be regarded as a good approximation of those in the population (c.f. table 4 in the appendix for a presentation of the data). As a first result of the comparison, we found that neither the distribution of the respondents' gender in the first (χ^2=.21, df=1, p > .05) nor the one in the second field period (χ^2=.45, df=1, p > .05) differed significantly from the one found in the Microcensus data. The same was true for the respondents' age in the first (t=.61, df=3.167, p > .05) and the second (t=.14, df=3.121, p > .05) wave of data collection. Whereas the occupational status of respondents who took part in the first field period was found not to differ from the characteristics of the population either (χ^2=7.10, df=3, p > .05), the opposite was the case for the sample obtained in the second field period (χ^2=16.77, df=3, p ≤ .05). Here, blue-collar workers were 6.2 percentage points under- and self-employed persons 5.8 percent points overrepresented in the sample. For the respondents' education, we found that the composition of subjects interviewed in the second field period did not differ significantly from those in the population (χ^2=3.72, df=2, p > .05), but here, this was the case for the respondents which were surveyed in the first period (χ^2=975.48, df=2, p ≤ .05). The differences were due to an 8.4 percentage points under-representation of subjects with compulsory education and an 8.5 percent point over-representation of those with a secondary school degree. Finally, subjects interviewed in both, the first (t=9.01, df=2.968, ≤ .05) and the second field period (t=2.85, df=2.922, p ≤ .05), were significantly wealthier than one should expect if the sample would have been completely representative for the population. On average, the household income of respondents from the second field period was 370.40 Euro and the one observed in the first period even 1019.90 Euro higher than the one represented in the Microcensus. We can conclude that, as it is a common result in survey research, respondents with a higher social status tend to be over-represented in our sample.

[1] The Microcensus is a 1% sample of the total population in Germany. For our analysis, we selected respondents at an age of 18 years or older, who have a German citizenship and are thus eligible to vote in political elections. Furthermore, the analysis sample was restricted to those respondents which represent the population from which the sample of our study was drawn. As a result, 2.623 cases were included in our analysis.

In order to adjust for the detected sample composition bias and to test whether this bias affects the election turnout which is predicted with our data, we created a weighting variable. This variable compensates for the over- and under-representation of respondents with different education, occupational status and in particular with different income. As the selectivity of the sample was correlated between the three aspects of the respondents' social status, the sample weights were computed in a sequential way. Firstly, we created a weighting variable which adjusted for the strongest bias, which was the one according to the respondents' income. Then the remaining deviations of the sample from the population characteristics according to the respondents' education and occupational status were adjusted. For each of the affected dimensions, the weights were computed specifically for the sample selection bias found in each field period. The resulting weights for each trait dimension were multiplicatively integrated into a global weighting variable. When these weights were applied, none of the sample characteristics were significantly different from those observed in the Microcensus any more.

- *The respondent's answers about their participation in different elections:* The first result was that, although the respondents had to remember their participation in elections which took place on average 93 months before the survey interview, they only said in 0.9% of the cases that they cannot remember whether they voted or not (cf. table 2). A more detailed look confirms the expectation that memory problems are more common when the elections were longer ago: In the case of the most recent election in 1998, only 0.5% of the respondents answered that they did not know whether they voted or not, but for the election in 1994, this figure increased to 0.8% and was 1.5% for the questions about the election in 1990.[2] Secondly, the results indicate that in our sample, 82.6% of the respondents answered that they voted in the 1998 election, whereas these were 84.9 percent for the election in 1994 and 85.1 percent for the most distant election, which was held in 1990. Thus, there is a slight and continuous increase in the percentage of respondents who reported to have voted, when being asked about elections more distant in time.

-- Table 2 about here --

[2] Note that the number of valid observations decreases from the election in 1998 to that in 1990 because respondents who were younger than 18 years at the election day and thus not at an eligible age did not answer the respective question. These were 3.5% of the respondents in the 1998 election, 10.0% in 1994 and 13.0% in 1990.

Against our expectations, correcting for sample-selection bias according to the different dimensions of the respondents' social status had a very small and inconsistent effect on the predicted election turnout (cf. table 2). For the election in 1998 and 1990, weighting the data lead to a 0.9 and 1.1 reduction of the electoral participation rate, which was then 81.7 and 84.0%, respectively. However, in the case of the election in 1994, the correction for sample-selection bias even increased the turnout figure from 84.9 to 85.5%. As weighting the data did neither have a consistent effect on the aggregated election turnout, nor changes any of our conclusions, we utilized the unweighted data for the following analyses.

- *Effects of time distance between election and survey interview:* In the next step, we compared the election turnout, which was predicted from the aggregated survey responses, with the officially published figures. This was done for the data collected in the different field periods and for the responses about the different elections (cf. table 3). The first result was that consistently across all three elections the respondents in the second, and thus the field period which was longer ago in time, were more likely to report to have voted than those in the first phase of data collection. Aggregated over the three elections the survey-based measures for electoral participation are 82.5% for the first and 86.2% for the second field period. Although a longer time between the elections and the survey interview caused thus a 3.6 percentage points higher turnout measure, this difference did not prove to be statistically significant ($z=1.65$; $p > .05$). As a second result, the survey-based turnout measure, aggregated over both field periods, was found to increase when subjects were asked about elections which were held longer ago. Thus, 82.6% of the subjects reported to have voted in the most recent election in 1998, whereas these were 84.9% in the 1994 election and 85.1% in the one held in 1990. Thus, without taking fluctuations in the true turnout into account, the respondents were 2.6 percentage points more likely to report to have voted in the election longest ago compared with the most recent one. This difference did not prove to be statistically significant ($z=0.92$; $p > .05$).

-- Table 3 about here --

Comparing the first and the second field period with respect to how strong the self-reported electoral participation deviates from the official turnout, we found for the first field period a survey-

based overestimation of 2.2 and for the second period one of 5.9 percentage points (cf. table 3). This indicates that respondents, aggregated over the election years, show a stronger disposition for vote overreporting when the interviews were conducted in the later field period and thus more distant in time from the elections. Binomial tests have proven that the turnout measure in the first period did not deviate significantly from the official figures ($z=1.37$; $p > .05$), but this was the case for the aggregated responses from the second period ($z=3.29$; $p \leq .05$).

Whereas the self-reported turnout showed a trend to increase between the elections in 1998 and 1990, the official figures decreased in the same time period: The official turnouts are 82.9, 80.0 and 77.9% for the elections in 1998, 1994 and 1990, respectively. As a result, the difference between the reported and official turnout is, now aggregated across the two field periods, monotonically becoming bigger when the elections were longer back in time. For the most recent election in 1998 the survey-based turnout lies 0.4 percentage points under the officially documented outcome, and is thus almost identical with this figure. In contrast, for the election in 1994, the self-reported turnout is 4.9 percentage points above the official figures, and in the case of the election 1990, the overestimation of turnout increases even to 7.2 percentage points. Whereas the vote reports for the most recent election in 1998 do not significantly deviate from the official turnout ($z=-0.20$; $p > .05$), this is the case for the responses about the election in 1994 ($z=2.31$; $p \leq .05$) as well as for the one held in 1990 ($z=3.22$; $p \leq .05$). Thus, asking about elections increasingly more distant in time leads to more overreporting of electoral participation and, in the case of polls longer ago than the last ballot, to a significant overestimation of the degree of electoral participation.

In a differentiated view, we found that both sources of variation in how long the election under consideration was before the survey interview contribute to the overestimation of the electoral turnout. In the first field period, the observed difference between the official turnout and the survey estimate was –1.2 percentage points for the election in 1998, 2.4 points for 1994 and increased to 5.6 points for the most distant election in 1990. In this field period, the bias of the aggregated survey measure reached for none of the elections statistical significance (1998: $z=-0.48$; $p > .05$; 1994: $z=0.83$; $p > .05$; 1990: $z=1.83$; $p > .05$). In the second field period, the overestimation of the electoral turnout increases monotonically for elections longer ago and is for all years stronger than in the case of the first period: The survey-estimated turnout was for the elections in 1998, 1994 and 1990 0.7, 7.8 and 9.2 percentage points above the official figures. These figures

represent for all but the last election before the survey interview in 1998 statistically significant overestimations of the true electoral participation (1998: $z=0.24$; $p > .05$; 1994: $z=2.50$; $p \leq .05$; 1990: $z=2.77$; $p \leq .05$).

- *Effects of response privacy:* In the final part of our analysis, we tested whether differences in the privacy of the response situation, associated with the mode of administration, influence the validity of vote reports. This is done for the response behavior aggregated across both field periods and the three election years. Firstly, it is found that subjects who were interviewed interviewer-administered (CAPI) were much more likely to report to have voted, compared with respondents who answered the questions under self-administration (CASI) and thus under insured privacy. Whereas in CAPI interviews 89.3% answered to have voted in the three elections under consideration, this proportion is only 78.2% when the interviewer were not able to perceive the response behavior under the CASI condition. This mode effect of 11.1 percentage points is statistically significant ($z=4.97$; $p \leq .05$). The average official-turnout measure for the three elections included in our analysis is 80.3%. Thus, in case of CASI, there is a slight and not significant tendency for underreproting of 2.0 percentage points ($z=-1.15$; $p > .05$). In contrast, under the condition of interviewer-administration, the survey-based turnout measure lies 9.0 percentage points above the true participation rate. This is a statistically significant overestimation of the true electoral turnout ($z=5.44$; $p \leq .05$). Accordingly, providing a private interview situation leads to significantly less vote reports and in particular to a correct estimate of the true electoral participation in the population.

4. Summary and Discussion

Other research has shown that the probability of vote overreporting in post-election surveys increases when the election day is longer ago. These studies tested the difference of being interviewed between one day and eight months after the respective election (Abelson, Loftus, & Greenwald, 1992; Belli et al., 1999). In our study, we analyzed the effect of considerably longer time periods on the respondents' reports about their electoral participation: The respondents were asked whether they voted in the German national elections in 1998, 1994 and 1990, which were held on average 44, 92 and 148 months before the survey interviews. The time between the elec-

tions and the interviews was furthermore varied by conducting the survey in two field periods, where the interviews carried out in the second period were on average 11 months more distant in time from the elections. The first main result of our analysis was that the self-reported participation rate increasingly differed from the official turnout when more time has been elapsed between the survey interviews and the respective election under consideration: The survey-estimated turnout increasingly overestimated the true participation rate (a) when the interviews were conducted in the second period of the field work and (b) when respondents were asked about elections longer back in time. The survey data significantly overestimated the turnout rate when the interviews (a) were conducted in the later field period, but proved not to deviate substantially from the official figures when the interviews were conducted in the period more proximate to the elections. And (b), the survey-based participation rate obtained from both field periods did not differ from the official turnout rate when subjects were asked about the last election before the survey in 1998. This was however the case for both of the elections which were longer ago. Vote overreporting was particularly strong when both sources of variation cumulatively contributed to a longer time between the election and the survey interview: Interviews conducted in the later field period overestimated the turnout rate for the election in 1994 by 7.8 and for the one in 1990 even by 9.2 percentage points.

The second main result of our study is that the respondents' susceptibility to vote overreporting is substantially reduced when the privacy of the response situation is provided. Firstly, respondents were significantly less likely to claim to have voted when their answers were collected self- rather than interviewer-administered. Secondly, and more importantly, the survey-estimated turnout rate significantly overestimated the true participation rate by 9 percentage points under the condition of interviewer administration, but was found to conform with the official figures when the interviews were conducted self-administered. We can conclude that the interviewers' ability to observe and potentially sanction the response behavior plays a significant role for how likely subjects overreport to have voted. This offers support for the hypothesis that other-directed social desirability bias is maybe not the only, but an important reason for vote overreporting (Presser, 1990).

Our results suggest two practical pieces of advise for researchers conducting surveys in the field of electoral participation. Firstly, when already a considerable time has elapsed, waiting longer to conduct survey research about the *last election* does not substantially increase the probability of

vote overreporting. Secondly, according to our results, the last election was found to define the threshold beyond which the respondents' reports are substantially more prone to overreporting. Researchers should thus avoid asking retrospective questions about elections before the most recent one. Thirdly, if the research question makes this however unavoidable, each month will lead to more vote overreporting. In our data, we found for the election in 1994 an increase of overreporting from 2.4 to 7.8 when the interviews were conducted in the second instead of the first field period, and thus 11 month later. Accordingly, the overreporting increased by 0.5 percentage points per month. For the antepenultimate election in 1990 the monthly increase was only 0.3 percentage points and thus the marginal effect of a longer time delay seems to decrease for questions about elections increasingly longer back in time. Thus, when researchers once have decided to collect data about elections held before the last one, the additional negative effect of further delays of the field work decreases for elections increasingly longer back in time. However, the quality of data and the validity of hereupon-based conclusions have to be treated with caution. The second conclusion from our results is that the validity of self-reports about the participation in political elections can be substantially improved when the privacy of the response situation is ensured. This can be reached using whatever administration mode that prevents the interviewer from being able to perceive the respondents' answers.

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Appendix

Table 4: Differences in the Characteristics of the Survey Sample and Those of the Population [3]

	Field Period			Population	Difference	
	Wave 1	Wave 2	Total	(Microcensus 2002)	Wave 1 - Population	Wave 2 - Population
Sex	*% (N)*	*% (N)*	*% (N)*	*% (N)*	*% (χ^2)*	*% (χ^2)*
- *female*	55.6 (124)	51.4 (91)	53.8 (215)	54.0 (1591)	+1.6 (0.2)	-2.6 (.45)
- *male*	44.4 (99)	48.6 (86)	46.3 (185)	46.0 (1355)	-1.6	+2.6
	100.0 (223)	*100.0 (177)*	*100.0 (400)*	*100.0 (2946)*		
Status						
- *blue collar*	7.2 (16)	6.2 (11)	6.8 (27)	12.5 (370)	-5.3	-6.3
- *white collar*	31.8 (71)	33.9 (60)	32.8 (131)	34.0 (1001)	-2.2 (7.1)	-0.1 (16.8)*
- *self-employed*	4.5 (10)	10.7 (19)	7.3 (29)	4.9 (142)	-0.4	+5.8
- *not employed*	56.5 (123)	49.2 (97)	53.3 (213)	48.7 (1433)	+7.8	+0.5
	100.0 (223)	*100.0 (177)*	*100.0 (400)*	*100.0 (2946)*		
Education						
- *compulsory education*	43.5 (97)	44.6 (79)	44.0 (176)	51.9 (1367)	-8.4	-7.3
- *secondary school*	31.4 (70)	26.6 (47)	29.3 (117)	22.9 (601)	+8.5 (975.5)*	+3.7 (3.7)
- *high school*	25.1 (56)	28.8 (51)	26.8 (107)	25.2 (655)	-0.1	+3.6
	100.0 (223)	*100.0 (177)*	*100.0 (400)*	*100.0 (2623)*		
	∅ (N)	*∅ (N)*	*∅ (N)*	*∅ (N)*	*∅ (t-value)*	*∅ (t-value)*
Age	49.4 (223)	50.4 (177)	49.8 (400)	50.2 ()	-0.8 (-0.6)	+0.2 (0.1)
Household income	3381.6 (223)	2732.1 (177)	3094.2 (400)	2361.7 ()	+1019.9 (9.0)*	370.4 (2.8)*

Significance: * $p \leq 0.05$

[3] We would like to thank the German Statistical Office for providing the Microcensus-Data.

TABLES FOR "Response Privacy and Elapsed Time since Election Day as Determinants for Vote Overreporting"

Table 1: Average Time Elapsed between Election Day and Survey Interview in Months

	Field Period		
	First	Second	All
Election Year			
- 1998	39.4	50.2	44.2
- 1994	86.8	97.5	91.7
- 1990	142.9	153.6	147.7
All	87.5	98.7	92.6

Table 2: Retrospective Reports about Electoral Participation in Federal Elections

	Election 1998		Election 1994		Election 1990		All	
	%	*(N)*	*%*	*(N)*	*%*	*(N)*	*%*	*(N)*
Reported Participation (weighted data)								
- Voted	81.7	(318)	85.5	(303)	84.0	(286)	83.7	(906)
- Not Voted	18.3	(71)	14.5	(51)	16.0	(54)	16.3	(176)
Valid Responses	100.0	(389)	100.0	(354)	100.0	(340)	100.0	(1083)
Reported Participation (unweighted data)								
- Voted	82.6	(317)	84.9	(303)	85.1	(291)	84.1	(911)
- Not Voted	17.4	(67)	15.1	(54)	14.9	(51)	15.9	(172)
Valid Responses	100.0	(384)	100.0	(357)	100.0	(342)	100.0	(1083)
- Valid Responses	96.0	(384)	89.3	(357)	85.5	(342)	90.3	(1083)
- Don't Know	.5	(2)	.8	(3)	1.5	(6)	.9	(11)
- Not Eligible	3.5	(14)	10.0	(40)	13.0	(52)	8.8	(106)
Total Sample	100.0	(400)	100.0	(400)	100.0	(400)	100.0	(1200)

Table 3: Survey-Estimated and Official Election Turnout According to the Field Period and the Election Year

	Field Period			Official Turnout	Difference between Survey-Estimated and Official Turnout		
	First	Second	All		First Field Period – Official	Second Field Period – Official	All – Official
Election Year	%	%	%	%			
1998	81.7	83.6	82.6	82.9	-1.2	+0.7	-0.4
1994	82.4	87.8	84.9	80.0	+2.4	+7.8*	+4.9*
1990	83.4	87.1	85.1	77.9	+5.6	+9.2*	+7.2*
All	82.5	86.2	84.2	80.3	+2.2	+5.9*	+3.9*

Significance: * difference between survey estimated and official turnout significant, $p < .05$.

Nr.	Author	Title
05-43	Volker Stocké Tobias Stark	Stichprobenverzerrung durch Item-Nonresponse in der international vergleichenden Politikwissenschaft
05-42	Volker Stocké	Response Privacy and Elapsed Time Since Election Day as Determinants for Vote Overreporting
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