

Cheating in Online Assessments of Political Knowledge: Evidence from Survey and Digital Trace Data*

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ABSTRACT. Survey measures of individuals' political knowledge feature frequently in social science research. As self-administered online surveys grow in popularity, the validity of these measures has been called into question. In this note, we provide first-hand evidence of cheating in online assessments of political knowledge. We combine survey responses with web tracking data of a German ($N = 685$) and a US ($N = 409$) panel to assess whether people turn to external sources for answers. The observed item-level prevalence rates of cheating vary depending on question type and difficulty from 0 to 12%. We find that 23% of the respondents from the German panel engage in cheating at least once across waves. On the contrary, less than 1% of the US respondents, who were discouraged from looking up external information with a commitment pledge, could be caught red-handed. We find robust respondent- and item-level characteristics associated with cheating. However, instances of cheating are rare events, as such, they are difficult to classify in the absence of tracking data. Even so, our analyses comparing naive and cheating-corrected measures of political knowledge provide little evidence that cheating distorts empirical models.

KEYWORDS. xxx

WORD COUNT. xxx

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INTRODUCTION

The increasing popularity of self-administered online surveys in social science research has the quality, accuracy, and representativeness of the resulting data. One major issue is that online self-administered surveys present a conducive environment for consultation of outside sources on the web. In other words, without the constraints of a researcher-controlled environment, respondents can “google” the answers to factual knowledge questions. Previous evidence indicates that the levels of political knowledge are higher in surveys executed online compared to those observed in the laboratory, telephone, or face-to-face settings ([Anscombe and Schaffner, 2014](#); [Burnett, 2016](#); [Elo, 2009](#); [Shulman and Boster, 2014](#); [Strabac and Aalberg, 2011](#)). The discrepancies in average scores between survey modes have been taken as evidence that respondents of online panels engage with outside sources.

In this note, we contribute to the literature on cheating in online survey assessments of political knowledge by implementing a direct yet unobtrusive approach to detect cheating behavior in the wild. By combining an online self-administered survey with passive tracking data of respondents’ browsing histories, we can detect cheating with high precision at the item level.

In a quota-sampled German panel, we find that 23% of the respondents engage in cheating behavior and observe cheating rates ranging from 0 to 12% at the item level. Further evidence from a US panel suggests that prompts that discourage cheating can be very effective. Results from multilevel models show that while there are robust person- and item-level determinants of cheating, the act of cheating per se, as a rare event, is difficult to predict and, as a consequence, hard to correct for, in absence of passive tracking data. At the same time, we find limited evidence that cheating distorts results from empirical models of political knowledge.

A PASSIVE TRACKING APPROACH TO DETECT CHEATING

Previous approaches to detect cheating in online surveys have provided mostly indirect evidence to assess whether the respondents use external information to answer questions (e.g. Clifford and Jerit, 2016; Gummer and Kunz, 2019; Jensen and Thomsen, 2014; Motta et al., 2017; Smith et al., 2020; Style and Jerit, Forthcoming, see Appendix B for a detailed overview of previous findings).

We are the first to catch respondents engaging in this behavior *in flagrante*. Our approach relies on combining digital trace data and individual survey responses (see Stier et al., 2019, for an overview).

On the one hand, we have the survey matrix, which contains the start and end timestamps, answers for the knowledge items, in addition to a set of political and demographic covariates. On the other, we count on respondents' web navigation data collected through passive metering.

The granularity of our data allows us to pinpoint the browsing behavior during the survey-taking interval. We can detect whether, how, and on which items, respondents engage with outside sources. To gather the instances of cheating, we suspicious navigation through a set of keyword queries. Subsequently, we validated the flagged entries. An illustration containing the identification process is presented in Figure 1. Panel A displays the structure of the survey matrix containing the timestamps to subset the relevant web browsing data for each respondent. Panels B and C display examples of a validated cheating instance and a false positive derived from the keywords. In panel B, the words "Merkel" and "Partei" flag suspicious activity related to an item about Angela Merkel's party affiliation. This search log was then marked as a true positive. On the contrary, Panel C presents an example where the acronym of the Free Democratic Party (FDP) is flagged as suspicious activity, yet in manual validation it was marked as a false positive. A full list of the

FIGURE 1: Illustration of cheating identification

A.

USER ID	STARTTIME	ENDTIME
ID:1310	2017-08-13 21:26:42 UTC	2017-08-13 21:34:48 UTC
•		
•		
•		
•		
ID:2808	2017-08-08 19:28:01 UTC	2017-08-08 19:36:13 UTC

B.

USER ID	TIME	URL	KEYWORD HIT	VALIDATED
ID:1310	2017-08-13 21:26:45 UTC	G4-EMEA.YOUGOV.COM/...	-	-
•				
ID:1310	2017-08-13 21:31:14 UTC	GOOGLE.COM/SEARCH?Q=MERKEL+PAR TEI...	TRUE	TRUE
•				
ID:1310	2017-08-13 21:35:51 UTC	YOUGOV.COM/OPI/ ... SURVEY_EXIT	-	-
•				

C.

USER ID	TIME	URL	KEYWORD HIT	VALIDATED
ID:2808	2017-08-08 19:28:10 UTC	G4-EMEA.YOUGOV.COM/...	-	-
•				
ID:2808	2017-08-08 19:29:10 UTC	YOUTUBE.COM/WATCH?vgsFDPin8fyg	TRUE	FALSE
•				
ID:2808	2017-08-08 19:36:17 UTC	YOUGOV.COM/OPI/ ... SURVEY_EXIT	-	-

keywords utilized to gather suspicious browsing, as well as the tables presenting all instances of validated cheating can be found in the Supplemental Appendix E.

DATA AND RESULTS

To identify cheating in the wild, we use data from an online panel survey on “politics and media” fielded to 2,579 respondents recruited for the German YouGov Pulse panel. The panel enables passive metering of individuals’ web usage on their devices. This allows us to observe every URL that respondents visited on these devices during our period of study. Respondents were quota-sampled to match target marginals of the German population that used the internet as a sampling frame using the Best for Planning study (Best for Planning, 2017) as a benchmark. The present study was launched on July 13, 2017, and included five waves, the last one finished on October 4, 2017. Waves 2, 4, and 5 contained measures of political knowledge. We excluded respondent

observations for which the survey-taking process did not appear in the tracking data. This reduces our sample to $n_{2,4,5} = \{545, 553, 519\}$ respondents per wave and $n_{tot} = 685$ unique respondents in total. More information on the survey setup, the recruitment and enticement of survey respondents, and the deployment of the passive metering software is reported in Online Appendix A.

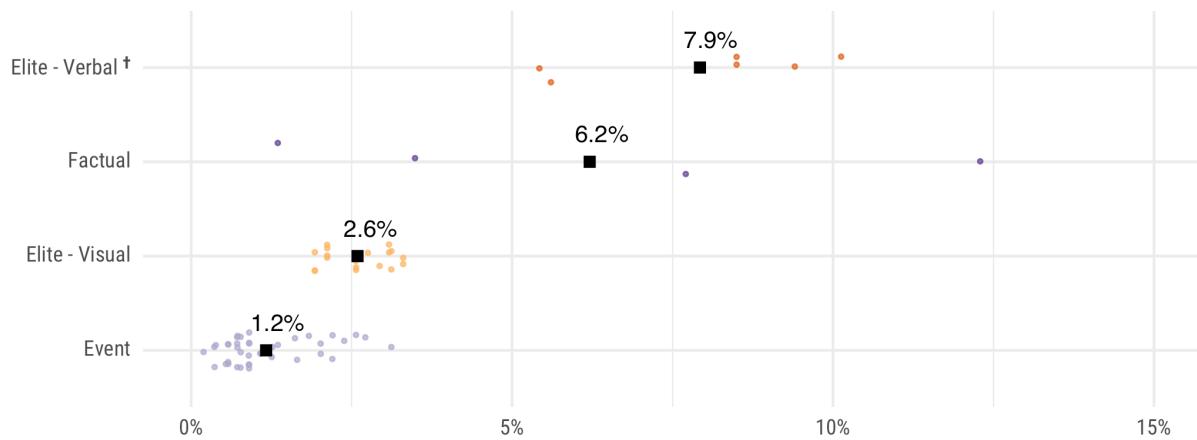
Throughout the survey, eight different knowledge questions were integrated with a total of 68 item-level statements. We observe cheating at the item level. Section F in the Appendix gives an overview of the items included in each of the waves. In total, four different question types were implemented varying in content, format, difficulty, and robustness against cheating. The question types are:

- Two **factual knowledge** questions on voting procedures in the German federal electoral system (asked in Waves 2 and 5). The questions are asked with a closed-ended answer format (3 or 5 answer options) and are often used in German election surveys.
- One **visual elites knowledge** question asking respondents to match nine pictures of high-profile politicians with their party (asked in Waves 2 and 5). The task was presented as a grid.
- One **verbal elites knowledge** question asking respondents to name one or several leading candidates for each of the six main parties in the context of the upcoming election using open-ended answer fields (asked in Wave 4).
- Four **event knowledge** question asking respondents to select from a list of ten events that they believe happened in the past few weeks using a multiple-choice format. The event list was designed to cover political and non-political events, with half of the events being real (asked in Waves 2 to 5).

In addition to the German survey, we also analyze data from a sister survey fielded in the United States between April 23, 2018, and February 5, 2019, to 1,494 respondents recruited for the US YouGov Pulse panel. Due to differences in the passive metering software being used, many respondents provided only domain-level data and not the full URLs, e.g., the complete search engine prompt, which renders the detection of cheating difficult. This survey counted with a total of 35 knowledge items spread through five waves. Furthermore, the US study also differs in that it included commitment questions (Clifford and Jerit, 2016) and implements a self-report measure of cheating. We will therefore use the reduced sample of $n = 409$ respondents for whom we have full URLs for additional descriptive analysis.

HOW PREVALENT IS CHEATING IN THE WILD?

The resulting data from the manually validated effort renders a picture in line with previous research conducted at the aggregate level. In the German survey, where we can explore cheating without any priming, 23% of the identified respondents engaged with outside sources to answer at least one of the knowledge items. Further, our capacity to address cheating at the micro-level allows us to explore the nuance of cheating. Moving past aggregate respondent-level measures of cheating, we can explore the degree to which cheating is a widespread or sparse behavior amongst identified cheaters. The distribution of cheating instances for cheaters is skewed to the right, suggesting that serial cheaters are rare (see Figure D1 in the Supplemental Appendix). Moreover, around two thirds (66%) of the respondents engaged with other websites while completing the survey in at least one of the waves. Despite the high page switching levels, we could only validate 35% of the respondents that navigated in parallel as cheaters. This suggests that previous approaches

FIGURE 2: Percentage of items cheated on by question type.

Note: Black squares report question type averages, small points item-level values; † Open-ended

leveraging screen-switching as a proxy measure (e.g. [Gummer and Kunz, 2019](#)) could potentially pick up non-cheating navigation.

Figure 2 showcases that the prevalence of cheating instances varies by orders of magnitude at the question level. Information seeking from outside sources ranges from, on average, 1% in event items to 8% in elite-verbal items. The heterogeneity of identified cheating at the question type level illustrates possible limitations of relying on single catch questions to explore the validity of political knowledge batteries as a unit. The most cheated on item asked which body of the government was tasked with electing the chancellor in Germany (factual knowledge). Generally, elite-verbal items, which asked respondents to type the names of German political party leaders, had a higher average cheating rate. Further examination of the prevalence of cheating at the item level can be found in the Supplemental Appendix D2.

FURTHER EVIDENCE FROM A SETTING WITH AN ANTI-CHEATING COMMITMENT PLEDGE

In the US survey, we presented panelists with one visual-elites knowledge, one factual knowledge, and three event knowledge questions, totalling 35 knowledge items. Additionally, this set-up contained an anti-cheating commitment pledge and a self-report item.¹ An overview of the items is included in Section F of the Supplemental Appendix.

In contrast to the previous results, the tracking data suggests that the prevalence of cheating, in this case, was minimal. A total of four respondents engaged with outside sources in six instances, all of them concerning event items. That is to say, less than 1% of respondents cheated and 0.01% of items were cheated on. Furthermore, the frequency of parallel navigation for this set of respondents was lower than that of the German survey, with 35% of the respondents engaging with other websites while completing the survey. Concerning the self-report item, none of the panelists who were caught red-handed reported having engaged with outside resources to respond to the survey. Overall, eight respondents stated having used outside information. We found through manual validation that two of them did use search engines to look up information, yet it concerned questions outside of the knowledge battery. The remaining six did not have any suspicious activity recorded in the tracking data, as such we cannot discard the possibility of cheating outside of the logged devices. Further insights can be obtained from the broader US sample of $n_{dom} = 963$ at the domain level, which also includes the respondents with the full URL queries available. An additional five respondents, for a total of 13 (1.4% of respondents in this sample), reported having utilized outside sources to complete the survey. Finally, parallel navigation from the broader sample was 61%.

¹The wording of the pledge was as follows: “When reading these next questions, please do not consult outside sources or other people for the answers. We are interested in what you believe. If you are unsure, please just take your best guess. Will you answer the following questions without help from outside sources?”

As the anti-cheating commitment pledge was not randomly assigned, we cannot identify its effect on cheating. Other factors that could explain the big difference in cheating prevalence between the two samples include differences in person or item characteristics that predict cheating (see next section). That being said, our evidence is consistent with existing evidence on the effect of commitment items (Clifford and Jerit, 2016; Smith et al., 2020), although the effectiveness reported in previous studies was substantively lower.

WHAT PREDICTS CHEATING?

Despite its fairly low prevalence, is cheating predictable? Past research suggests that those with higher levels of formal education are more prone to look up answers to political knowledge questions to conform to the norm of political engagement (Silver et al., 1986; Robison, 2015). By the same logic, those who report being knowledgeable about politics are also expected to engage more in cheating. Furthermore, we argue that conditional on these factors, respondents who do know more about politics should be less prone to look up information simply because they already know it. Additionally, we consider gender and age (Smith et al., 2020) as person-level predictors of cheating.

At the item level, we hypothesize that cheating should be more prevalent in more difficult items, picking up the logic of catch questions (Motta et al., 2017; Smith et al., 2020; Style and Jerit, Forthcoming). In line with previous findings (Gummer and Kunz, 2019), and the descriptive evidence presented above, we believe that the item type matters. Finally, we point out that not all items measure political knowledge effectively. Past research has shown that items can work differently for different respondent groups (Munzert and Selb, 2015). We hypothesize that in addition to blurring

the aggregate measure, such items might induce cheating because they lead to confusion during survey-taking. We operationalize this idea with an item-level scalability measure.

To assess the relationship between these factors and cheating, we model response-level cheating with a non-nested multilevel model with person- and question-level random intercepts and a set of person- and question-level fixed effects. At the person level, we consider gender, level of school education, age, internal efficacy, and political knowledge as predictors. We consider internal efficacy the more apt concept to reflect people's reported commitment to politics than the generic political interest measure. Internal efficacy is measured by conducting a principal components analysis on five (both internal and external) efficacy questions and taking the first principal component (Craig et al., 1990).² Political knowledge is measured as the fraction of knowledge items answered correctly after adjusting for cheating. The original question text is documented in the Online Appendix F. At the item level, we consider type, difficulty, and scalability as predictors. Difficulty is measured as the fraction of correct answers to an item after adjusting for cheating. Scalability is measured by computing Loevinger's Homogeneity coefficients H_i on batteries of items grouped by item type (Loevinger, 1948; Mokken, 1971). Full results from the scaling procedure are reported in Tables D1 to D4 in the Supplemental Appendix.

Figure 3 reports the results of our main model, which was fit to the German sample. Panel A presents fixed effects estimates from the model, standardized by two standard deviations (Gelman, 2008). Panel B reports marginal effects (predicted probabilities) by predictor. In line with previous research, we find robust evidence for a positive relation between education and cheating. Age is also positively associated with cheating. As hypothesized, cheating is more likely among those

²The three items contributing most to the internal efficacy score are (1) "Political issues are often difficult for me to understand", (2) "I am very well versed in politics in general", and (3) "I am very well informed about current political events".

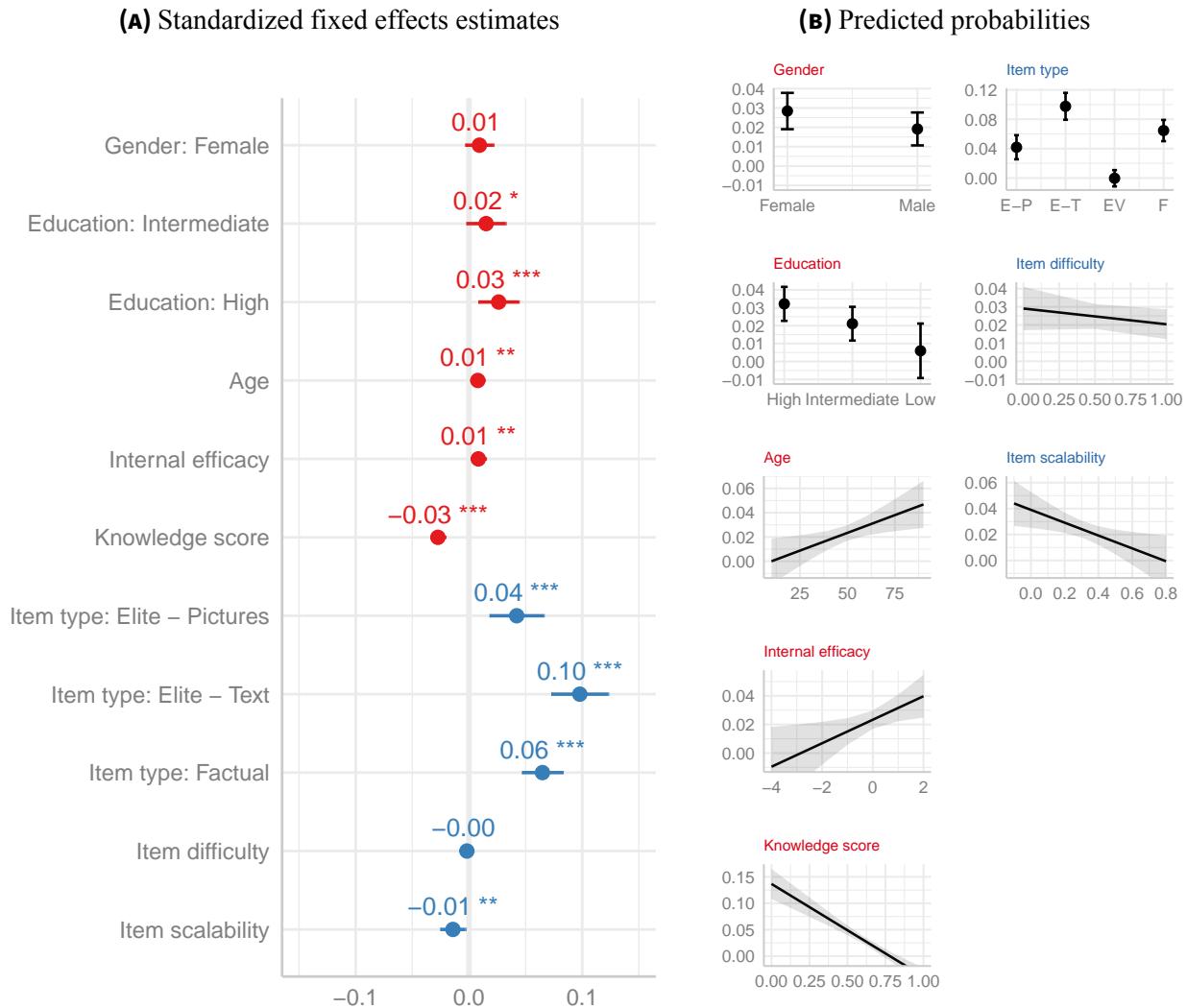
with high levels of internal efficacy and less likely among those who—as documented in the performance on the knowledge items—actually know more about politics. At the item level, cheating is most likely to happen on the open (verbal) elite questions, followed by factual (closed) questions about the political process and harder-to-cheat elite questions with visual cues. We find that less cheating happens on the individual event items.

In addition to the response-level results, simple respondent-level models reveal that the set of predictors are linked to cheating (regardless of being operationalized as a binary indicator or as a proportion of items cheated on) in a very similar way as in the response-level model: Respondents with intermediate and high levels of education, higher levels of internal efficacy, and lower knowledge scores are more likely to be cheaters (see Figure D5 in the Online Appendix).

It is important to note that while we can identify a subset of robust predictors of cheating, much of the cheating activity could not be predicted. After optimizing the threshold for the classification model of respondent and question characteristics, the F1 score is around 35%. Classification under this model results in around 21% of flagged instances being actual cheating (precision) and 93% of true positives being flagged (recall). In other words, even with threshold moving for such imbalanced classification, large numbers of valid responses are classified as cheating.

We also explored whether response times could be used as a surrogate to identify and correct for cheating. Response times, as a frequently available alternative form of metadata, have been used before to infer cheating behavior ([Munzert and Selb, 2015](#); [Clifford and Jerit, 2016](#); [Gummer and Kunz, 2019](#)), building on the assumption that respondents who look up information elsewhere should, on average, take longer to submit an answer. One limitation of this approach is that it only allows us to infer at the question-, not at the item level. Nevertheless, in our data, we do find a strong and very robust relationship between log time spent on a question and whether cheating

FIGURE 3: Estimated effects of respondent and item characteristics on response-level cheating incidence.



Note: Results from a linear cross-nested multilevel model with person and item random effects fit by REML. Standardized (by two standard deviations) point estimates along with 95% confidence intervals reported (* $p < .1$, ** $p < .05$, *** $p < .01$). Number of observations: 35,696; number of respondents: 666; number of items: 68. Residual standard deviations: response level 0.13, respondent level 0.07, question level 0.01.

occurred, controlling for a set of commonly available respondent and question characteristics (see Figure D15 in the Online Appendix for the full model). Median response times for questions that were cheated on are over a minute longer than for honestly answered questions (see Figure D16 in the Online Appendix). However, despite these stark differences response time alone does not

qualify as a robust predictor of cheating. Our predictive model that combines time with respondent and question-level information has a F1 score of 67% (precision = 52% and recall = 94%). Although this model performs better, it is far from rendering a precise classification of cheating instances.

DISCUSSION AND CONCLUSION

Previous evidence suggests that online settings may present challenges to the measurement of traditional scales in social science research, such as political knowledge (Clifford and Jerit, 2016; Smith et al., 2020). In this note, we leverage a novel data collection format to explore the prevalence of cheating in online surveys of political knowledge. We overcome some of the limitations of previous research utilizing self-reports, catch questions, and window switching logs by parsing the web navigation of survey respondents during the survey-taking interval.

By inspecting the parallel web navigation of the survey respondents, we find first-hand evidence of cheating. In the German survey, we encounter that 23% of respondents engage with outside sites for answers at least once. Even so, this behavior follows a positively skewed distribution, indicating that serial cheaters are not common. We also find substantial amounts of variation between question types. Our models of the respondent- and item-level characteristics of cheating incidence present a series of predictors of cheating. At the respondent level, the models indicate that subjects who report being knowledgeable about politics, have higher levels of formal education, and have lower knowledge scores are more likely to cheat. At the item level, we find that cheating becomes more likely when items fail to capture the underlying latent concept of political knowledge. While we find robust markers, the instances of cheating are sparse, so in the absence of first-hand evidence, it remains difficult to classify and correct.

Our cheating detection setup is not free of limitations. We cannot identify whether respondents consult devices not registered under the passive metering—or even offline sources—to search for information. Additionally, not all survey-takers show up in the tracking data, hence our sample is reduced to respondents whose survey logs we can match. Nevertheless, the setup provides a reliable method to retrieve first-hand evidence of cheating, overcoming some of the limitations of previous research. Our strategy allows us to identify instances of information seeking with high precision, ensuring that we gather only applicable cases. Additionally, the granularity of our data enables us to explore the nuance related to question features.

Even if we encounter evidence and fail to predict instances of cheating, some optimism may be warranted. Although the granularity of the trace data differed in the US survey, our findings suggest that commitment pledges to refrain from looking up information (Clifford and Jerit, 2016) can potentially reduce the rates of cheating. Further, we fail to observe any significant differences in tests of coefficient correspondence on determinants of political knowledge for naive and cheating-adjusted measures (see Figure C1). In other words, the validity of the political knowledge scale is not significantly undermined by cheating in our survey.

Our empirical strategy is only available for survey samples with linked digital trace data. Previous research has pointed out that the rates of cheating can vary across populations (Clifford and Jerit, 2016; Smith et al., 2020). Nonetheless, we recommend that researchers employ normative commitment pledges discouraging the use of external sources and question types that are more robust to cheating. Finally, while researchers face trade-offs between self- and interviewer-delivered survey modes, our findings suggest that the validity of political knowledge measures does not need to be one of them, as it can be addressed through survey design features to a large extent.

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Cheating in Online Assessments of Political Knowledge

Online Appendix

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APPENDIX A INFORMATION ON THE SURVEY AND TRACKING DATA

A.1 SAMPLING

The survey was administrated by YouGov. Surveys run by YouGov combine purposive sampling with a multi-stage sample-matching and weighting procedure ([Rivers, 2006](#)). First, a target population is defined, which is the German online population for the data at hand. Based on information from high-quality studies on demographic population marginals (i.e. gender, age and educational attainment), a sampling frame is defined. For the panel, data on marginals from [Best for Planning \(2017\)](#) were used, who conducted 30,000 face-to-face interviews to evaluate the German online population. A stratified sample is drawn from this frame and matched as closely as possible to YouGov's longstanding panel (with over a million members).

The resulting target sample constitutes a representative set of respondents in terms of traditional sampling theory. However, respondents might be hard to contact because they either have never reported their contact details or do not agree to the terms of the survey. Hence, multi-stage matching is applied, combining the representative target sample with YouGov's longstanding panel of reliable respondents. From this panel, a sample of individuals is selected that matches as closely as possible the distribution of the target sample and has opted in to provide website visit data (see below). Through this procedure, YouGov guarantees not only a minimum of 1,000 respondents in the survey, but also the inclusion of hard-to-reach population subgroups.

A.2 SURVEY DESIGN AND FIELDING

All data was gathered by YouGov from July 1 to December 9, 2017. The panel was made up of five waves. Besides evaluating respondents' political knowledge on several dimensions, the survey covered a wide range of topics such as people's political preferences, their general attitudes towards politics, opinions on particular parties, and what people think of the election campaign (the federal elections were held on September 24, 2017).

A.3 PASSIVE METERING TECHNOLOGY

Wakoopa, the tracking software used by YouGov in this study, runs in the background of panelists' devices and collects anonymized visit data. There are no technological limits to the types of websites that can be included in the data. Moreover, the software tracks web traffic (passwords and financial transactions are ignored) for all browsers installed on a user's computer. The technology does not slow the performance of users' computers and is transparent about the data that is being sent: Panelists can see a list of the last several captured URLs and can also pause tracking for 15 minutes. Of course, they can also uninstall the software at any time. YouGov encourages its panelists to install the software on as many devices as possible, including laptops, mobile phones, and tablets. The capabilities for mobile tracking are somewhat more limited for privacy reasons, but data on domain-level visits and app use are collected.

Panelists are recruited from YouGov's traditional participant pool via incentives. The company reports fairly strong incentives: 4,000 "points" for signing up and downloading the Wakoopa software—roughly 8 times the number offered for a typical survey—and 1,000 additional points every month. Participants in online surveys can redeem these points for clothing, prepaid gift cards, and other merchandise. One consequence of this recruitment strategy is that YouGov Pulse users are a subset of the overall panel, making sampling somewhat more challenging.

A.4 PRIVACY AND ETHICAL CONSIDERATIONS OF DATA

Combining survey data and digital trace data of the same respondents has substantive merits to understand the effects of online exposure on people's attitudes and behavior. However, it entails challenging tasks for protecting the privacy of the respondents and raises ethical questions, as users may not be aware of how their data are being used. Even with the consent of the participants, it still could be problematic because the account names and meta-information of their social media accounts can be identifiable and linked to their survey responses ([Stier et al., 2019](#)). Thus, it is important to communicate these concerns as clearly as possible when collecting data ([Menchentrevino, 2013](#)). In every step of data collection, we informed participants about the scope of data collection, data management, confidentiality, and research purpose. We have an explicit and informed consent from the people whose data are collected.

Regarding the web-tracking data, YouGov received the consent from the panel that their social media data can be linked to other survey items they have participated. They highlighted that participants have complete control over which data they share for research purposes. Participants can choose which information they want to share, pause the tracking app when they want, and withdraw their consent anytime. After data collection, YouGov removed any personally identifying information (PII) and sensitive data (e.g., financial transaction) and stripped-out geocoding information that is too specific before delivering the data to researchers. The deliverables are de-identified and anonymized and fully comply with the EU's General Data Protection Regulation (GDPR) requirements.

APPENDIX B PREVIOUS EVIDENCE ON CHEATING ONLINE

The potential impact of cheating in self-administered surveys on the validity of the derived measures has gathered substantial attention. A stream of this research has relied on comparisons between survey modes and sample types ([Anscombe and Schaffner, 2014](#); [Burnett, 2016](#); [Elo, 2009](#); [Shulman and Boster, 2014](#); [Strabac and Aalberg, 2011](#)). These performance comparisons do not allow to untangle the provenance of these observed score differences, i.e. sampling error or cheating. More recently, researchers have leveraged multiple techniques to tackle questions concerning the extent and characteristics of cheating and cheaters in online surveys. Based on a student sample, randomly assigned to laboratory and online survey modes, [Clifford and Jerit \(2014\)](#) encountered that 10% of the subjects in the online group reported having navigated the web in parallel to completing the survey. In the Danish context, [Jensen and Thomsen \(2014\)](#) tackled cheating directly and encountered that 22% of the respondents reported having used the internet to answer at least one of the political knowledge questions. Also, employing self-reported behavior measures, [Clifford and Jerit \(2016\)](#) found substantial variation in rates of cheating ranging from 4-6% in MTurk to 19-42% in student samples with lower problematic behavior encountered in subjects presented with commitment statements.

Leveraging an alternative cheating identification measure in a series of studies, catch questions, [Motta et al. \(2017\)](#) encountered similar rates of cheating (8% to 25%), in addition to presenting mixed results regarding the use of explicit instructions not to cheat. More recently, joining the catch question and self-report identification strategies, [Smith et al. \(2020\)](#) randomly presented subjects in two student sample studies with messages discouraging and allowing the use of outside sources to complete a battery of political knowledge questions resulting in cheating rates around 20-22% and 69-72% for the discouraged and allowed groups respectively. In addition to the experimental studies, the researchers provide evidence from an observational set-up where 11% of respondents provided a correct answer to the catch question. Another study employing catch questions and random assignment of instructions on an American National Elections Studies (ANES) 2018 pilot study found that though cheating was prevalent on both treatment states, 15% of the respondents explicitly told not to cheat answered the catch questions correctly compared to 25% of respondents who did not receive instructions ([Style and Jerit, Forthcoming](#)).

Further research has made use of respondents paradata to explore the rate to which respondents switched between the browser window containing the online survey and other sites (Gummer and Kunz, 2019). The findings suggest that screen switching rates range from 3-9% with variation along with question format, where open-ended questions are more prone to problematic conduct compared to closed. Overall, the evidence from previous studies suggests that consultation to outside sources in online surveys is a considerable phenomenon. Still, the debate about the extent to which cheating is present in online knowledge assessments is far from settled. As Table B1 showcases, the prevalence of cheating in the literature ranges from 3% to 72% varying along with the different modes of identification, sample types, and manipulations designed to prevent it in the first place.

TABLE B1: Prevalence of cheating in online assessments of political knowledge in selection of studies

Article	Prevalence	Detection method	Sample type	Item type	Effort
Jensen and Thomsen (2014)	22%	Self-report	Quota - Internet	Closed	—
Gummer and Kunz (2019)	3-6%	Window switching log	Quota - Internet	Closed	—
Gummer and Kunz (2019)	4-9%	Window switching log	Quota - Internet	Open	—
Clifford and Jerit (2016)	23%	Self-report	Student	Closed	DR
Clifford and Jerit (2016)	41%	Self-report	Student	Closed	FS+T+C
Clifford and Jerit (2016)	19-27%	Self-report	Student	Closed	C
Clifford and Jerit (2016)	14%	Self-report	Campus	Closed	C
Clifford and Jerit (2016)	13%	Self-report	Quota - Gen pop	Closed	T+C
Clifford and Jerit (2016)	14%	Self-report	Quota - Gen pop	Closed	—
Clifford and Jerit (2016)	4-7%	Self-report	MTurks	Closed	—
Clifford and Jerit (2016)	7%	Self-report	MTurks	Closed	C
Motta et al. (2017)	25-26%	Catch question	MTurks	Closed*	—
Motta et al. (2017)	5-13%	Catch question	MTurks	Closed*	DR
Motta et al. (2017)	8%	Catch question	SurveyMonkey	Closed*	—
Motta et al. (2017)	11%	Catch question	SurveyMonkey	Closed*	DR
Smith et al. (2020)	20-22%	Catch and self-report	Student	Closed*	C
Smith et al. (2020)	69-72%	Catch and self-report	Student	Closed*	AS
Smith et al. (2020)	11%	Catch question	Quota - Internet	Closed*	—
Style and Jerit (Forthcoming)	15-25%	Catch question	Quota - Gen pop	Both*	DR

Notes: *Open-ended catch questions. DR: Direct request not to seek information; C: Commitment question; T: Time limits; FS: Forgiving statement; AS: Statement allowing to seek information

The assumptions embedded in cheating identification strategies used previously pose limits to these findings. A stream of the literature suggests that social desirability in the form of self-deceptive enhancement (SDE) could be partly associated with cheating (Clifford and Jerit, 2016; Shulman and Boster, 2014; Style and Jerit, Forthcoming). Under these terms, identification through

self-reporting could provide problematic measures, as cheating can be itself subject to social desirability. Catch questions are often employed to circumvent some of the issues with self-reports. However, this identification strategy does not come without downsides. The literature has employed obscure facts in open-ended format to ensure that guessing does not confound the identification of cheating. Some problems may arise with this strategy as these rare facts may not measure the same latent features of political knowledge and open-ended questions have been connected with higher cheating prevalence ([Gummer and Kunz, 2019](#)). The rates retrieved with catch questions may then not be illustrative of the respondents' behavior in completing the rest of the political knowledge battery. Finally, the use of paradata presupposes that deviations from a behavior established by the researchers, such as expected time per question or screen-switching, is a direct manifestation of cheating. In this note, we provide direct evidence of online survey respondents who are caught *in flagrante* consulting outside sources to complete political knowledge questions.

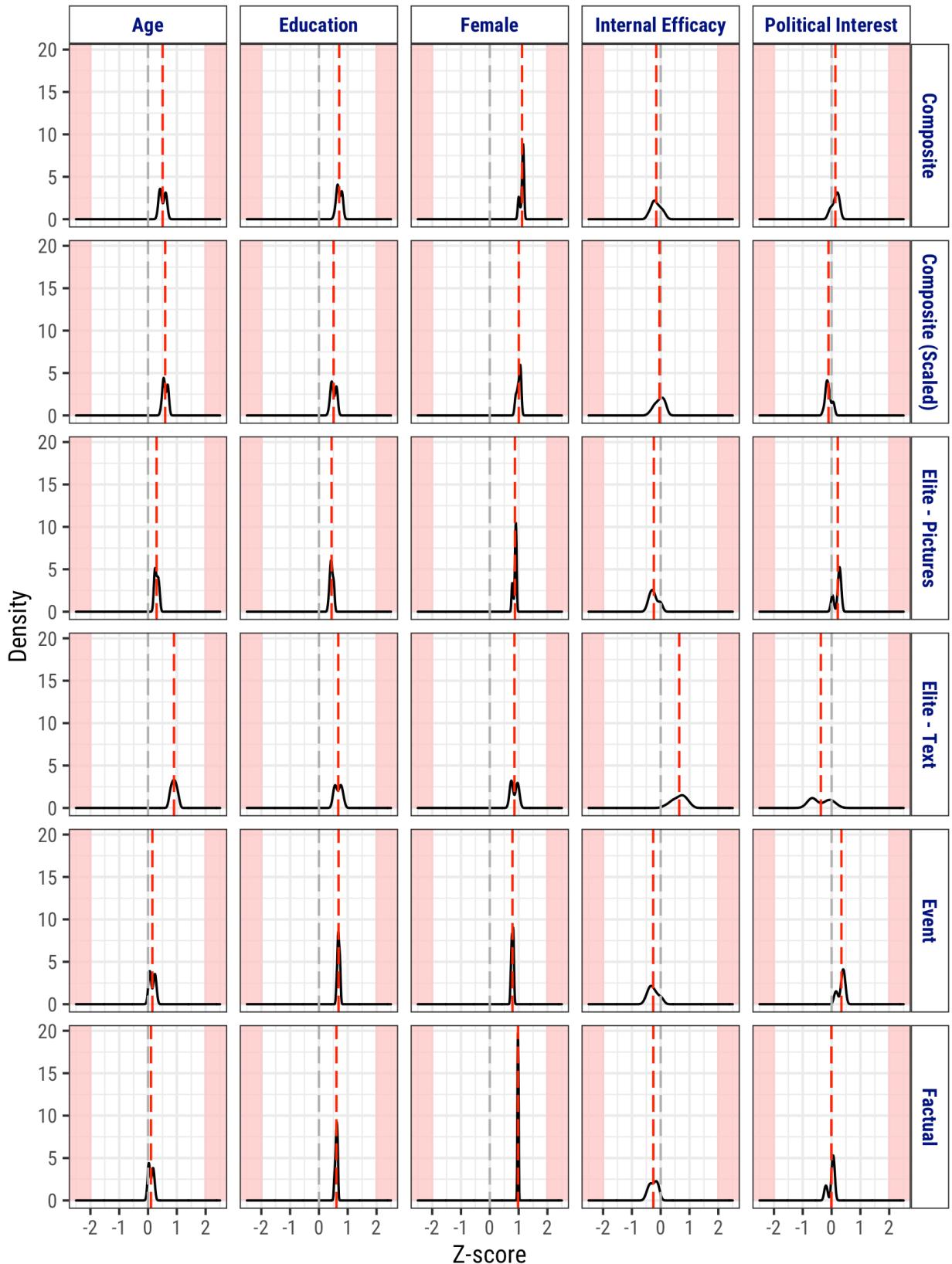
APPENDIX C DOES CHEATING DISTORT EMPIRICAL MODELS OF POLITICAL KNOWLEDGE?

To assess whether consultation of outside sources distorts empirical models of political knowledge, we compare regression coefficients between cheating-adjusted and naive political knowledge scores. In line with previous research, we include measures for sex, age, political interest, and education as determinants for political knowledge (Delli Carpini and Keeter, 1996; Munzert and Selb, 2017; Prior, 2014). Additionally, we add the internal efficacy measure derived from a principal components analysis on five (both internal and external) efficacy questions from the main text. We model the universe of possible 31 permutations of the covariates on the cheating-adjusted and naive variants of these six measures of political knowledge:

- **Composite:** Overall score on all knowledge items encountered across waves.
- **Composite (Scaled):** Overall score on all knowledge items with Loevinger's Homogeneity coefficients H_i larger than 0.3 across waves.
- **Elite - Pictures:** Overall score on all visual elite items across waves.
- **Elite - Text:** Overall score on all verbal elite items across waves.
- **Event:** Overall score on all event items across waves.
- **Factual:** Overall score on all factual items across waves.

Figure C1 displays the distribution of Z-scores of derived from the coefficient correspondence tests (Clogg et al., 1995) for the naive and cheating-adjusted political knowledge measures. In the test, the coefficients from the universe of models on the naive knowledge scores are paralleled to their cheating-adjusted counterparts. The results from the coefficient correspondence tests suggest that the the validity of the knowledge scales is not significantly undermined by cheating in our sample.

FIGURE C1: Distribution of Z-scores in coefficient correspondence test for naive and cheating-adjusted political knowledge measures



APPENDIX D SUPPORTING TABLES AND FIGURES

FIGURE D1: Distribution of items cheated on for identified cheaters

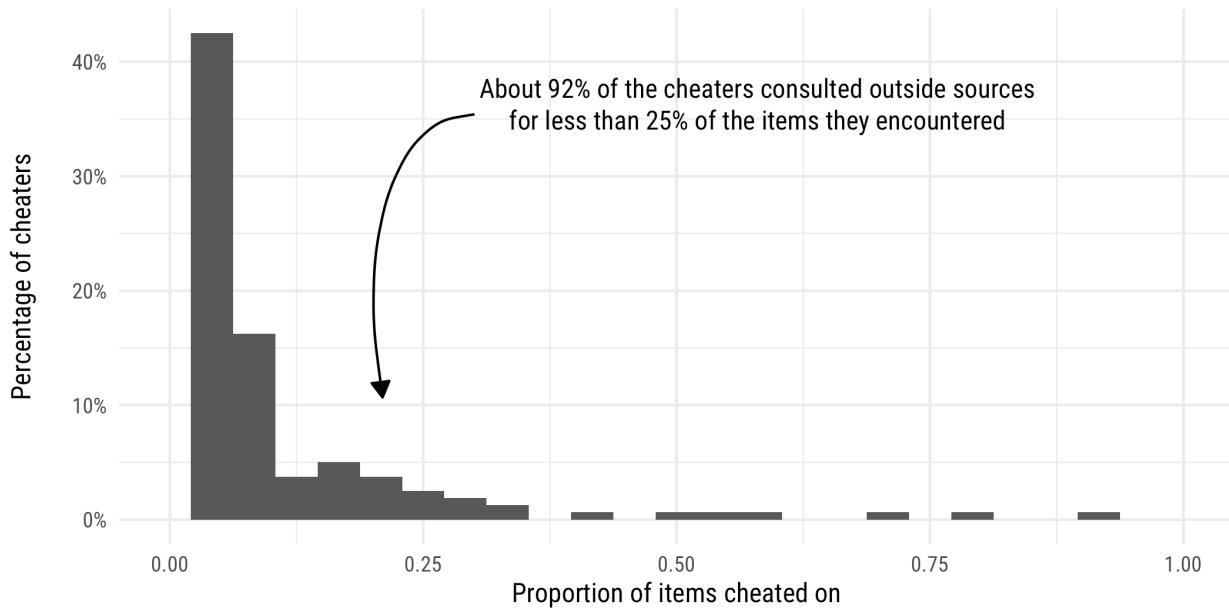


TABLE D1: Item scalability coefficients H_i for factual knowledge items.

Item	Est.	SE
Factual—Chancellor election (2)	0.37	0.04
Factual—Chancellor election (5)	0.40	0.04
Factual—Vote importance (2)	0.38	0.04
Factual—Vote importance (5)	0.43	0.04

FIGURE D2: Percentage of instances of cheating by item

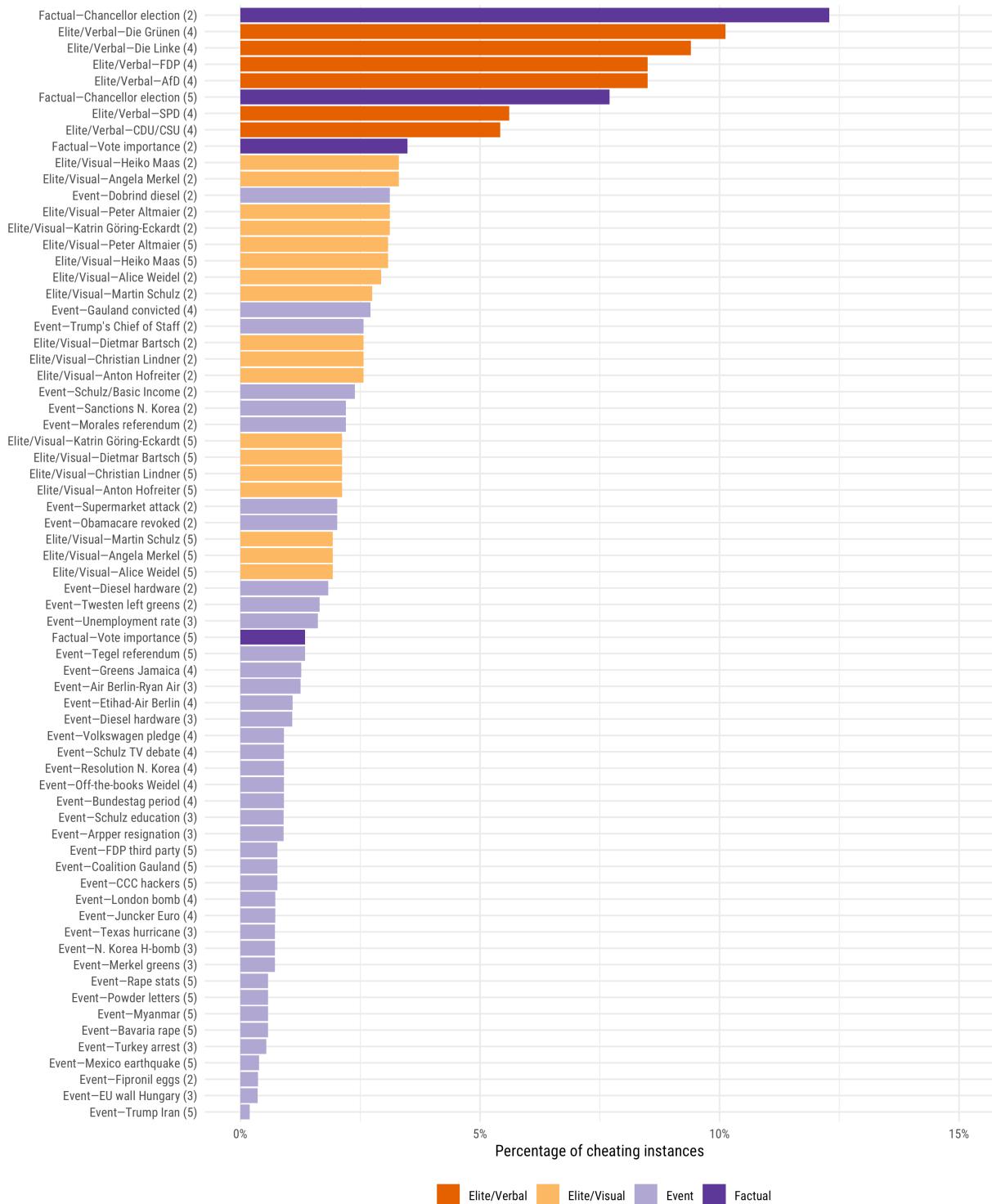
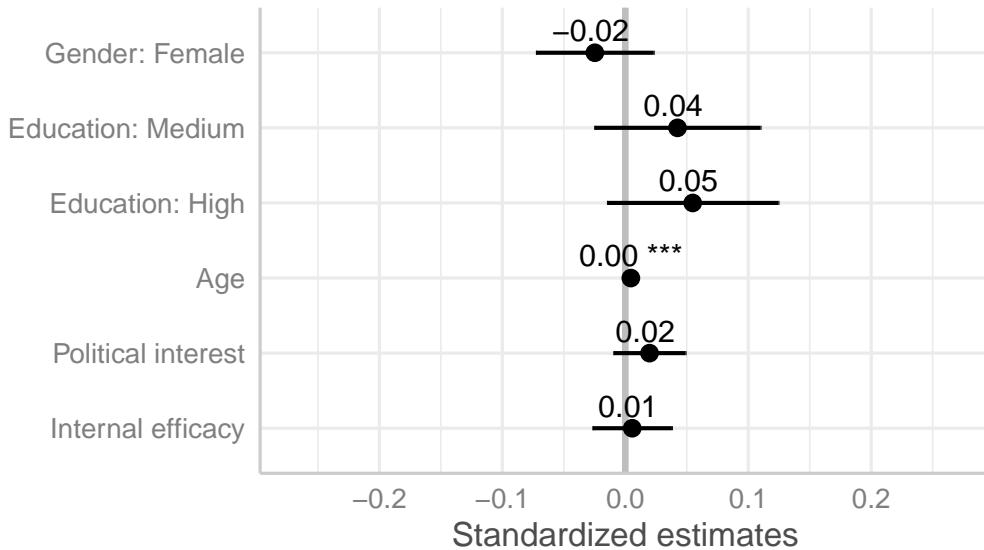


FIGURE D3: Estimated effects of respondent characteristics on the availability of web-tracking data

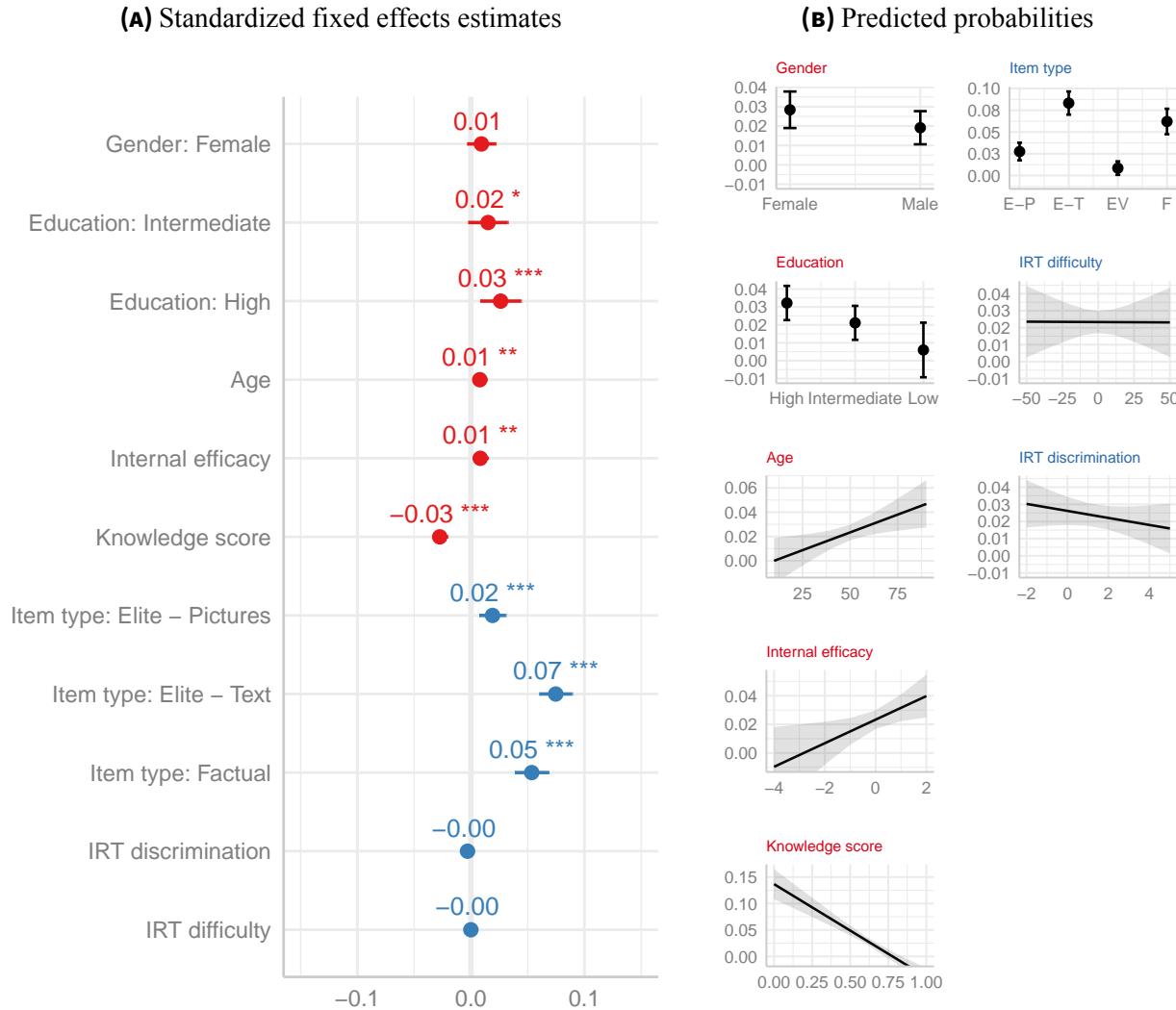


Note: Results from a linear regression model. Point estimates along with 95% confidence intervals reported (* $p < .1$, ** $p < .05$, *** $p < .01$). Number of observations: 1117.

TABLE D2: Item scalability coefficients H_i for verbal elite knowledge items.

Item	Est.	SE
Elite/Visual—Peter Altmaier (2)	0.71	0.03
Elite/Visual—Peter Altmaier (5)	0.69	0.03
Elite/Visual—Dietmar Bartsch (2)	0.74	0.03
Elite/Visual—Dietmar Bartsch (5)	0.69	0.03
Elite/Visual—Katrin Göring-Eckardt (2)	0.70	0.03
Elite/Visual—Katrin Göring-Eckardt (5)	0.71	0.03
Elite/Visual—Anton Hofreiter (2)	0.69	0.03
Elite/Visual—Anton Hofreiter (5)	0.71	0.03
Elite/Visual—Christian Lindner (2)	0.74	0.03
Elite/Visual—Christian Lindner (5)	0.78	0.03
Elite/Visual—Heiko Maas (2)	0.67	0.03
Elite/Visual—Heiko Maas (5)	0.66	0.03
Elite/Visual—Angela Merkel (2)	0.55	0.08
Elite/Visual—Angela Merkel (5)	0.82	0.05
Elite/Visual—Martin Schulz (2)	0.48	0.08
Elite/Visual—Martin Schulz (5)	0.75	0.05
Elite/Visual—Alice Weidel (2)	0.50	0.05
Elite/Visual—Alice Weidel (5)	0.64	0.03

FIGURE D4: Estimated effects of respondent and item characteristics on response-level cheating incidence with alternative two-parameter IRT difficulty and discrimination measures.

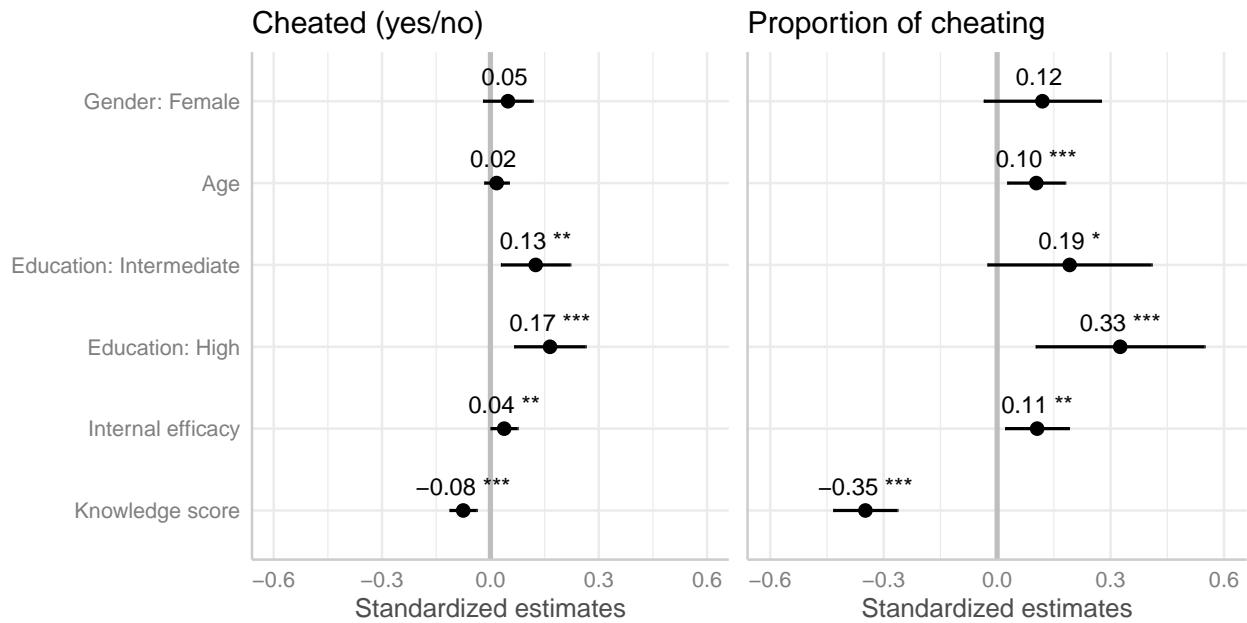


Note: Results from a linear cross-nested multilevel model with person and item random effects fit by REML. Standardized (by two standard deviations) point estimates along with 95% confidence intervals reported (* $p < .1$, ** $p < .05$, *** $p < .01$). Number of observations: 35,696; number of respondents: 666; number of items: 68. Residual standard deviations: response level 0.13, respondent level 0.07, question level 0.01.

TABLE D3: Item scalability coefficients H_i for visual elite knowledge items.

Item	Est.	SE
Elite/Verbal—AfD (4)	0.62	0.03
Elite/Verbal—CDU/CSU (4)	0.73	0.06
Elite/Verbal—FDP (4)	0.68	0.04
Elite/Verbal—Die Grünen (4)	0.63	0.04
Elite/Verbal—Die Linke (4)	0.63	0.03
Elite/Verbal—SPD (4)	0.74	0.04

FIGURE D5: Estimated effects of respondent characteristics on cheating (left: binary, right: proportion of items cheated on)



Note: Results from linear regression models. Standardized (by two standard deviations) point estimates along with 95% confidence intervals reported (* $p < .1$, ** $p < .05$, *** $p < .01$). Number of observations: 666.

FIGURE D6: Marginal effects of question type on cheating by item scalability.

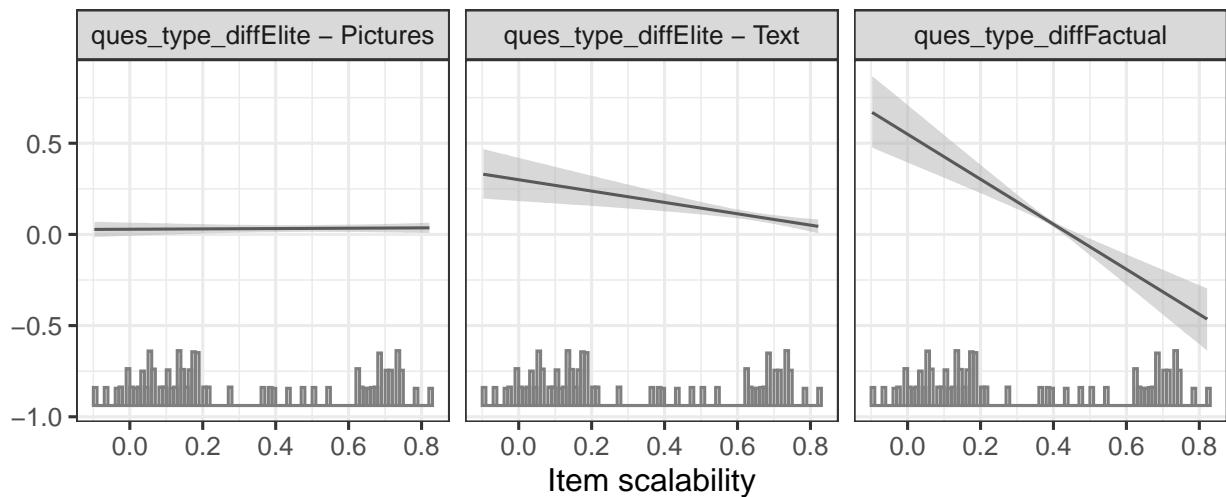


TABLE D4: Item scalability coefficients H_i for event knowledge items.

Item	Est.	SE
Event—Diesel hardware (2)	-0.06	0.02
Event—Dobrind diesel (2)	0.06	0.02
Event—Fipronil eggs (2)	0.14	0.02
Event—Morales referendum (2)	-0.10	0.02
Event—Sanctions N. Korea (2)	0.14	0.02
Event—Schulz/Basic Income (2)	0.06	0.02
Event—Obamacare revoked (2)	0.05	0.02
Event—Supermarket attack (2)	0.07	0.02
Event—Trump’s Chief of Staff (2)	0.15	0.02
Event—Twesten left greens (2)	0.17	0.02
Event—Arpper resignation (3)	0.18	0.03
Event—Air Berlin-Ryan Air (3)	-0.03	0.02
Event—EU wall Hungary (3)	0.22	0.07
Event—Texas hurricane (3)	0.11	0.02
Event—N. Korea H-bomb (3)	0.16	0.02
Event—Diesel hardware (3)	-0.01	0.02
Event—Merkel greens (3)	0.27	0.08
Event—Schulz education (3)	0.09	0.03
Event—Turkey arrest (3)	0.19	0.02
Event—Unemployment rate (3)	0.02	0.02
Event—London bomb (4)	0.15	0.02
Event—Etihad-Air Berlin (4)	0.08	0.02
Event—Gauland convicted (4)	0.05	0.03
Event—Greens Jamaica (4)	0.00	0.03
Event—Juncker Euro (4)	0.21	0.02
Event—Resolution N. Korea (4)	-0.00	0.02
Event—Bundestag period (4)	0.12	0.02
Event—Schulz TV debate (4)	0.14	0.02
Event—Volkswagen pledge (4)	0.06	0.03
Event—Off-the-books Weidel (4)	0.14	0.02
Event—FDP third party (5)	0.03	0.04
Event—CCC hackers (5)	-0.04	0.03
Event—Mexico earthquake (5)	0.12	0.02
Event—Coalition Gauland (5)	0.10	0.04
Event—Rape stats (5)	0.16	0.06
Event—Myanmar (5)	0.19	0.02
Event—Powder letters (5)	0.18	0.04
Event—Bavaria rape (5)	0.02	0.03
Event—Tegel referendum (5)	0.03	0.02
Event—Trump Iran (5)	0.19	0.02

FIGURE D7: Marginal effects of question type on cheating by item difficulty.

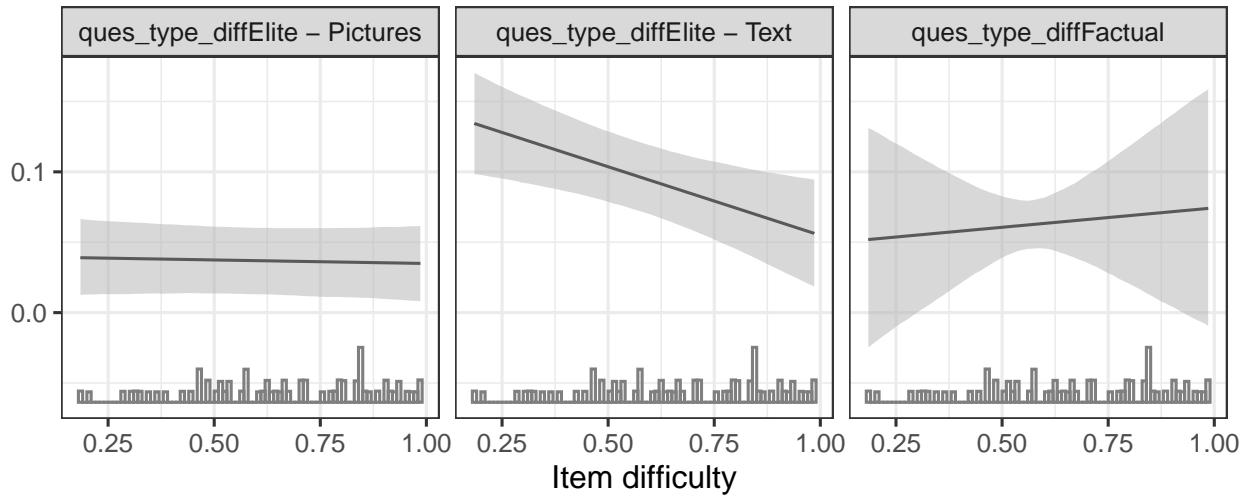


FIGURE D8: Marginal effects of item difficulty on cheating by item scalability.

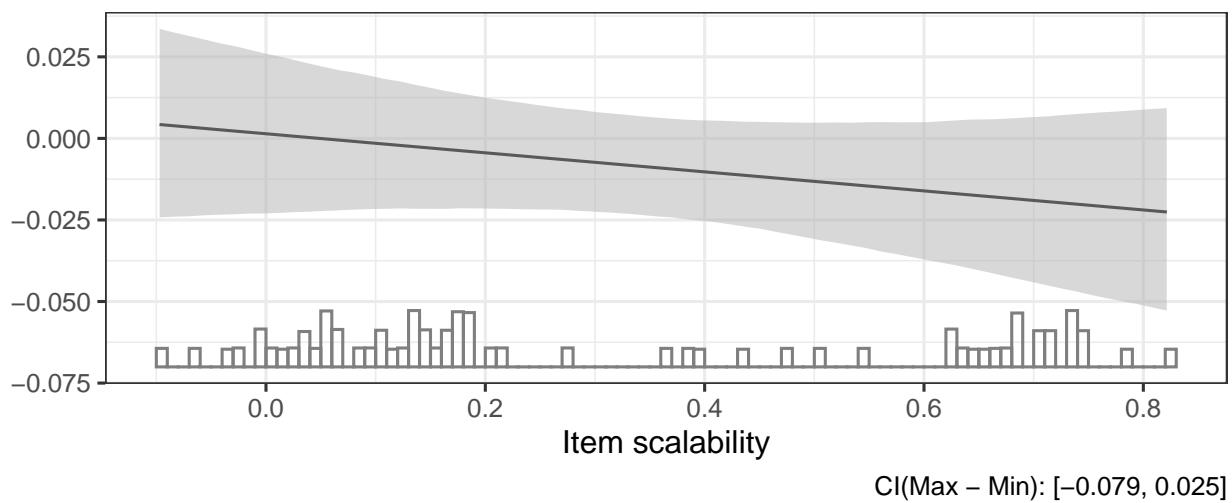


FIGURE D9: Marginal effects of education on cheating by internal efficacy.

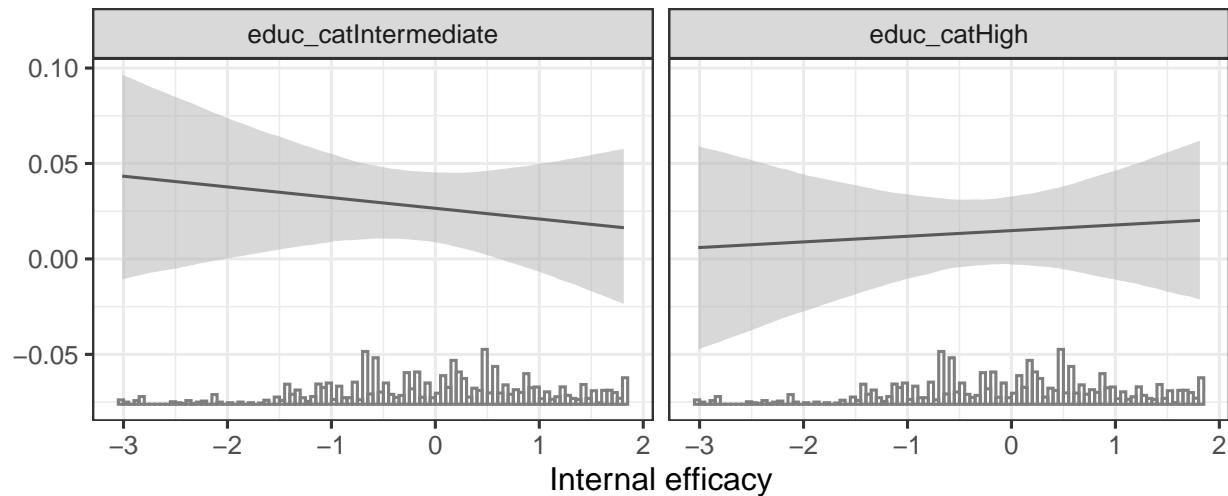


FIGURE D10: Marginal effects of education on cheating by knowledge score.

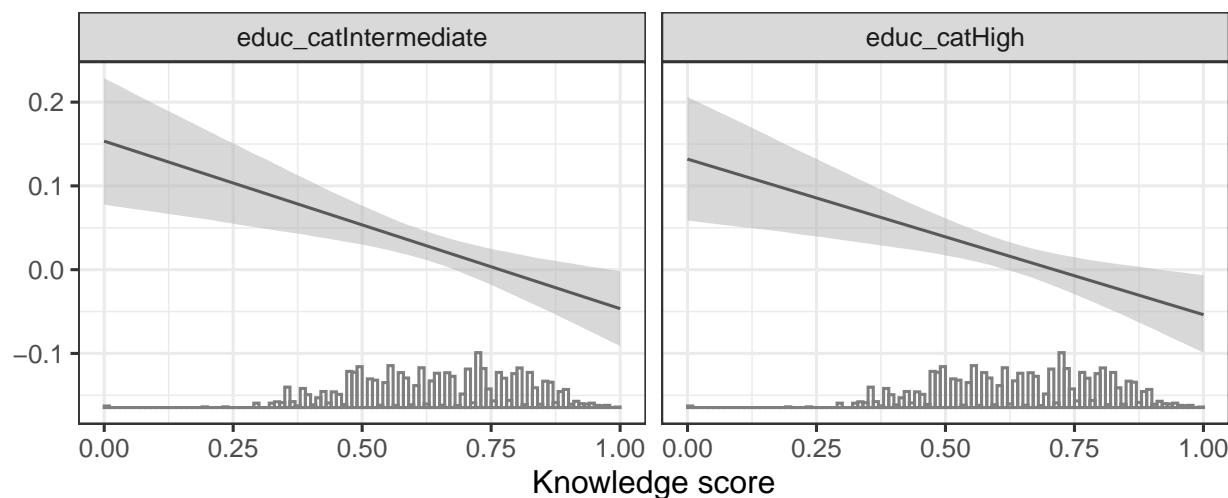


FIGURE D11: Marginal effects of education on cheating by item difficulty.

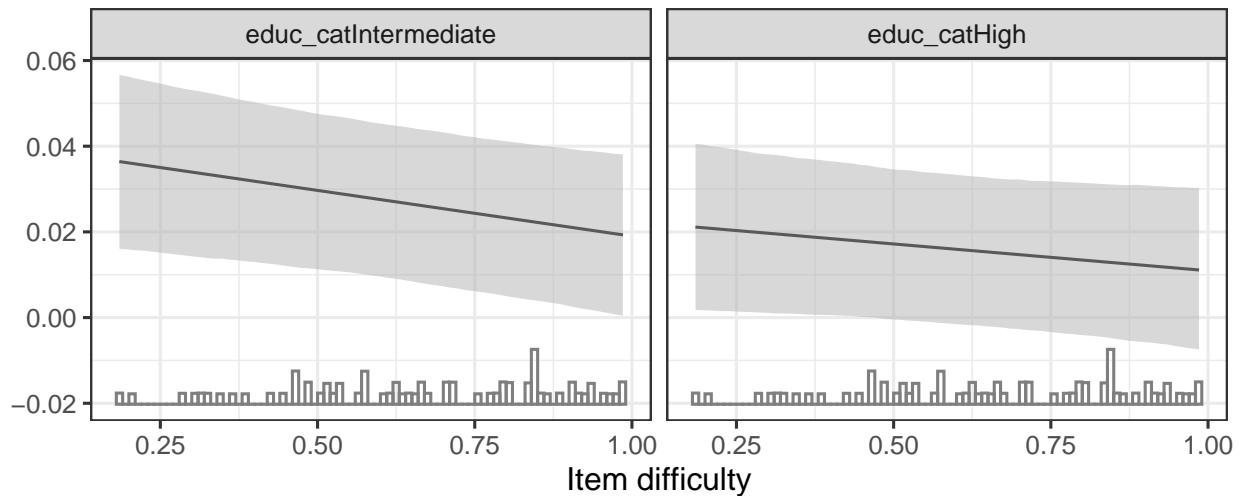


FIGURE D12: Marginal effects of knowledge score on cheating by item difficulty.

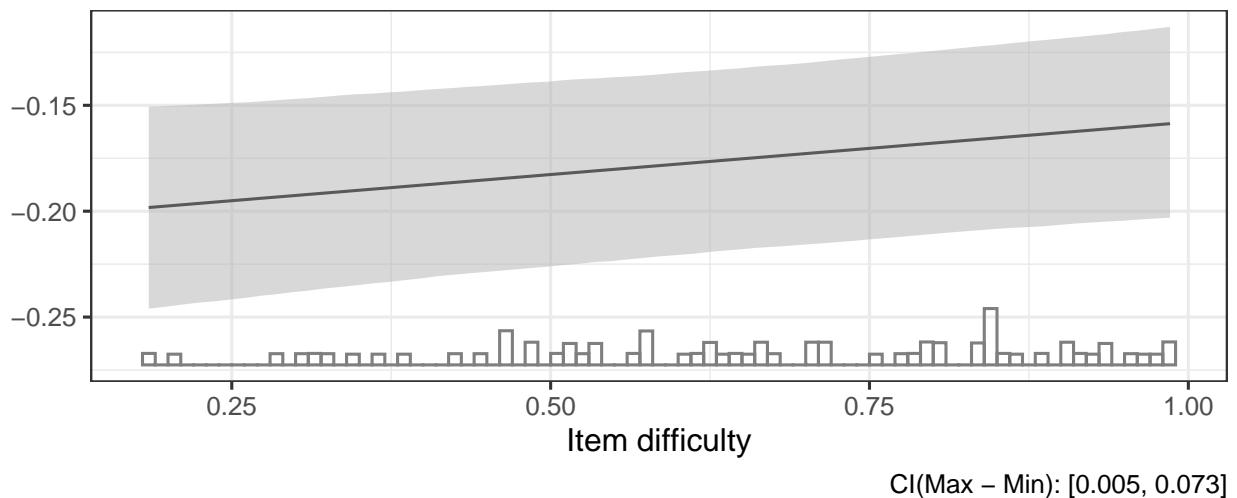


FIGURE D13: Marginal effects of question type on cheating by knowledge score.

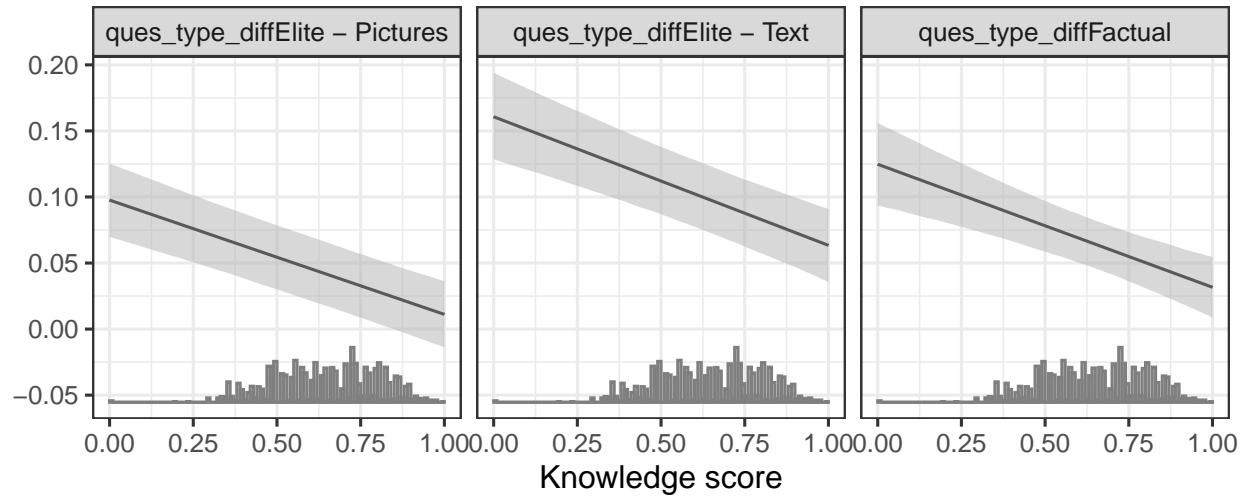


FIGURE D14: Marginal effects of knowledge score on cheating by item scalability.

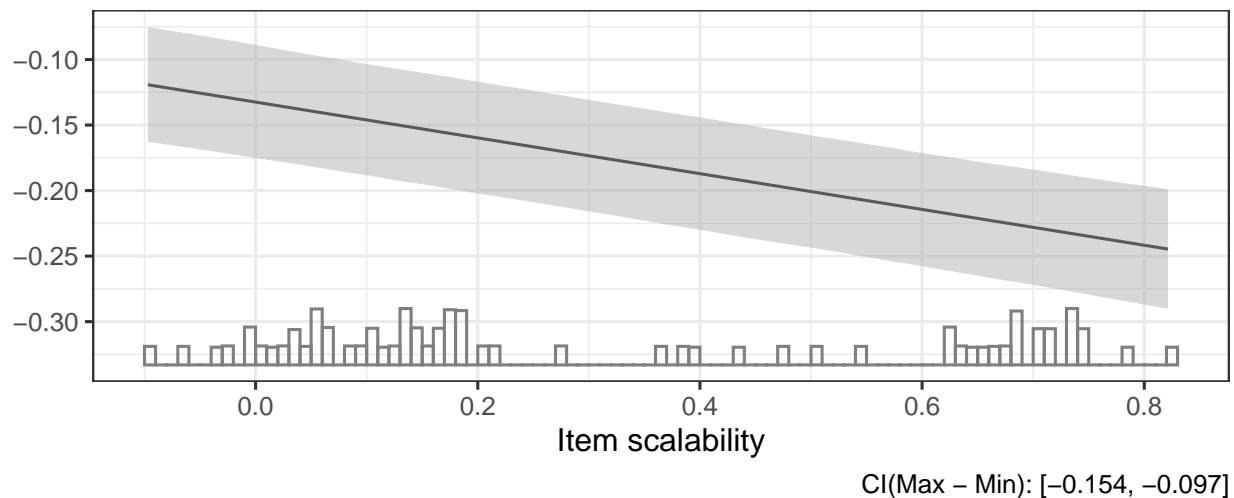
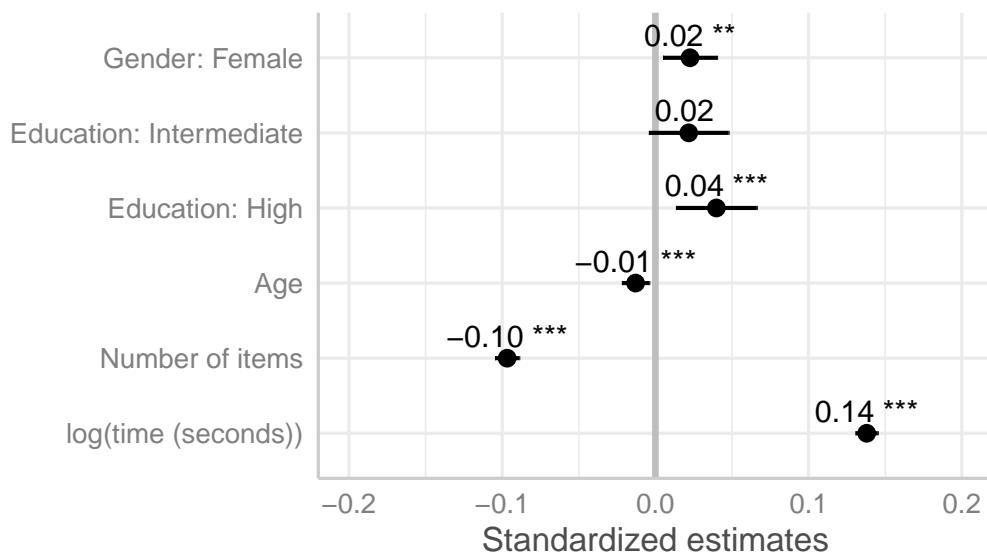
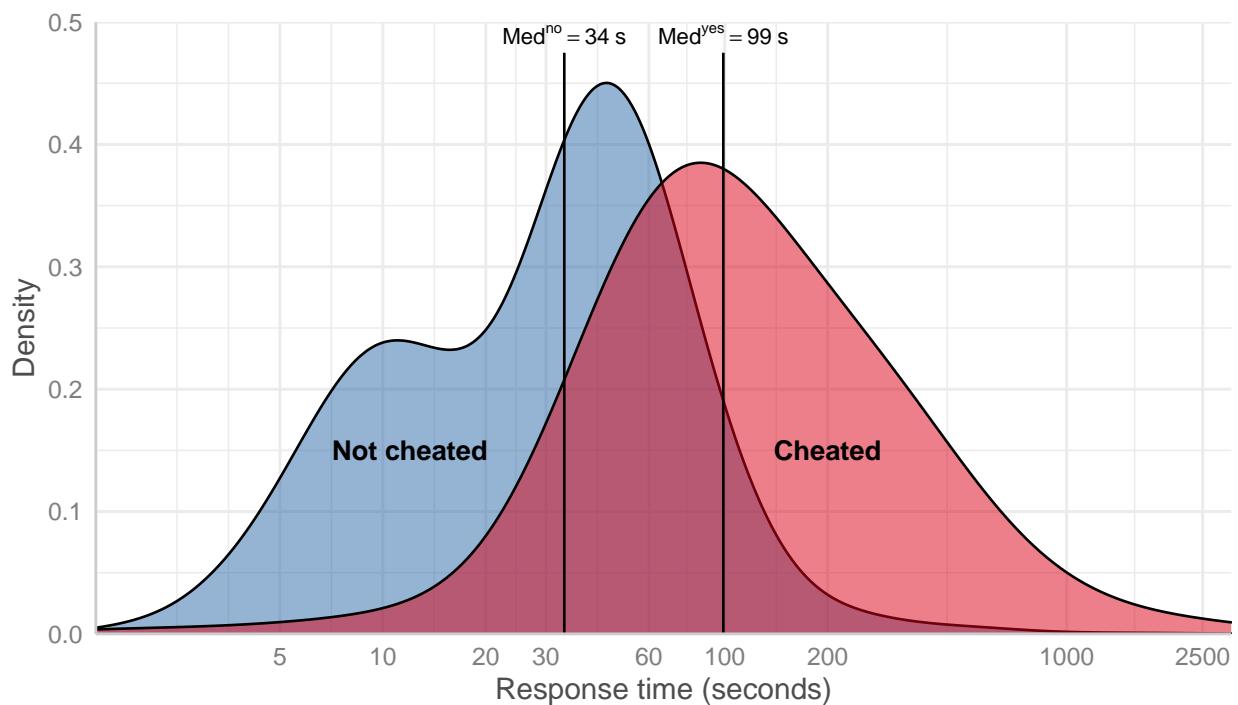


FIGURE D15: Estimated effects of respondent and question characteristics as well as response time on question-level cheating



Note: Results from a linear cross-nested model with person and question random effects fit by REML. Standardized (by two standard deviations) point estimates along with 95% confidence intervals reported (* $p < .1$, ** $p < .05$, *** $p < .01$). Number of observations: 5860, number of respondents: 679, number of questions: 11. Residual standard deviations: question response level 0.19, respondent level 0.09, question level 0.01.

FIGURE D16: Density plots of question response times by cheating status



Note: 5,574 question responses involving no cheating compared to 345 question responses involving cheating. Median difference is 99s (under cheating) - 34s (under no cheating) = 65s.

APPENDIX E DOCUMENTATION OF CHEATING BEHAVIOR

TABLE E1: Keywords utilized to flag suspicious activity per item

Item Label	Keywords
Elite/Verbal—AfD (4)	afd; alternative_f; alternative-f; alternative+f; weidel; gauland; petry
Elite/Verbal—CDU/CSU (4)	merkel; edu; csu; christlich
Elite/Verbal—Die Grünen (4)	gruene; grüne; b'90; eckart; özdemir; oezdemir
Elite/Verbal—Die Linke (4)	linke; wagenknecht; bartsch
Elite/Verbal—FDP (4)	lindner; fdp; freie
Elite/Verbal—SPD (4)	schulz; spd; sozialdemokratische
Elite/Visual—Alice Weidel (2)	weidel; afd; politiker
Elite/Visual—Alice Weidel (5)	weidel; afd; politiker
Elite/Visual—Angela Merkel (2)	merkel; cdu; csu; politiker
Elite/Visual—Angela Merkel (5)	merkel; cdu; csu; politiker
Elite/Visual—Anton Hofreiter (2)	hofreiter; grüne; politiker
Elite/Visual—Anton Hofreiter (5)	hofreiter; grüne; politiker
Elite/Visual—Christian Lindner (2)	lindner; fdp; politiker
Elite/Visual—Christian Lindner (5)	lindner; fdp; politiker
Elite/Visual—Dietmar Bartsch (2)	bartsch; linke; politiker
Elite/Visual—Dietmar Bartsch (5)	bartsch; linke; politiker
Elite/Visual—Heiko Maas (2)	maas; spd; politiker
Elite/Visual—Heiko Maas (5)	maas; spd; politiker
Elite/Visual—Katrin Göring-Eckardt (2)	göring; grüne; politiker
Elite/Visual—Katrin Göring-Eckardt (5)	göring; grüne; politiker
Elite/Visual—Martin Schulz (2)	schulz; spd; ; politiker
Elite/Visual—Martin Schulz (5)	schulz; spd; ; politiker
Elite/Visual—Peter Altmaier (2)	altmaier; edu; csu; politiker
Elite/Visual—Peter Altmaier (5)	altmaier; edu; csu; politiker
Event—Air Berlin-Ryan Air (3)	ryanair; airberlin; air-berlin; air_berlin; berlin
Event—Arpper resignation (3)	holger; arppe; afd; mecklenburg
Event—Bavaria rape (5)	oberbayern; vergewaltig; afghan; flüchtlings
Event—Bundestag period (4)	wahlperiode; bundestag
Event—CCC hackers (5)	hacker; wahlsoftware; ccc; chaos
Event—Coalition Gauland (5)	koalition; gauland
Event—Diesel hardware (2)	diesel; euro-5; euro-6; hardware; dieselgipfel
Event—Diesel hardware (3)	hardware; automobil; merkel
Event—Dobrindt diesel (2)	diesel; dobrindt
Event—Etihad-Air Berlin (4)	etihad; airberlin; air-berlin; air_berlin

Event—EU wall Hungary (3)	ungar; grenzzaun
Event—FDP third party (5)	bundestagswahl; fpd; freie_demokratische; freie-demokratische; ergebnisse; wahlergebnis
Event—Fipronil eggs (2)	fipronil; insektizid; eier
Event—Gauland convicted (4)	gauland; verurteilt; volksverhetzung
Event—Greens Jamaica (4)	london; bomb; explosion
Event—Juncker Euro (4)	juncker; euro
Event—London bomb (4)	jamaika; koalition; grüne
Event—Merkel greens (3)	koalition; merkel; grüne
Event—Mexico earthquake (5)	erdbeben; mexiko; 200
Event—Morales referendum (2)	bolivi; morales; referendum; protest
Event—Myanmar (5)	myanmar; rohingya
Event—N. Korea H-bomb (3)	nordkorea; bombe; test
Event—Obamacare revoked (2)	obamacare; senat; usa
Event—Off-the-books Weidel (4)	alice; weidel; schweiz; syri
Event—Powder letters (5)	drohbrief; pulver; rasierklingen; politiker
Event—Rape stats (5)	herrmann; vergewaltig; bayern
Event—Resolution N. Korea (4)	veto; nordkorea; uno
Event—Sanctions N. Korea (2)	sanktion; nordkorea; uno; sicherheitsrat
Event—Schulz education (3)	bildungsreform; schulz
Event—Schulz TV debate (4)	tv-duell; tvduell; schulz
Event—Schulz/Basic Income (2)	grundeinkommen; schulz
Event—Supermarket attack (2)	palaesti; palästi; messer; hamburg; supermarket; terror; attentat
Event—Tegel referendum (5)	tegel; volksentscheid
Event—Texas hurricane (3)	texas; hurrikan
Event—Trump Iran (5)	iran; atom; trump
Event—Trump's Chief of Staff (2)	stabschef; trump; general
Event—Turkey arrest (3)	tuerkei; türkei; festgenommen; deutsche
Event—Twesten left greens (2)	elke; twesten; niedersachsen
Event—Unemployment rate (3)	arbeitslosenquote; arbeitsmarkt; arbeitslose; august
Event—Volkswagen pledge (4)	volkswagen; 2040; vw; autos
Factual—Chancellor election (2)	bundeskanzler
Factual—Chancellor election (5)	bundeskanzler
Factual—Vote importance (2)	erststimme; stimme; bundestag; direktstimme; listenstimme
Factual—Vote importance (5)	erststimme; stimme; bundestag; direktstimme; listenstimme

TABLE E2: Instances of cheating for Factual items

Item	Domain	Query
Factual—Chancellor election	google.de	wer w_hlt kanzler
Factual—Chancellor election	google.de	bundeskanzler wer w_hlt
Factual—Chancellor election	bing.com	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Bundeskanzler_(Deutschland)
Factual—Chancellor election	de.wikipedia.org	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzlerin durch wen gew_hlt
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	bing.com	bundeskanzler wahlen
Factual—Chancellor election	google.de	wahl bundeskanzler durch
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	welche stimme entscheidet über die St_rke der Parteien im Bundestag...
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler in dtl.
Factual—Chancellor election	google.de	wer w%C3%A4hlt bundeskanzler in deutschland
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler deutschland
Factual—Chancellor election	google.de	bundeskanzlerwahl 2017
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wahl bundeskanzler
Factual—Chancellor election	google.de	zweitstimme
Factual—Chancellor election	de.search.yahoo.com	Bundeskanzler
Factual—Chancellor election	google.de	wie wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	focus.de	politik/praxistipps/bundeskanzler-wer-waehlt-ihn_id_6852180
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	wahl bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler der bundesrepublik deutschland gew%C3...
Factual—Chancellor election	google.de	wahl des bundeskanzlers
Factual—Chancellor election	bing.com	wer w_hlt den bundeskanzler

TABLE E2: Instances of cheating for Factual items

Item	Domain	Query
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler der bundesrepublik deutschland gew_hl...
Factual—Chancellor election	google.de	bundeskanzler wird gew_hlt durch
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wahl des bundeskanzlers durch
Factual—Chancellor election	google.de	wer w%C3%A4hlt den bundeskanzler
Factual—Chancellor election	ecosia.org	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	bundeskanzler gew_hlt von
Factual—Chancellor election	google.de	wahl der bundeskanzlerin 2013
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler der bundesrepublik deutschland gew_hl...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wahl des bundeskanzlers einfach erkl_rt
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wie wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	duckduckgo.com	bundeskanzlerwahl
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.com	durch wen wird der bundeskanzler gew%A4hlt
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	google.de	bundeskanzler wird vom bundestag gew_hlt
Factual—Chancellor election	google.de	bundeskanzler gew_hlt
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzler wahl
Factual—Chancellor election	bing.com	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzler
Factual—Chancellor election	google.de	bundeskanzlerwahl deutschland
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.com	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzlerin gew_hlt durch
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler

TABLE E2: Instances of cheating for Factual items

Item	Domain	Query
Factual—Chancellor election	google.de	durch wen wird die Bundeskanzlerin gew_hlt
Factual—Chancellor election	de.wikipedia.org	Bundeskanzler_(Deutschland)
Factual—Chancellor election	google.de	Bundeskanzlerin bzw. der Bundeskanzler der Bundesrepublik Deutschland ...
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler%2Fdie bundeskanzlerin
Factual—Chancellor election	de.wikipedia.org	Bundeskanzler_(Deutschland)
Factual—Chancellor election	suche.t-online.de	wer w_hlt den bundeskanzler%3F
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	google.de	bundeskanzlerwahl
Factual—Chancellor election	bing.com	Wahl Bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt kanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin gew_hlt
Factual—Chancellor election	google.de	Bundeskanzlerwahl wer w_hlt
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler der bundesrepublik deutschland gew_hl...
Factual—Chancellor election	bing.com	durch wen wird der bundeskanzler gew%c3%a4hlt
Factual—Vote importance	bing.com	welche Stimme bei der Bundestagswahl ist wichtiger
Factual—Vote importance	google.de	Bei der Bundestagswahl haben Sie zwei Stimmen%2C die Erststimme und di...
Factual—Vote importance	google.de	welche stimme entscheidet über die St_rke der Parteien im Bundestag...
Factual—Vote importance	google.de	bundestagswahl erststimme
Factual—Vote importance	google.de	bundestagswahl erststimme
Factual—Vote importance	google.de	wer w_hlt den bundeskanzler
Factual—Vote importance	google.de	welche stimme ist bei der bundestagswahl die wichtigste
Factual—Vote importance	google.de	welche stimme ist bei der bundestagswahl die wichtigste
Factual—Vote importance	google.de	wahl welche stimme wichtiger
Factual—Vote importance	google.de	relative st%C3%A4rke bundestag ersstimme
Factual—Vote importance	ecosia.org	zweitstimme
Factual—Vote importance	de.wikipedia.org	Politisches_System_der_Bundesrepublik_Deutschland
Factual—Vote importance	google.de	welche stimme fñr bundestag
Factual—Vote importance	google.de	welche stimme ist wichtiger erst oder zweitstimme
Factual—Vote importance	google.de	erst- und zweitstimme
Factual—Vote importance	google.de	erststimme zweitstimme unterschied
Factual—Vote importance	google.de	Bei der Bundestagswahl haben Sie zwei Stimmen%2C die Erststimme und di...
Factual—Vote importance	google.de	zweitstimme
Factual—Vote importance	de.search.yahoo.com	zweitstimme bundestagswahl
Factual—Vote importance	bpb.de	mediathek/599/erst-und-zweitstimme
Factual—Vote importance	bing.com	erststimme

TABLE E2: Instances of cheating for Factual items

Item	Domain	Query
Factual—Vote importance	google.de	zweitstimme wahl
Factual—Vote importance	google.de	ist die zweitstimme wichtiger
Factual—Vote importance	google.de	Welche der beiden ist entscheidend fr die relative Strke der Parteie...
Factual—Vote importance	google.de	erststimme bundestagswahl
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wie wird der bundeskanzler in deutschland gew%C3%A4hlt
Factual—Chancellor election	nortonsafe.search.ask.com	bundeskanzler wird gew_hlt
Factual—Chancellor election	google.de	ewer w%C3%A4hlt den Bundeskanzler%3F
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzler wahl
Factual—Chancellor election	google.de	bundeskanzler
Factual—Chancellor election	google.de	bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt die bundeskanzlerin
Factual—Chancellor election	google.de	durch wen wird der bundeskanzler gew_hlt
Factual—Chancellor election	google.de	bundeskanzler gew_hlt
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	bundeskanzlerwahl
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wer w_hlt bundeskanzler
Factual—Chancellor election	google.de	Wahl Bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	bundeskanzler wird gew_hlt
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	bundeskanzlerwahl
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	Bundeskanzler der Bundesrepublik Deutschland gew_hlt
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	durch wen wird bundeskanzler gew_hlt
Factual—Chancellor election	google.de	Wer w_hlt den Bundeskanzler
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	duckduckgo.com	durch wen der bundeskanzler gew%C3%A4hlt
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election		bundeskanzlerwahl

TABLE E2: Instances of cheating for Factual items

Item	Domain	Query
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	kanzler wird gew_hlt durch
Factual—Chancellor election	google.com	Bundeskanzler
Factual—Chancellor election	ecosia.org	Bundeskanzlerin
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	bing.com	wahl des bundeskanzlers
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wie wird der bundeskanzler gew_hlt zusammenfassung
Factual—Chancellor election	google.de	Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesre...
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	search.avast.com	wie wird der bundeskanzler gew_hlt%3F
Factual—Chancellor election	google.de	Bundeskanzler Wahl
Factual—Chancellor election	google.de	wer w_hlt den bundeskanzler
Factual—Chancellor election	google.com	Bundeskanzler der Bundesrepublik Deutschland gew%C3%A4hl
Factual—Chancellor election	google.de	Bundeskanzlerwahl
Factual—Vote importance	google.de	wahl sitzverteilung
Factual—Vote importance	google.de	welche stimme war die wichtigste bei Bundestagswahl%3F
Factual—Vote importance	google.de	werw_hlt kanzler
Factual—Vote importance	google.de	erststimme und zweitstimme
Factual—Vote importance	google.de	sitzverteilung bundestag berechnung
Factual—Vote importance	google.de	Bei der Bundestagswahl haben Sie zwei Stimmen%2C die Erststimme und di...
Factual—Vote importance	google.de	welche stimme ist ausschlaggebend f□r sitzverteilung bundestag
Factual—Vote importance	google.de	kanzlerwahl bundesrat
Factual—Vote importance	google.de	erststimme und zweitstimme
Factual—Vote importance	google.de	sitzverteilung bundestag
Factual—Vote importance	google.de	sitzverteilung bundestag erststimme zweitstimme

TABLE E3: Instances of cheating for Elite Visual items

Item	Domain	Query
Elite/Visual—Alice Weidel	google.de	weidel
Elite/Visual—Alice Weidel	bilder.bild.de	fotos-skaliert/alice-weidel-51561416-44966086/3,w=650,c=0.bild.jpg
Elite/Visual—Alice Weidel	google.de	alice weidel
Elite/Visual—Alice Weidel	ecosia.org	alice weidel
Elite/Visual—Angela Merkel	google.de	welche partei angela merkel
Elite/Visual—Angela Merkel	google.de	merkel partei
Elite/Visual—Angela Merkel	google.de	angela merkel
Elite/Visual—Angela Merkel	google.com	merkel cdu oder csu
Elite/Visual—Angela Merkel	google.de	partei von merkel
Elite/Visual—Angela Merkel	de.wikipedia.org	Angela_Merkel
Elite/Visual—Angela Merkel	google.de	Merkel%2Bpartei
Elite/Visual—Angela Merkel	google.lv	angela merkel contact
Elite/Visual—Anton Hofreiter	google.de	anton hofreiter
Elite/Visual—Broad picture search	google.de	steinmeier
Elite/Visual—Broad picture search	google.de	lammert
Elite/Visual—Broad picture search	spd-saar.de	landtagswahl/kandidaten
Elite/Visual—Broad picture search	google.de	schwesig afd
Elite/Visual—Broad picture search	google.de	minister regierung
Elite/Visual—Broad picture search	google.de	politiker
Elite/Visual—Broad picture search	ecosia.org	kanzleramtsminister
Elite/Visual—Broad picture search	google.de	bilder von politikerfrauen
Elite/Visual—Broad picture search	bundestag.de	parlament/fraktionen
Elite/Visual—Broad picture search	google.de	politikerinnen
Elite/Visual—Broad picture search	google.de	spd
Elite/Visual—Broad picture search	google.de	die gr□nen politiker
Elite/Visual—Broad picture search	google.de	kanzleramtsminister
Elite/Visual—Broad picture search	google.de	politiker deutschland
Elite/Visual—Broad picture search	google.de	deutsche politiker
Elite/Visual—Broad picture search	google.de	kanzlerkandidatin die partei
Elite/Visual—Broad picture search	google.de	die gr□nen
Elite/Visual—Broad picture search	google.de	von der leyen
Elite/Visual—Broad picture search	google.de	politikerin deutschland
Elite/Visual—Dietmar Bartsch	google.de	dietmar bartsch
Elite/Visual—Dietmar Bartsch	google.de	bartsch spd
Elite/Visual—Dietmar Bartsch	google.de	dietmar bartsch
Elite/Visual—Heiko Maas	google.de	heiko maas partei
Elite/Visual—Heiko Maas	google.de	maas

TABLE E3: Instances of cheating for Elite Visual items

Item	Domain	Query
Elite/Visual—Heiko Maas	google.de	heiko maas
Elite/Visual—Heiko Maas	google.de	ma□ partei
Elite/Visual—Heiko Maas	facebook.com	maas%20heiko
Elite/Visual—Heiko Maas	ecosia.org	heiko maas
Elite/Visual—Heiko Maas	google.de	heiko maas
Elite/Visual—Heiko Maas	google.de	Heiko Maas
Elite/Visual—Heiko Maas	google.de	maas
Elite/Visual—Heiko Maas	google.de	Heiko Maas
Elite/Visual—Heiko Maas	google.de	Heiko Maas
Elite/Visual—Heiko Maas	ecosia.org	heiko maas
Elite/Visual—Katrin Göring-Eckardt	ecosia.org	katrin g□ring-eckardt
Elite/Visual—Katrin Göring-Eckardt	search.avast.com	Katrin G□ring Eckardt
Elite/Visual—Katrin Göring-Eckardt	google.de	Katrin G□ring-Eckardt
Elite/Visual—Katrin Göring-Eckardt	google.de	g□ring eckardt
Elite/Visual—Katrin Göring-Eckardt	google.de	g□ring eckardt
Elite/Visual—Katrin Göring-Eckardt	ecosia.org	karin g□ring-eckardt
Elite/Visual—Martin Schulz	google.de	bundeskanzleramt schulz
Elite/Visual—Martin Schulz	de.wikipedia.org	Martin_Schulz
Elite/Visual—Martin Schulz	google.de	martin schulz partei
Elite/Visual—Peter Altmaier	google.de	peter altmayer partei
Elite/Visual—Peter Altmaier	google.de	altmeier
Elite/Visual—Peter Altmaier	google.de	minister mit hasenscharte
Elite/Visual—Peter Altmaier	google.de	peter altmaier
Elite/Visual—Peter Altmaier	ecosia.org	kanzleramtsminister altmeier
Elite/Visual—Peter Altmaier	google.de	peter altmaier
Elite/Visual—Peter Altmaier	google.de	Peter Altmaier
Elite/Visual—Peter Altmaier	ecosia.org	peter altmaier
Elite/Visual—Alice Weidel	google.de	afd politikerin weidel
Elite/Visual—Anton Hofreiter	de.wikipedia.org	Anton_Hofreiter
Elite/Visual—Broad picture search	google.de	gauland
Elite/Visual—Broad picture search	google.de	steinmeier bundeskanzler
Elite/Visual—Broad picture search	google.de	linke politiker
Elite/Visual—Broad picture search	bing.com	die f%C3%BChrenden politiker
Elite/Visual—Broad picture search	google.de	deutsche politiker
Elite/Visual—Broad picture search	google.de	fdp politiker
Elite/Visual—Broad picture search	google.de	fdp politiker
Elite/Visual—Broad picture search	google.de	gr□ne politiker

TABLE E3: Instances of cheating for Elite Visual items

Item	Domain	Query
Elite/Visual—Broad picture search	google.de	google bildersuche r□ckw□rts
Elite/Visual—Broad picture search	google.de	Kandidaten afd
Elite/Visual—Broad picture search	google.de	politiker 2017
Elite/Visual—Christian Lindner	google.de	christian lindner
Elite/Visual—Dietmar Bartsch	google.de	bartsch linke
Elite/Visual—Heiko Maas	google.de	welcher partei geh□rt maas an
Elite/Visual—Heiko Maas	google.de	heiko maas
Elite/Visual—Heiko Maas	google.de	heino maas
Elite/Visual—Heiko Maas	google.de	Maas justizminister
Elite/Visual—Heiko Maas	google.de	heiko maas
Elite/Visual—Heiko Maas	google.de	maas
Elite/Visual—Heiko Maas	google.de	Heiko Maas
Elite/Visual—Heiko Maas	google.de	Heiko Maas
Elite/Visual—Katrin Göring-Eckardt	google.de	katrin g□ring-eckardt
Elite/Visual—Peter Altmaier	google.de	altmeier
Elite/Visual—Peter Altmaier	google.de	altmeier
Elite/Visual—Peter Altmaier	google.de	altmaier
Elite/Visual—Peter Altmaier	ecosia.org	altmeier
Elite/Visual—Peter Altmaier	google.de	altmaier
Elite/Visual—Peter Altmaier	google.de	Peter Altmaier
Elite/Visual—Peter Altmaier	google.de	altmaier partei
Elite/Visual—Peter Altmaier	google.com	Altmeier

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	alice afd
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	bing.com	afd
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	spitzenkandidat afd
Elite/Verbal—AfD	sueddeutsche.de	politik/bundestagswahl-die-spitzenkandidaten-der-parteien-1.3520071
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	afd politiker
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	spitzenkandidat afd
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	afd spitzenkandidat
Elite/Verbal—AfD	google.de	Alice Weidel
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—AfD	google.de	afd spitzenkandidat
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	bing.com	afd
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	kandidat afd
Elite/Verbal—AfD	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—AfD	google.de	Spitzenkandidaten partei
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	spitzenkandidaten bundestagswahl 2017
Elite/Verbal—AfD	google.de	afd politiker
Elite/Verbal—AfD	www.afd.de	
Elite/Verbal—AfD	google.de	afd
Elite/Verbal—AfD	google.de	gauland
Elite/Verbal—AfD	google.de	spitzenkandidat afd
Elite/Verbal—AfD	google.de	afd kandidaten 2017
Elite/Verbal—AfD	google.de	Spitzenkandidat AfD
Elite/Verbal—AfD	google.de	afd spitzenkandidat 2017
Elite/Verbal—AfD	google.de	gauland

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	Alice Weidel
Elite/Verbal—AfD	google.de	Afd kandidat
Elite/Verbal—AfD	afd.de	
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	spitzenkandidatenm
Elite/Verbal—AfD	google.de	afd bundestagswahl spitzenkandidat
Elite/Verbal—AfD	google.de	spitzenkandidat afd
Elite/Verbal—AfD	google.com	Alice Weidel
Elite/Verbal—AfD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—AfD	google.de	afd spitzenkandidat
Elite/Verbal—AfD	rundschau-online.de	politik/afd-spitzenkandidat-gauland-spricht-von-entsorgung-der-integ...
Elite/Verbal—AfD	google.de	spitzenkandidaten 2017
Elite/Verbal—AfD	google.de	spitzenkandidat AfD
Elite/Verbal—AfD	google.de	afd kanzlerkandidat 2017
Elite/Verbal—AfD	google.de	Spitzenkandidaten
Elite/Verbal—CDU/CSU	google.de	spitzenkanida cdu
Elite/Verbal—CDU/CSU	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—CDU/CSU	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—CDU/CSU	google.de	cdu spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—CDU/CSU	google.de	cdu spitzenkandidat bundestagswahl
Elite/Verbal—CDU/CSU	google.de	spitzenkandidat cdu 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.nl	horst seehofer
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	bing.com	csu
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—CDU/CSU	google.de	Spitzenkandidaten partei
Elite/Verbal—CDU/CSU	google.de	cdu spitzenkandidaten
Elite/Verbal—CDU/CSU	google.de	Namen von Spitzenkandidaten cdu
Elite/Verbal—CDU/CSU	google.de	cdu politiker

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—CDU/CSU	google.de	cdu spitzenkandidat
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	cdu spitzenkandidaten bundestagswahl 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidatenm
Elite/Verbal—CDU/CSU	google.de	spitzenkandidat cdu csu
Elite/Verbal—CDU/CSU	google.com	Spitzenkandidat CDU CSU
Elite/Verbal—CDU/CSU	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	google.de	spitzenkandidaten 2017
Elite/Verbal—CDU/CSU	swagbucks.com	angela merkel%2Bpartei
Elite/Verbal—CDU/CSU	google.de	csu
Elite/Verbal—CDU/CSU	google.de	Spitzenkandidaten
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	Gr%C3%BCne
Elite/Verbal—Die Grünen	google.de	grüne
Elite/Verbal—Die Grünen	nortonsafe.search.ask.com	grünen politiker
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidat die grünen
Elite/Verbal—Die Grünen	google.de	spitzenkandidat grüne
Elite/Verbal—Die Grünen	google.de	grüne spitzenkandidaten
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidat der grünen
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	die grünen politiker
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	die grünen spitzenkandidat bundestagswahl 2017
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	die grünen spitzenkandidat
Elite/Verbal—Die Grünen	de.search.yahoo.com	spitzenkandidaten grüne
Elite/Verbal—Die Grünen	google.de	Katrin Göring-Eckhardt
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—Die Grünen	google.de	grüne spitzenkandidat

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—Die Grünen	google.de	grüne kandidat
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	bing.com	grüne chef
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	kandidat grüne
Elite/Verbal—Die Grünen	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—Die Grünen	google.de	spitzenkandidat Grüne
Elite/Verbal—Die Grünen	google.de	Spitzenkandidaten partei
Elite/Verbal—Die Grünen	google.de	kandidat der Grünen
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	Namen von Spitzenkandidaten grüne
Elite/Verbal—Die Grünen	google.de	grünen kanzlerkandidat
Elite/Verbal—Die Grünen	google.de	grüne kandidaten 2017
Elite/Verbal—Die Grünen	google.de	die grünen
Elite/Verbal—Die Grünen	google.de	grünen polkitikerin
Elite/Verbal—Die Grünen	suche.t-online.de	Spitzenkandidat Die Grünen
Elite/Verbal—Die Grünen	google.de	grün
Elite/Verbal—Die Grünen	google.de	eckhard d_ring
Elite/Verbal—Die Grünen	google.de	spitzenkandidat grüne
Elite/Verbal—Die Grünen	google.de	Spitzenkandidat grüne
Elite/Verbal—Die Grünen	google.de	die grünen spitzenkandidat 2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	de.wikipedia.org	w/index.php
Elite/Verbal—Die Grünen	google.de	spitzenkandidat grüne
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidatenm
Elite/Verbal—Die Grünen	google.de	spitzenkandidat grün
Elite/Verbal—Die Grünen	google.de	Katrin G_ring-Eckhardt
Elite/Verbal—Die Grünen	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Grünen	google.de	Katrin G_ring-Eckhardt
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Grünen	google.de	spitzenkandidat die grünen
Elite/Verbal—Die Grünen	google.de	b90 die grüne kanzlerkandidat 2017
Elite/Verbal—Die Grünen	suche.web.de	grün
Elite/Verbal—Die Grünen	google.de	grün wahlprogramm
Elite/Verbal—Die Grünen	google.de	Spitzenkandidaten

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—Die Linke	google.de	spitzenkandidat der linken
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	linke
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	spitzenkandidaten der linken
Elite/Verbal—Die Linke	google.de	spitzenkandidat linke
Elite/Verbal—Die Linke	google.de	linke spitzenkandidat
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	die linke spitzenkandidat bundestagswahl 2017
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	die linke
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	die linke spitzenkandidat
Elite/Verbal—Die Linke	en.wikipedia.org	w/index.php
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—Die Linke	google.de	linke spitzenkandidat
Elite/Verbal—Die Linke	google.de	linke kandidat
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	linke spitzenkandidat
Elite/Verbal—Die Linke	bing.com	linke chef
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	kandidat linke
Elite/Verbal—Die Linke	de.search.yahoo.com	linke kandidat
Elite/Verbal—Die Linke	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—Die Linke	google.de	Spitzenkandidaten partei
Elite/Verbal—Die Linke	google.de	kandidat der Linken
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	Namen von Spitzenkandidaten linke
Elite/Verbal—Die Linke	google.de	linke politiker wahlprogramm
Elite/Verbal—Die Linke	google.de	linke kanzlerkandidat
Elite/Verbal—Die Linke	suche.t-online.de	Spitzenkandidat Linke
Elite/Verbal—Die Linke	google.dk	linke spitzenkandidat

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—Die Linke	google.de	Bartsch
Elite/Verbal—Die Linke	google.de	spitzenkandidat linke
Elite/Verbal—Die Linke	google.de	die linke spitzenkandidat 2017
Elite/Verbal—Die Linke	google.de	bundestagswahl 2017 die Linke
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	de.wikipedia.org	Sahra_Wagenknecht
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	spitzenkandidatenm
Elite/Verbal—Die Linke	google.de	spitzenkandidat linke
Elite/Verbal—Die Linke	google.de	die linke
Elite/Verbal—Die Linke	google.de	kandidaten linke
Elite/Verbal—Die Linke	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	spitzenkandidaten 2017
Elite/Verbal—Die Linke	google.de	spitzenkandidat die linke
Elite/Verbal—Die Linke	google.de	linke
Elite/Verbal—Die Linke	google.de	die linke kanzlerkandidat 2017
Elite/Verbal—Die Linke	google.de	die linke spitzenkandidat
Elite/Verbal—Die Linke	google.de	spitzenkandidatdie linke
Elite/Verbal—Die Linke	swagbucks.com	linke
Elite/Verbal—Die Linke	google.de	Spitzenkandidaten
Elite/Verbal—FDP	google.de	FDP lindner
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—FDP	google.de	spitzenkandidat fdp
Elite/Verbal—FDP	google.de	FDP
Elite/Verbal—FDP	bing.com	lindner fdp
Elite/Verbal—FDP	google.de	fdp
Elite/Verbal—FDP	google.de	spitzenkandidat fdp
Elite/Verbal—FDP	google.de	spitzenkandidat fdp
Elite/Verbal—FDP	sueddeutsche.de	politik/bundestagswahl-die-spitzenkandidaten-der-parteien-1.3520071
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—FDP	google.de	fdp spitzenkandidat bundestagswahl 2017
Elite/Verbal—FDP	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—FDP	google.nl	fdp partei
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—FDP	google.de	fdp spitzenkandidat
Elite/Verbal—FDP	google.de	fdp lindner
Elite/Verbal—FDP	google.de	fdp kandidat
Elite/Verbal—FDP	google.de	christian lindner
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	bing.com	fdp chef
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	de.search.yahoo.com	fdp kandidat
Elite/Verbal—FDP	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—FDP	google.de	Spitzenkandidaten partei
Elite/Verbal—FDP	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—FDP	google.de	Namen von Spitzenkandidaten FDP
Elite/Verbal—FDP	google.de	fdp politiker
Elite/Verbal—FDP	google.de	fdp kanzlerkandidat
Elite/Verbal—FDP	google.dk	fdp spitzenkandidat
Elite/Verbal—FDP	web.de	magazine/politik/wahlen/bundestagswahl/bundestagswahl-2017-fdp-afd-nah...
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	fdp.de	kandidat/christian-lindner
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	google.de	spitzenkandidatenm
Elite/Verbal—FDP	google.de	fdp lindner
Elite/Verbal—FDP	google.de	spitzenkandidat fdp
Elite/Verbal—FDP	google.de	fdp
Elite/Verbal—FDP	google.de	kandidaten fdp
Elite/Verbal—FDP	bing.com	spitzenkandidaten bundestagswahl 2017
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	google.de	spitzenkandidaten 2017
Elite/Verbal—FDP	google.de	spitzenkandidat fdp
Elite/Verbal—FDP	google.de	fdP
Elite/Verbal—FDP	google.de	fdp kanzlerkandidat 2017
Elite/Verbal—FDP	suche.web.de	fdp
Elite/Verbal—FDP	google.de	lindner
Elite/Verbal—FDP	fdp.de	kandidat/christian-lindner
Elite/Verbal—FDP	swagbucks.com	fdp

TABLE E4: Instances of cheating for Elite Verbal items

Item	Domain	Query
Elite/Verbal—FDP	google.de	Spitzenkandidaten
Elite/Verbal—SPD	facebook.com	martin%20schulz
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	google.de	spitzenkandidat spd
Elite/Verbal—SPD	sueddeutsche.de	politik/bundestagswahl-die-spitzenkandidaten-der-parteien-1.3520071
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	bing.com	spd spitzenkandidat 2017
Elite/Verbal—SPD	google.de	spd spitzenkandidat bundestagswahl
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	google.de	spd
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	bild.de	politik/inland/bundestagswahl2017/alle-informationen-im-liveticker-532...
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	bundestagswahl spitzenkandidaten
Elite/Verbal—SPD	google.de	Spitzenkandidaten partei
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	google.de	Namen von Spitzenkandidaten spd
Elite/Verbal—SPD	google.dk	spd spitzenkandidat
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	spd.de	
Elite/Verbal—SPD	de.search.yahoo.com	spd%20schulz
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	spitzenkandidatenm
Elite/Verbal—SPD	bundestagswahl-bw.de	spitzenkandidaten_btwahl2017
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	google.de	spitzenkandidaten 2017
Elite/Verbal—SPD	suche.web.de	spd
Elite/Verbal—SPD	google.de	Spitzenkandidaten

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Diesel hardware	google.de	dieselgopfel hardware-update
Event—Diesel hardware	google.de	diesel gipfel
Event—Diesel hardware	google.de	dieselgipfel hardware
Event—Diesel hardware	ecosia.org	eim Dieselgipfel haben sich die Autohersteller zur kostenlosen Hardwar...
Event—Diesel hardware	google.de	Beim Dieselgipfel haben sich die Autohersteller zur kostenlosen Hardwa...
Event—Diesel hardware	google.de	Beim Dieselgipfel haben sich die Autohersteller zur kostenlosen Hardwa...
Event—Diesel hardware	google.de	Beim Dieselgipfel haben sich die Autohersteller zur kostenlosen Hardwa...
Event—Diesel hardware	google.de	aus f�r dieselfahrzeuge bis 2030
Event—Diesel hardware	google.de	kostenlose hardware updates dieselgipfel
Event—Diesel hardware	google.de	kostenloses hardware update dieselgipfel
Event—Diesel hardware	google.de	diesel gipfel
Event—Diesel hardware	google.de	diesel gipfel
Event—Dobrind diesel	google.de	dobrind dieselfahrzeuge 2030
Event—Dobrind diesel	google.de	dobrindt
Event—Dobrind diesel	ecosia.org	undesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bi...
Event—Dobrind diesel	google.de	Bundesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bis 20...
Event—Dobrind diesel	google.de	dobrindt dieselfahrzeuge
Event—Dobrind diesel	google.de	Bundesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bis 20...
Event—Dobrind diesel	google.de	dieselgipfel
Event—Dobrind diesel	google.de	aus f�r diesel
Event—Dobrind diesel	de.search.yahoo.com	dobrindt alexander
Event—Dobrind diesel	google.de	Bundesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bis 20...
Event—Dobrind diesel	google.de	dobrind aus f�r dieselfahrzeuge
Event—Dobrind diesel	google.de	dobrindt aus f�r diesel 2030
Event—Dobrind diesel	google.de	dieselfahrzeuge abschaffen bis 2030
Event—Dobrind diesel	google.de	dobrind%2Bdiesel
Event—Dobrind diesel	google.de	dieselverbot bis 2030
Event—Dobrind diesel	google.de	Bundesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bis 20...
Event—Dobrind diesel	google.de	aus f�r dieselfahrzeuge
Event—Dobrind diesel	google.de	Dobrindt %2B Diesel
Event—Dobrind diesel	google.de	Bundesverkehrsminister Dobrindt hat das Aus f�r Dieselfahrzeuge bis 20...
Event—Fipronil eggs	google.de	Wegen m_glicher Belastung durch das Insektizid Fipronil nehmen einige ...
Event—Fipronil eggs	google.de	Fipronil
Event—Fipronil eggs	google.de	Wegen m_glicher Belastung durch das Insektizid Fipronil nehmen einige ...
Event—Morales referendum	google.de	massenproteste bolivien
Event—Morales referendum	bing.com	bolivien massenproteste%3F
Event—Morales referendum	bing.com	evo morales

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Morales referendum	google.de	evo morales massenproteste
Event—Morales referendum	google.de	morales verfassungsreferendum
Event—Morales referendum	ecosia.org	Ein vom bolivianischen Pr_sidenten Evo Morales initiiertes Verfassungs...
Event—Morales referendum	google.de	Ein vom bolivianischen Pr_sidenten Evo Morales initiiertes Verfassungs...
Event—Morales referendum	google.de	evo morales
Event—Morales referendum	google.de	evo morales
Event—Morales referendum	google.de	Ein vom bolivianischen Pr_sidenten Evo Morales initiiertes Verfassungs...
Event—Morales referendum	google.de	morales verfassungsmemorandum
Event—Morales referendum	google.de	morales verfassungsreferendum
Event—Morales referendum	google.de	evo morales bolivien
Event—Morales referendum	bing.com	morales
Event—Morales referendum	google.de	Ein vom bolivianischen Pr_sidenten Evo Morales initiiertes Verfassungs...
Event—Morales referendum	google.de	bolivien
Event—Morales referendum	google.de	evo morales
Event—Obamacare revoked	bing.com	abschaffung obamacare
Event—Obamacare revoked	google.de	us senat obamacare
Event—Obamacare revoked	google.de	Der US-Senat hat die Abschaffung von Obamacare beschlossen.
Event—Obamacare revoked	google.de	senat obamacare
Event—Obamacare revoked	google.de	Der US-Senat hat die Abschaffung von Obamacare beschlossen.
Event—Obamacare revoked	google.de	us senat obamacare
Event—Obamacare revoked	google.de	abschaffung obamacare
Event—Obamacare revoked	google.de	Der US-Senat hat die Abschaffung von Obamacare beschlossen.
Event—Obamacare revoked	google.de	abschaffung obamacare
Event—Obamacare revoked	google.de	obamacare
Event—Obamacare revoked	google.de	Der US-Senat hat die Abschaffung von Obamacare beschlossen.
Event—Obamacare revoked	bing.com	us senat abschaffung obamacare
Event—Obamacare revoked	google.de	Der US-Senat hat die Abschaffung von Obamacare beschlossen.
Event—Obamacare revoked	google.de	obamacare
Event—Sanctions N. Korea	google.de	un sanktionen gegen nordkorea
Event—Sanctions N. Korea	google.de	sicherheitsrat sanktinen nordjoprea
Event—Sanctions N. Korea	google.de	Der UN-Sicherheitsrat hat einstimmig h_rtete Sanktionen gegen Nordkore...
Event—Sanctions N. Korea	google.de	un sicherheitsrat, h_rtete sanktionen gegen nordkorea
Event—Sanctions N. Korea	google.de	Der UN-Sicherheitsrat hat einstimmig h_rtete Sanktionen gegen Nordkore...
Event—Sanctions N. Korea	google.de	un sankzionen gegne nordkorea
Event—Sanctions N. Korea	google.de	Der UN-Sicherheitsrat hat einstimmig h_rtete Sanktionen gegen Nordkore...
Event—Sanctions N. Korea	google.de	h_rtete sanktionen gegen nordkorea
Event—Sanctions N. Korea	google.de	harte sanktionen gegen nordkorea

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Sanctions N. Korea	google.de	un sicherheitsrat sanktionen nordkorea
Event—Sanctions N. Korea	google.de	h_rtere ma_nahmen nordkorea
Event—Sanctions N. Korea	google.de	Der UN-Sicherheitsrat hat einstimmig h_rtere Sanktionen gegen Nordkore...
Event—Sanctions N. Korea	google.de	un nordkorea
Event—Schulz/Basic Income	google.de	schulz grundeinkommen
Event—Schulz/Basic Income	google.de	schulz fordert bedingungsloses Grundeinkommen
Event—Schulz/Basic Income	google.de	schulz martin grundeinkommen bedingungsloses
Event—Schulz/Basic Income	google.de	schulz grundeinkommen
Event—Schulz/Basic Income	google.de	SPD-Kanzlerkandidat Schulz hat die Einfhrung eines bedingungslosen Gr...
Event—Schulz/Basic Income	google.de	martin schulz
Event—Schulz/Basic Income	google.de	SPD-Kanzlerkandidat Schulz hat die Einfhrung eines bedingungslosen Gr...
Event—Schulz/Basic Income	google.de	bedingungsloses einkommen deutschland
Event—Schulz/Basic Income	google.de	schulz fordert bedingungsloses grundeinkommen
Event—Schulz/Basic Income	google.de	schulz grundeinkommen
Event—Schulz/Basic Income	google.de	schulz einfhrung grundeinkommen
Event—Schulz/Basic Income	google.de	schulz grundeinkommen
Event—Schulz/Basic Income	google.de	SPD-Kanzlerkandidat Schulz hat die Einfhrung eines bedingungslosen Gr...
Event—Schulz/Basic Income	google.de	schulz grundeinkommen
Event—Supermarket attack	google.de	Ein Pal%C3%A4stinenser hat in einem Supermarkt in Hamburg auf Menschen...
Event—Supermarket attack	google.de	pal_stinenser hamburg supermarket
Event—Supermarket attack	google.de	pal_stinenser supermarket hamburg messer
Event—Supermarket attack	focus.de	suehe/messerstich%20hamburg
Event—Supermarket attack	ecosia.org	Ein Pal_stinenser hat in einem Supermarkt in Hamburg auf Menschen eing...
Event—Supermarket attack	google.de	Ein Pal_stinenser hat in einem Supermarkt in Hamburg auf Menschen eing...
Event—Supermarket attack	google.de	Ein Pal_stinenser hat in einem Supermarkt in Hamburg auf Menschen eing...
Event—Supermarket attack	google.de	supermarkt hamburg
Event—Supermarket attack	google.de	Ein Pal_stinenser hat in einem Supermarkt in Hamburg auf Menschen eing...
Event—Supermarket attack	google.de	□berfall auf supermarket in hamburg
Event—Supermarket attack	google.de	Ein Pal_stinenser hat in einem Supermarkt in Hamburg auf Menschen eing...
Event—Supermarket attack	google.de	pal_stinenser supermarket
Event—Supermarket attack	google.de	pal_stinenser hamburg
Event—Supermarket attack	google.de	hamburg messerattacke
Event—Supermarket attack	google.de	supermarkt hamburg t_ter
Event—Trump's Chief of Staff	bing.com	usa neuer stabchef
Event—Trump's Chief of Staff	google.de	stabsschef trump general
Event—Trump's Chief of Staff	google.de	trump general
Event—Trump's Chief of Staff	ecosia.org	stabschef wei_es haus

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Trump's Chief of Staff	google.de	us senat stabschef
Event—Trump's Chief of Staff	google.de	general%2C neuer staabschef
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Trump's Chief of Staff	google.de	stabschef in den usa
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Trump's Chief of Staff	google.de	trump general stabschef
Event—Trump's Chief of Staff	google.de	general stabschef usa
Event—Trump's Chief of Staff	google.de	trump neuer stabschef
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Trump's Chief of Staff	google.de	stabschef usa
Event—Trump's Chief of Staff	google.de	US-Pr_sident Donald Trump hat einen General zum neuen Stabschef ernann...
Event—Twesten left greens	google.de	elke twesten
Event—Twesten left greens	ecosia.org	ie Grnen-Abgeordnete Elke Twesten hat ihre Fraktion im nieders_chsis...
Event—Twesten left greens	google.de	Die Grnen-Abgeordnete Elke Twesten hat ihre Fraktion im nieders_chsis...
Event—Twesten left greens	google.de	elke twesten
Event—Twesten left greens	google.de	Die Grnen-Abgeordnete Elke Twesten hat ihre Fraktion im nieders_chsis...
Event—Twesten left greens	google.de	Die Grnen-Abgeordnete Elke Twesten hat ihre Fraktion im nieders_chsis...
Event—Twesten left greens	google.de	elke twesten
Event—Twesten left greens	google.de	Elke twesten
Event—Twesten left greens	google.de	Die Grnen-Abgeordnete Elke Twesten hat ihre Fraktion im nieders_chsis...
Event—Twesten left greens	google.de	elke twesten
Event—Twesten left greens	ecosia.org	elke twesten
Event—Air Berlin-Ryan Air	google.de	ryanair airberlin
Event—Air Berlin-Ryan Air	google.de	ryanair air berlin
Event—Air Berlin-Ryan Air	google.de	Die Fluggesellschaft Ryanair hat angekndigt%2C gro_e Teile der insolv...
Event—Air Berlin-Ryan Air	google.de	ryan air air berlin
Event—Air Berlin-Ryan Air	google.de	ryanair air berlin
Event—Air Berlin-Ryan Air	google.de	rayanair%2Bairberil
Event—Air Berlin-Ryan Air	google.de	air berlin %C3%BCbernahme
Event—Arpper resignation	google.de	arppe
Event—Arpper resignation	google.de	arppe
Event—Arpper resignation	google.de	Der bisherige AfD-Fraktionsvize in Mecklenburg-Vorpommern Arppe ist na...
Event—Arpper resignation	google.de	Der bisherige AfD-Fraktionsvize in Mecklenburg-Vorpommern Arppe ist na...
Event—Arpper resignation	google.de	Arppe
Event—Diesel hardware	google.de	merkel hardware automobilhersteller



TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Diesel hardware	google.nl	merkel asked auto updates
Event—Diesel hardware	google.de	merkel hardware updates
Event—Diesel hardware	google.de	merkel automobil hardware update
Event—Diesel hardware	google.de	Angela Merkel hat die deutschen Automobilhersteller aufgefordert%2C ko...
Event—Diesel hardware	google.de	Merkel hardwareupdate
Event—Diesel hardware	google.de	Angela Merkel%2BHardware Update
Event—EU wall Hungary	google.nl	hungary fence
Event—EU wall Hungary	google.de	Die EU-Kommission hat sich bereiterkl_rt%2C sich an den Kosten fr den...
Event—EU wall Hungary	google.de	Grenzzaun eu Kommission
Event—Merkel greens	google.de	merkel wunschkoalition
Event—Merkel greens	google.de	merkel wunschkoalition
Event—Merkel greens	google.de	Angela Merkel eine Koalition mit den Grnen zu Ihrer Wunschkoalition n...
Event—Merkel greens	google.de	Angela merkel grne
Event—N. Korea H-bomb	google.de	Nordkorea hat den Test einer Wasserstoffbombe vermeldet.
Event—N. Korea H-bomb	google.de	Nordkorea hat den Test einer Wasserstoffbombe vermeldet.
Event—N. Korea H-bomb	google.de	nordkorea wasserstoffbombe
Event—N. Korea H-bomb	google.de	nordkorea wasserstoffbombentest
Event—Schulz education	google.de	schulz konzept bildungsreform
Event—Schulz education	google.com	SPD-Kanzlerkandidat Schulz hat ein Konzept fr%C3%BCr eine Bildungsrefor...
Event—Schulz education	google.de	schulz bildungsreform
Event—Schulz education	google.de	schulz konzept bildungsreform
Event—Schulz education	bing.com	Schulz bildungsreform
Event—Texas hurricane	google.com	schulz bildungsreform
Event—Texas hurricane	google.de	Teile von S%C3%BCdtexas %C3%BCberflutet
Event—Texas hurricane	google.de	Durch einen Hurrikan sind weite Teile von Sdtexas berflutet worden....
Event—Texas hurricane	google.de	hurrikan texas
Event—Texas hurricane	google.de	Durch einen Hurrikan sind weite Teile von Sdtexas berflutet worden....
Event—Turkey arrest	google.de	trkei festnahme deutsche
Event—Turkey arrest	google.de	Festnahmen trkei
Event—Turkey arrest	google.de	Trkei%2Bfestnahme deutscher Staatsbrger
Event—Unemployment rate	google.de	arbeitslosenquote im august
Event—Unemployment rate	google.de	Arbeitslosenquote ist im August auf unter 4%25 gesunken.
Event—Unemployment rate	google.de	arbeitslosenquote
Event—Unemployment rate	bing.com	arbeitslosenquote august 2017
Event—Unemployment rate	google.de	arbeitslosenquote august 2017
Event—Unemployment rate	google.de	Die Arbeitslosenquote ist im August auf unter 4%25 gesunken.
Event—Unemployment rate	google.de	Arbeitslosenquote august 2017



TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Unemployment rate	google.de	arbeitslosenquote bayern 2017
Event—Unemployment rate	google.de	arbeitslosenquote deutschland
Event—Bundestag period	google.de	bundestag wahlperiode verl_ngern
Event—Bundestag period	t-online.de	nachrichten/deutschland/bundestagswahl/id_81846732/umfrage-bundestagsw...
Event—Bundestag period	google.de	Wer will Wahlperiode von 4 auf 5 Jahre verl_ngern
Event—Bundestag period	google.de	Die Parteien im Bundestag m_chten die Wahlperiode von vier auf f nf Ja...
Event—Bundestag period	google.de	Wahlkampf 2017%2Bstreitfragen%2BInternet
Event—Etihad-Air Berlin	google.de	etihad airways gebot
Event—Etihad-Air Berlin	google.de	Die Fluggesellschaft Etihad Airways hat im Bieterwettstreit ein Angebo...
Event—Etihad-Air Berlin	google.de	bieter bei air berlin
Event—Etihad-Air Berlin	google.de	etihad airway
Event—Etihad-Air Berlin	google.de	etihad airways air berlin
Event—Etihad-Air Berlin	google.de	etihad airways buys air berlin
Event—Gauland convicted	google.de	gauland bew_hrungsstrafe
Event—Gauland convicted	google.de	AfD-Spitzenkandidat Alexander Gauland ist wegen Volksverhetzung
Event—Gauland convicted	google.de	gauland volkisverhetzung verurteiltz
Event—Gauland convicted	google.de	gauland
Event—Gauland convicted	google.de	alexander gauland
Event—Gauland convicted	google.de	gauland in 1. Instanz wegen Volksverhetzung verurteilt
Event—Gauland convicted	google.de	gauland bew_hrungsstrafe
Event—Gauland convicted	google.de	gauland
Event—Gauland convicted	google.de	AfD-Spitzenkandidat Alexander Gauland ist wegen Volksverhetzung in ers...
Event—Gauland convicted	google.de	Gauland
Event—Gauland convicted	google.de	Gauland strafe
Event—Gauland convicted	google.de	Gauland volksverhetzung
Event—Gauland convicted	google.de	alexander gauland
Event—Gauland convicted	google.de	Alexander Gauland
Event—Gauland convicted	google.de	gauland
Event—Gauland convicted	google.de	urteil gegen gauland
Event—Gauland convicted	bing.com	gauland
Event—Greens Jamaica	google.de	jamaika koalition
Event—Greens Jamaica	google.de	fdp bundesparteitag jamaika
Event—Greens Jamaica	google.de	Die Gr_enen haben auf ihrem Bundesparteitag den Eintritt in eine Jamaik...
Event—Greens Jamaica	google.de	jamaika koalition gr_ne
Event—Greens Jamaica	google.de	die gr_enen politiker
Event—Greens Jamaica	google.de	Die gr_enen jamaika coalition
Event—Greens Jamaica	google.de	CDU%2FCSU SPD Gr_ne Linke FDP AfD wei_nicht %2F keine Angabe Alle B

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Juncker Euro	google.de	junker euro alle _nder
Event—Juncker Euro	google.de	juncker euro
Event—Juncker Euro	google.de	EU-Kommissionspr_sident Juncker hat sich in einer Grundsatzrede daf□r ...
Event—Juncker Euro	google.de	Juncker Euro in allen l_ndern
Event—London bomb	google.de	london u bahn bombe
Event—London bomb	google.de	bombe london undergrunn
Event—London bomb	google.de	Bei der Explosion einer Bombe in der Londoner U-Bahn sind viele Mensch...
Event—London bomb	google.de	Explosion londoner u-Bahnd
Event—Off-the-books Weidel	spiegel.de	politik/deutschland/afd-alice-weidel-droht-neuer-aerger-um-die-beschae...
Event—Off-the-books Weidel	google.de	weidel schweiz syrische asylbewerberin
Event—Off-the-books Weidel	zeit.de	politik/deutschland/2017-09/alternative-fuer-deutschland-alice-weidel-...
Event—Off-the-books Weidel	google.de	Recherchen der ZEIT haben ergeben%2C dass AfD-Politikerin Alice Weidel...
Event—Off-the-books Weidel	google.de	Alice weidel%2Bschwarzarbeit
Event—Resolution N. Korea	google.de	veto russland raketenstart nordkorea
Event—Resolution N. Korea	google.de	un sicherheitsrat resolution nordkorea
Event—Resolution N. Korea	google.de	Nach einem erneuten Raketenstart Nordkoreas konnte sich der UN-Sicherh...
Event—Resolution N. Korea	google.de	Nach einem erneuten Raketenstart Nordkoreas konnte sich der UN-Sicherh...
Event—Schulz TV debate	google.de	nordkorea veto russland
Event—Schulz TV debate	google.de	martin schulz offener brieg duell
Event—Schulz TV debate	google.de	Martin Schulz hat Angela Merkel in einem offenen Brief zu einem erneut...
Event—Schulz TV debate	google.de	schulz neues tv duell
Event—Schulz TV debate	google.de	Martin Schulz hat Angela Merkel in einem offenen Brief zu einem erneut...
Event—Volkswagen pledge	google.de	TV duell schulz offener brief
Event—Volkswagen pledge	google.de	vw 2040 keine
Event—Volkswagen pledge	google.de	Volkswagen hat angek□ndigt%2C ab sp_testens 2040 keine Autos mit Verbr...
Event—Volkswagen pledge	google.de	volkswagen 2040
Event—Volkswagen pledge	google.de	Volkswagen verbrennungsmotor 2040
Event—Volkswagen pledge	google.de	Volkswagen 2040
Event—Bavaria rape	google.de	afghanen oberbayern vergewaltigung
Event—Bavaria rape	google.de	m_dchen 16 afgahnien veregwatigt
Event—Bavaria rape	google.de	vergewaltigung 16j_hriger in oberbayern
Event—Bavaria rape	google.de	16 j_hrige bayern
Event—CCC hackers	google.de	chaos computer club
Event—CCC hackers	google.de	chaos computer club bundestagswahl
Event—CCC hackers	google.de	russische hacker chaos sofware bundestagswahl
Event—CCC hackers	google.de	chaos computer club
Event—Coalition Gauland	google.de	gauland koalition mit fdp

TABLE E5: Instances of cheating for Event items

Item	Domain	Query
Event—Coalition Gauland	bing.com	alexander gauland
Event—Coalition Gauland	google.de	afd koalition
Event—Coalition Gauland	google.de	gauland
Event—Coalition Gauland	google.de	Gauland koalition
Event—FDP third party	google.de	fdp bundestagswahl
Event—FDP third party	gutefrage.net	frage/wie-schaffen-wir-es-das-die-csu-auch-in-zukunft-staerkste-partei...
Event—FDP third party	welt.de	politik/bundestagswahl/article168296921/Ergebnis-und-Wahlsieger-im-Wah...
Event—FDP third party	google.de	maas
Event—Mexico earthquake	google.de	erdbeben mexiko 2017
Event—Mexico earthquake	google.de	erdbeben mexiko 2017
Event—Myanmar	google.de	myamar flucht
Event—Myanmar	google.de	myanmar
Event—Myanmar	google.de	myanmar
Event—Myanmar	google.de	myanmar
Event—Powder letters	google.de	drohbrioefe rasierklingen spitzenpolitiker
Event—Powder letters	news.google.com	news/search/section/q/drohbriefe/drohbriefe
Event—Powder letters	google.de	drohbriefe an politiker
Event—Powder letters	google.de	brief rasierklnge
Event—Rape stats	google.de	joachim hermann vergewaltigungen
Event—Rape stats	google.de	vergewaltigungen in deutschland gesunken
Event—Rape stats	google.de	Vergewaltigungen Herrman
Event—Tegel referendum	google.de	flughafen tegel
Event—Tegel referendum	google.de	flughafen tegel
Event—Tegel referendum	google.de	Volksentscheid tegel
Event—Tegel referendum	google.de	Volksentscheid zum Flughafen Tegel in Berlin haben mehr als 60%25 der ...
Event—Tegel referendum	google.de	volksentscheid tegel
Event—Tegel referendum	google.de	Abstimmung tegel
Event—Tegel referendum	google.de	volksentscheid tegel ergebnis
Event—Trump Iran	google.de	un generalversdmmlung atomabkommen
Event—Trump Iran	google.de	trump iran

APPENDIX F DOCUMENTATION OF SURVEY ITEMS

FIGURE F1: Factual — Vote importance; waves 2 and 5

YouGov®

Bei der Bundestagswahl haben Sie zwei Stimmen, die Erststimme und die Zweitstimme. Welche der beiden ist entscheidend für die relative Stärke der Parteien im Bundestag?

die Erststimme
 die Zweitstimme
 beide sind gleich wichtig
 weiß nicht

[Translated] In the federal election you have two votes, the first vote and the second vote. Which of the two is decisive for the relative strength of the parties in the Bundestag?

- The first vote
- The second vote [CORRECT]**
- Both are equally important
- Don't know

FIGURE F2: Factual — Chancellor election; waves 2 and 5

YouGov®

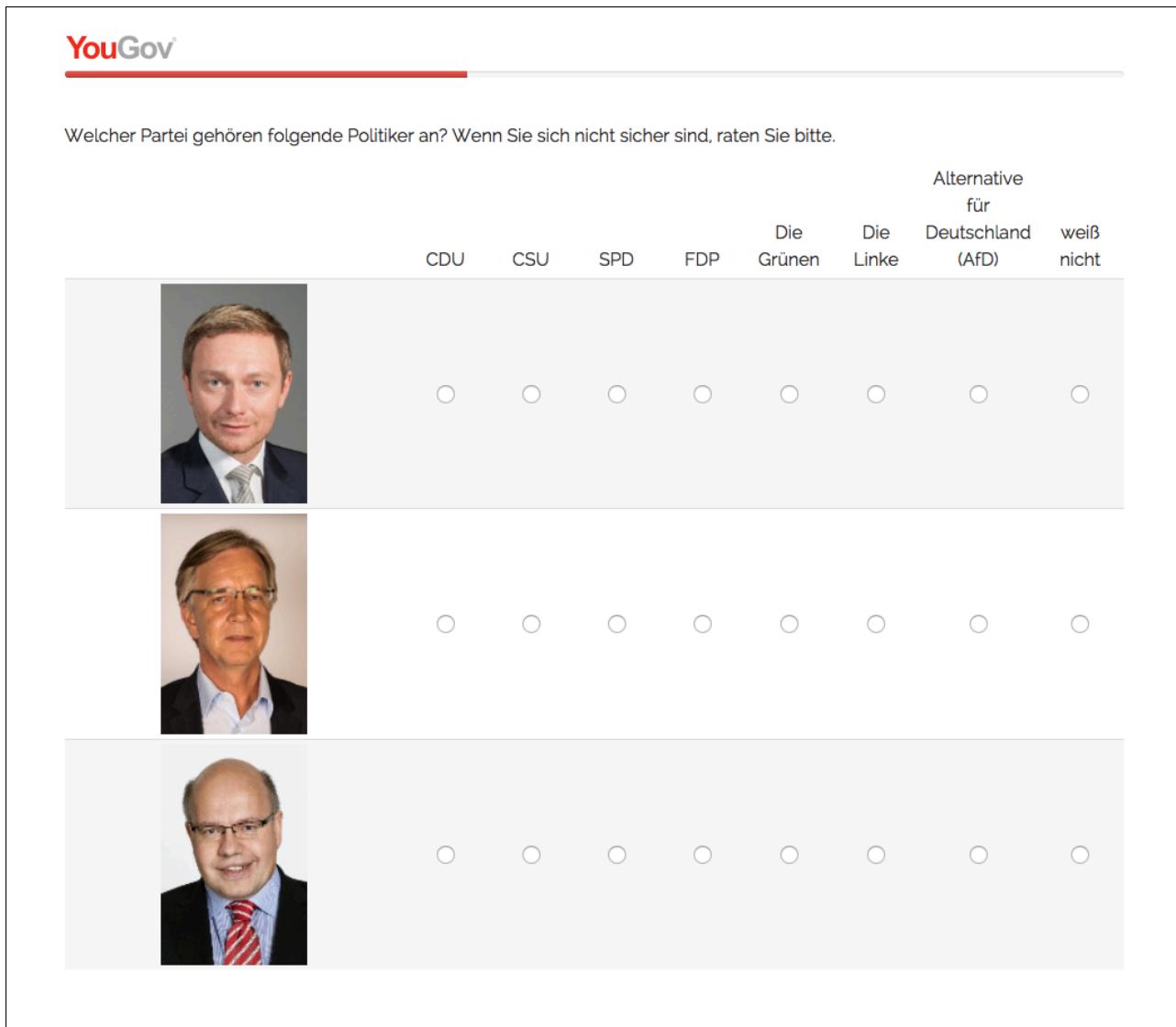
Durch wen wird die Bundeskanzlerin bzw. der Bundeskanzler der Bundesrepublik Deutschland gewählt?

- Bundesrat
- Bundesversammlung
- Bundestag
- Regierungskabinett
- Der Bundeskanzler wird nicht gewählt, er wird durch die stärkste Partei im Parlament bestimmt
- weiß nicht

[Translated] By whom is the chancellor of the Federal Republic of Germany elected?

- Federal Council (Bundesrat)
- Federal Convention (Bundesversammlung)
- Federal Parliament (Bundestag) [CORRECT]**
- Cabinet of Germany (Regierungskabinett)
- The Chancellor is not elected, they are determined by the strongest party in parliament
- Don't know

FIGURE F3: Elite - Visual — Politician's party affiliation; waves 2 and 5



[Translated] Which party do the following politicians belong to? If you are not sure, please mark it.

- Christian Lindner (**FDP**)
 - Dietmar Bartsch (**Die Linke**)
 - Peter Altmaier (**CDU**)
- CDU
 ...
 AfD
 Don't know

FIGURE F4: Elite - Visual — Politician's party affiliation; waves 2 and 5

YouGov®

Welcher Partei gehören folgende Politiker an? Wenn Sie sich nicht sicher sind, raten Sie bitte.

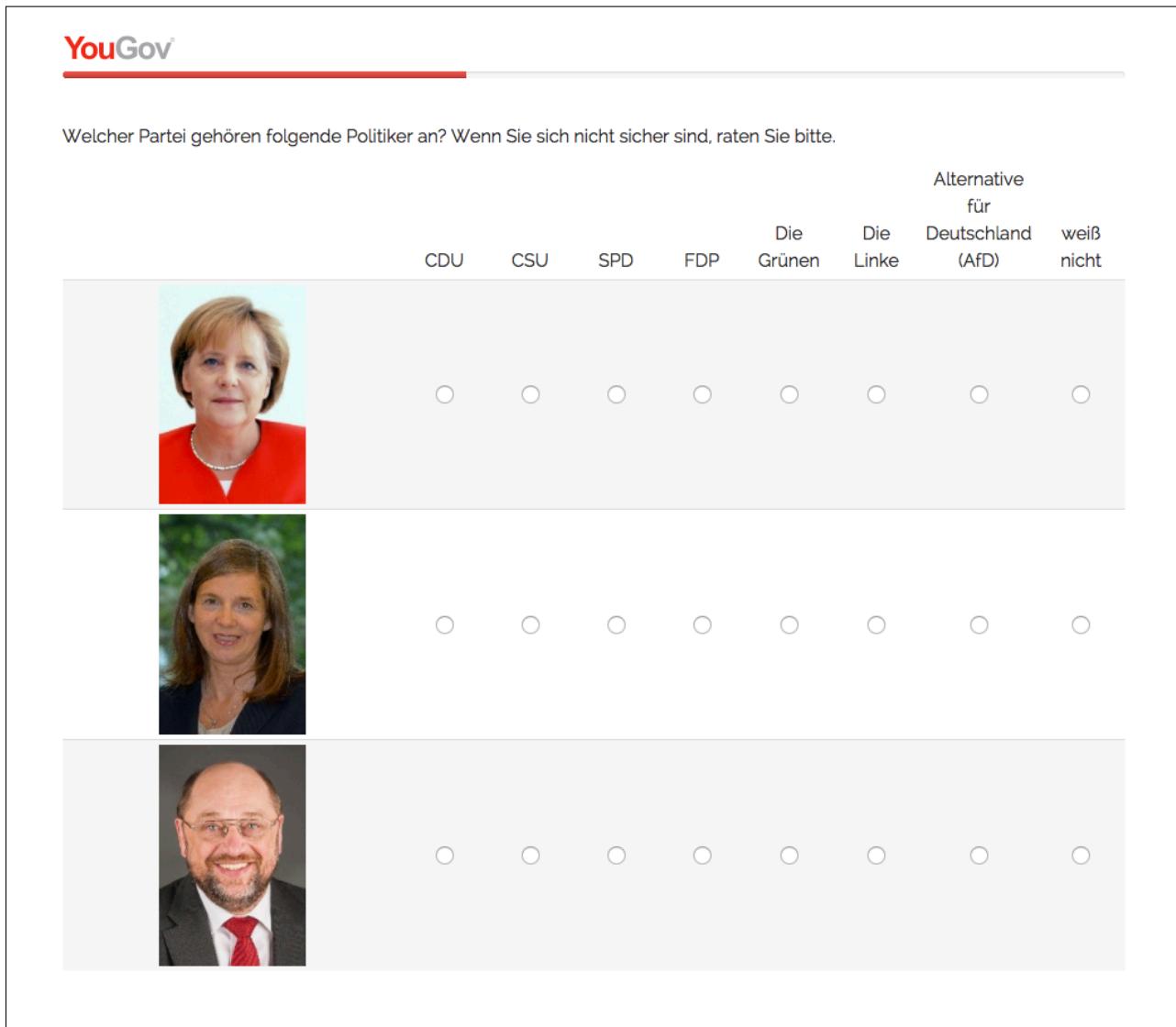
	CDU	CSU	SPD	FDP	Die Grünen	Die Linke	Deutschland (AfD)	weiß nicht
	<input type="radio"/>							
	<input type="radio"/>							
	<input type="radio"/>							

[Translated] Which party do the following politicians belong to? If you are not sure, please mark it.

- Alice Weidel (**AfD**)
- Heiko Maas (**SPD**)
- Anton Hofreiter (**Die Grünen**)

- CDU
- ...
- AfD
- Don't know

FIGURE F5: Elite - Visual — Politician's party affiliation; waves 2 and 5



[Translated] Which party do the following politicians belong to? If you are not sure, please mark it.

- Angela Merkel (**CDU**)
 - Katrin Göring-Eckardt (**Die Grünen**)
 - Martin Schulz (**SPD**)
- CDU
 ...
 AfD
 Don't know

FIGURE F6: Elite - Verbal — Party leaders; wave 4

YouGov

Kennen Sie den Namen von einem oder vielleicht sogar mehreren der Spitzenkandidaten der folgenden Parteien? Bitte nennen Sie uns in diesem Fall den oder die Namen in den entsprechenden Feldern!

CDU/CSU: []

SPD: []

FDP: []

Die Linke: []

B'90/Die Grünen: []

AfD: []

[Translated] Do you know the name of one or even more of the top candidates from the following parties? In this case, please tell us the name, or names, in the corresponding fields.

- CDU/CSU
- ...
- AfD

FIGURE F7: Events; wave 2

YouGov

Im Folgenden sehen sie einige Ereignisse, die in den letzten Wochen stattgefunden haben oder nicht. Bitte wählen Sie die Ereignisse aus, von denen Sie wissen oder glauben, dass sie tatsächlich stattgefunden haben!

- Der UN-Sicherheitsrat hat einstimmig härtere Sanktionen gegen Nordkorea beschlossen.
- Wegen möglicher Belastung durch das Insektizid Fipronil nehmen einige deutsche Supermarktketten Eier aus dem Sortiment.
- US-Präsident Donald Trump hat einen General zum neuen Stabschef ernannt.
- Ein Palästinenser hat in einem Supermarkt in Hamburg auf Menschen eingestochen.
- Beim Dieselgipfel haben sich die Autohersteller zur kostenlosen Hardware-Updates von Euro-5- und Euro-6-Fahrzeugen verpflichtet.
- Bundesverkehrsminister Dobrindt hat das Aus für Dieselfahrzeuge bis 2030 gefordert.
- Der US-Senat hat die Abschaffung von Obamacare beschlossen.
- Ein vom bolivianischen Präsidenten Evo Morales initiiertes Verfassungsreferendum hat zu Massenprotesten geführt.
- SPD-Kanzlerkandidat Schulz hat die Einführung eines bedingungslosen Grundeinkommens gefordert.
- Die Grünen-Abgeordnete Elke Twesten hat ihre Fraktion im niedersächsischen Landtag verlassen.
- keines der genannten Ereignisse hat sich zugetragen

[Translated] Below are some events that have or have not occurred in the past few weeks. Please select the events you know or believe actually happened.

- The UN Security Council has unanimously approved tougher sanctions against North Korea. [TRUE]
- Some German supermarket chains are removing eggs from the range due to the potential contamination with the insecticide fipronil. [TRUE]
- US President Donald Trump has appointed a general as the new chief of staff. [TRUE]
- A Palestinian person stabbed people in a supermarket in Hamburg [TRUE]
- At the Diesel Summit, the car manufacturers committed themselves to free hardware updates for Euro 5 and Euro 6 vehicles. [FALSE]
- Federal Transport Minister Dobrindt has called for the end of diesel vehicles by 2030. [FALSE]
- The US Senate has decided to abolish Obamacare. [FALSE]
- A constitutional referendum initiated by Bolivian President Evo Morales has led to mass protests. [FALSE]
- SPD candidate for chancellor Schulz has called for the introduction of an universal basic income. [FALSE]
- The Green MP Elke Twesten has left her parliamentary group in Lower Saxony. [TRUE]
- None of the events mentioned have occurred.

FIGURE F8: Events; wave 3

YouGov®

Im Folgenden sehen sie einige Ereignisse, die in den letzten Wochen stattgefunden haben oder nicht. Bitte wählen Sie die Ereignisse aus, von denen Sie wissen oder glauben, dass sie tatsächlich stattgefunden haben!

- In der Türkei sind zwei deutsche Staatsbürger aufgrund politischer Vorwürfe festgenommen worden.
- Die Fluggesellschaft Ryanair hat angekündigt, große Teile der insolventen Fluglinie Air Berlin übernehmen zu wollen.
- keines der genannten
- Der bisherige AfD-Fraktionsvize in Mecklenburg-Vorpommern Arppe ist nach Vorwürfen zu gewaltverherrlichenden Äußerungen in Online-Chats zurückgetreten.
- Die EU-Kommission hat sich bereiterklärt, sich an den Kosten für den Bau eines Grenzzauns an der ungarischen Grenze zum Balkan zu beteiligen.
- SPD-Kanzlerkandidat Schulz hat ein Konzept für eine Bildungsreform vorgestellt.
- Nordkorea hat den Test einer Wasserstoffbombe vermeldet.
- Angela Merkel hat die deutschen Automobilhersteller aufgefordert, kostenlose Hardware-Updates zur Verfügung zu stellen.
- Angela Merkel eine Koalition mit den Grünen zu Ihrer Wunschkoalition nach der Wahl erklärt.
- Die Arbeitslosenquote ist im August auf unter 4% gesunken.
- Durch einen Hurrikan sind weite Teile von Südtexas überflutet worden.

[Translated] Below are some events that have or have not occurred in the past few weeks. Please select the events you know or believe actually happened.

- Two German citizens have been arrested in Turkey on political charges. [TRUE]
- The airline Ryanair has announced that it intends to take over large parts of the insolvent airline Air Berlin. [FALSE]
- None of the events mentioned have occurred.
- The previous AfD parliamentary deputy in Mecklenburg-Western Pomerania Arppe has resigned after allegations of expressions glorifying violence in online chats. [TRUE]
- The EU Commission has agreed to contribute to the costs of building a border fence on the Hungarian border with the Balkans. [FALSE]
- SPD chancellor candidate Schulz has presented a concept for an educational reform. [TRUE]
- North Korea has announced the test of a hydrogen bomb. [TRUE]
- Angela Merkel has asked German car manufacturers to provide free hardware updates. [FALSE]
- Angela Merkel declared a coalition with the Greens as her desired coalition after the election. [FALSE]
- The unemployment rate fell below 4% in August. [FALSE]
- Large parts of southern Texas have been flooded by a hurricane. [TRUE]

FIGURE F9: Events; wave 4



Im Folgenden sehen sie einige Ereignisse, die in den letzten Wochen stattgefunden haben oder nicht. Bitte wählen Sie die Ereignisse aus, von denen Sie wissen oder glauben, dass sie tatsächlich stattgefunden haben!

- Nach einem erneuten Raketenstart Nordkoreas konnte sich der UN-Sicherheitsrat nach einem Veto Russlands und Chinas nicht auf eine Resolution einigen.
- AfD-Spitzenkandidat Alexander Gauland ist wegen Volksverhetzung in erster Instanz zu einer fünfmonatigen Bewährungsstrafe verurteilt worden.
- Die Fluggesellschaft Etihad Airways hat im Bieterwettstreit ein Angebot für die insolvente Fluglinie Air Berlin abgegeben.
- Die Parteien im Bundestag möchten die Wahlperiode von vier auf fünf Jahre verlängern.
- Die Grünen haben auf ihrem Bundesparteitag den Eintritt in eine Jamaika-Koalition mit der CDU/CSU und der FDP ausgeschlossen.
- EU-Kommissionspräsident Juncker hat sich in einer Grundsatzrede dafür ausgesprochen, den Euro in allen Ländern der Europäischen Union einzuführen.
- Bei der Explosion einer Bombe in der Londoner U-Bahn sind viele Menschen verletzt worden.
- Volkswagen hat angekündigt, ab spätestens 2040 keine Autos mit Verbrennungsmotor mehr produzieren zu wollen.
- keines der genannten Ereignisse hat sich zugetragen.
- Recherchen der ZEIT haben ergeben, dass AfD-Politikerin Alice Weidel an ihrem Schweizer Wohnsitz eine syrische Asylbewerberin schwarz beschäftigt haben soll.
- Martin Schulz hat Angela Merkel in einem offenen Brief zu einem erneuten TV-Duell aufgefordert.

[Translated] Below are some events that have or have not occurred in the past few weeks. Please select the events you know or believe actually happened.

- After a new missile launch by North Korea, the UN Security Council was unable to agree on a resolution after a veto by Russia and China. [FALSE]
- AfD top candidate Alexander Gauland has been sentenced in the first instance to a five-month suspended sentence for sedition. [FALSE]
- The airline Etihad Airways made an offer for the insolvent airline Air Berlin in the bidding contest. [FALSE]
- The parties in the Bundestag want to extend the electoral period from four to five years. [TRUE]
- The Greens excluded entry to a Jamaica coalition with the CDU/CSU and the FDP at their federal party convention. [FALSE]
- EU Commission President Juncker spoke in a keynote speech to introduce the euro in all countries of the European Union. [TRUE]
- Many people were injured when a bomb exploded on the London Underground. [TRUE]
- Volkswagen has announced that it will no longer produce cars with combustion engines by 2040 at the latest. [FALSE]
- None of the events mentioned have occurred.
- ZEIT research has shown that AfD politician Alice Weidel is said to have employed a Syrian asylum seeker of-the-books at her Swiss residence. [TRUE]
- Martin Schulz asked Angela Merkel in an open letter for another TV debate. [TRUE]

FIGURE F10: Events; wave 5

YouGov

Im Folgenden sehen sie einige Ereignisse, die in den letzten Wochen stattgefunden haben oder nicht. Bitte wählen Sie die Ereignisse aus, von denen Sie wissen oder glauben, dass sie tatsächlich stattgefunden haben!

- Bei einem Erdbeben in Mexiko sind mehr als 200 Menschen ums Leben gekommen.
- In Oberbayern ist ein 16-Jähriges Mädchen in der Nähe einer Flüchtlingsunterkunft mutmaßlich von mehreren Afghanen vergewaltigt worden.
- US-Präsident Trump hat vor der UN-Generalversammlung angekündigt, das Atomabkommen mit Iran überdenken zu wollen.
- In Myanmar sind hunderttausende Angehörige der muslimischen Rohingya-Minderheit vor Gewalt durch das Militär auf der Flucht.
- Kurz vor der Bundestagswahl sind mehrere Drohbriefe, die unter anderem weißes Pulver und Rasierklingen enthielten, an deutsche Spitzenpolitiker verschickt worden.
- Bei der Bundestagswahl ist die FDP drittstärkste Kraft geworden.
- Bayerns Innenminister Joachim Herrmann hat Zahlen bekanntgegeben, nach denen im ersten Halbjahr 2017 die Zahl der angezeigten Vergewaltigungen um 30% gesunken ist.
- AfD-Politiker Alexander Gauland hat kurz vor der Bundestagswahl erklärt, dass er sich eine bürgerliche Koalition mit den Unionsparteien und der FDP nach der Wahl vorstellen kann.
- Durch Recherchen des Chaos Computer Club wurde bekannt, dass sich russische Hacker Zugang zu Wahlsoftware beschafft hatten, die bei der Bundestagswahl zum Einsatz kam.
- Beim Volksentscheid zum Flughafen Tegel in Berlin haben mehr als 60% der Wählerinnen und Wähler gegen den Erhalt gestimmt.
- keines der genannten Ereignisse hat sich zugetragen.

[Translated] Below are some events that have or have not occurred in the past few weeks. Please select the events you know or believe actually happened.

- An earthquake in Mexico killed more than 200 people. [TRUE]
- In Upper Bavaria, a 16-year-old girl near a refugee shelter has been allegedly raped by several Afghan men. [TRUE]
- US President Trump has announced before the UN General Assembly to rethink the nuclear deal with Iran. [TRUE]
- In Myanmar, hundreds of thousands of members of the Muslim Rohingya minority are fleeing military violence. [TRUE]
- Shortly before the Bundestag election, several threatening letters, which included white powder and razor blades, were sent to top German politicians. [TRUE]
- In the federal election, the FDP became the third strongest force. [FALSE]
- Bavaria's Interior Minister Joachim Herrmann has released figures that show that the number of rapes reported fell by 30% in the first half of 2017. [FALSE]
- AfD politician Alexander Gauland declared shortly before the general election that he could imagine a "bourgeois" coalition with the Union parties and the FDP after the election. [FALSE]
- Research by the Chaos Computer Club revealed that Russian hackers had obtained access to voting software that was used in the federal election. [FALSE]
- In the referendum on Tegel Airport in Berlin, more than 60% of voters voted against preserving it. [FALSE]
- None of the events mentioned have occurred.

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