

Persuasion effects in electoral campaigns
– a comparative analysis of household panel data

Ursina Kuhn, FORS, Lausanne, Switzerland ¹

Paper to be presented at the SOEP User Conference in Berlin 30. July 2010

Abstract

This paper studies campaign effects of national elections using household panel surveys from Germany, Great Britain and Switzerland. Because household panels question every year the same individuals about their party preference, they offer a unique opportunity to study individual dynamics over the electoral cycle. More specifically, they allow a better distinction between activation and persuasion effects of campaigns than it is possible with ordinary electoral panels, which are conducted during campaigns. Campaign effects are captured through the time difference between the interview and the election date. We add evidence to the debate whether campaigns do persuade voters to change between parties, or whether changes mostly reflect activation effects. Using random effects models with different transitions as the dependent variable, we find strong evidence for activation and persuasion effects in all three countries. Furthermore, we study the impact of political awareness on activation and persuasion, relying on theories on memory based and on-line information processing. Mostly in line with expectations, we find that highly aware citizens are less likely to be (de)activated and persuaded than little aware citizens. In Germany and Switzerland, there is no additional heterogeneity in the reaction to campaigns according to levels of political awareness. For persuasion in Great Britain however, campaigns have the strongest effect on the little aware.

¹ Correspondance to ursina.kuhn@fors.unil.ch

Introduction

Numerous scholars have demonstrated that campaigns and media coverage matter for elections. Most importantly, campaigns *activate existing predispositions*. Activation may mobilise citizens to vote or reinforce their voting intention. Moreover, activation may cause citizens to return to their latent party preference, if they have changed temporarily to another party. In contrast to this well documented activation effect, scholars disagree on whether, or how much, campaigns make voters change between parties. While some studies found evidence for *persuasion effects* (e.g. Alvarez 1997, Johnston et al. 1992, Lodge, Steenbergen and Brau 1995, Holbrook 1996, Shaw 1999), others argue that campaigns steer the vote toward a result that can be foreseen in advance. They claim that campaigns do not persuade voters to switch parties (e.g. Finkel 1993, Gelman and King 1993, Finkel and Schrott 1995). However, recent studies on US presidential campaigns (Campbell 2000, Herr 2002, Hillygus and Jackman 2003, Johnston, Hagen and Jamieson 2004, Fridkin et al. 2007, Huber and Arcenaux 2007, Franz and Ridout 2010) provide empirical evidence for persuasion effects of advertisement. Yet, there is hardly any evidence for persuasion effects of electoral campaigns outside the USA and much about the relation between individual characterises and campaign effect remains to be explored.

In this paper, we look at campaign effects in Western Europe by relying on household panel surveys, which so far have not been used to study campaign effects. In Germany, Great Britain and Switzerland, household panels ask every year the same individuals about their party preferences and have been running since 1984, 1991 and 1999, respectively. Because of the yearly interviews, the data cover the entire electoral cycle. Campaign effects can be captured through the closeness between the date of the interview and the date of the national elections.

Although not particularly designed to study campaign effects, household panels offer a unique opportunity to fill research gaps. First, we can look at individual dynamics over the entire electoral cycle, which so far is a hardly explored research field (Wlezien and Erikson 2002, Andersen, Tilley and Heath 2005). Second - and this is the main argument below - we are better able to distinguish between activation and persuasion than it has been possible with electoral panel surveys conducted during a campaign. Third, we contribute to the understanding of the effect of political awareness, which is a central variable in opinion formation and opinion change (Zaller 1992, Sniderman, Brody and Tetlock 1991, Page and Shapiro 1992). We also look at the dynamic effects of political awareness. Fourth, we take a comparative perspective by looking at elections in Great Britain, Germany and Switzerland, which

represent very different electoral and party systems. We cover several electoral cycles per country, so that conclusions go beyond the context of a particular campaign. Previous studies on campaign effects have focused on single elections and to a great proportion on the USA (Brady, Johnston and Sides 2006, Arceneaux 2005). Finally, panel conditioning effects should be lower in household panels than in electoral panels conducted during a campaign. Panel conditioning effects arise because electoral surveys increase the attentiveness to politics and campaigns (see Bartels 2000 and 2006 for a discussion of panel conditioning effects). There are two arguments, why these effects should be weaker in household panels than in electoral panels. First, the intervals between interviews are much longer in household panels, so that panel conditioning effects would have to last for about a year in order to have an effect. Second, household panels are not primarily electoral surveys. The share of questions related to politics during the interview is relatively low, which makes panel conditioning for political questions less likely (see also Hillygus and Jackman 2003 for a similar argumentation).

Two research questions guide this analysis. First, we are interested in whether campaigns activate and persuade voters. Second, we look at how political awareness influences these campaigns effects. In this paper, campaign effects refer to the sum of campaign activities from advertisement, media coverage or other information related to elections. We do not study specific campaign events or advertisements and assume that the intensity and influence of campaign activities increases when elections come closer. We so capture campaign effects through the distance between the interview and the national election.

1. Persuasion effects of electoral campaigns

The studies of the Columbia school on US presidential elections in the 1940s represent the starting point of systematic research on campaign effects (Berelson, Lazarsfeld, and McPhee 1954, Lazarsfeld, Berelson and Gaudet 1948). According to these studies, only few voters were found to change their preferred party or candidate during the campaign. Yet, several other campaign effects were found. First, campaigns reinforced early deciders in their choice. Second, they helped undecided or unsure individuals to choose a party or candidate that is in line with their predispositions. Third, campaigns made certain issues more salient for vote choice.

After the Columbia studies, campaigns have received little attention in electoral research until the 1980s, when a cognitive turn (Brandenburg and Egmond 2008) has taken place. Instead of focusing on changes in voting intentions and persuasion, the attention shifted to the causal mechanisms behind campaign effects. Several different

strategies have been applied to study these mechanisms: experiments, rolling cross sections, electoral panels and aggregate analyses of U.S. electoral polls. Experiments usually test for the influence of particular campaign characteristics while controlling for other potential influences. Yet, because of their weak external validity, experiments cannot assess the actual influence of campaigns on elections (e.g. Chong and Druckman 2007, Goldstein and Ridout 2004, Shaw 1999, Iyengar and Simon 2000, Kinder 2007). This holds particularly for electoral campaigns, because they present a chaotic environment with multiple streams of conflicting and complicated information of varying intensity (Fridkin et al. 2007: 771). The complexity is further increased by different information sources involved in campaigns and by differences in individuals' exposure. Because campaign environments are so different from experimental settings, studies from the field – mostly relying on surveys – are important to complement experimental research. Another research design to study campaign effects are rolling cross sections. Similar to experiments, they aim at capturing the influence of particular campaign events, while holding other influences constant. Usually, these studies test whether such events change aggregate opinion, but cannot assess individual dynamics.

Electoral panels present another popular instrument to study campaign effects. They follow the same individuals over the electoral campaign. Normally, the first wave takes place at the onset of the campaign and the last wave is carried out after the elections. Predispositions are measured at the first wave and then compared with voting intentions in later waves (e.g. Finkel 1993, Bartels 2006). Iyengar and Simon (2000: 152) criticise this approach because it misses the frequent changes occurring before the start of the official campaign. Another problem of electoral panels has been pointed out by Gelman and King (1993). They argued that survey responses before the electoral campaign are unreliable measures for predispositions, because predispositions are not activated in the absence of campaigns. As a consequence, electoral panels cannot distinguish well between persuasion and activation.

Activation refers to adaptations of the voting intention to be in line with predispositions. This occurs either when citizens change from no party preference to the party preference which is in line with predispositions or when they change from a party preference not in line with predispositions to the party preference in line with predispositions. In the later case, this may be misinterpreted as a persuasion effect in electoral panels.

Gelman and King claim that changes at the individual level have wrongly be interpreted as persuasion effects, when in fact, they represent activations of existing predispositions. For their own empirical analysis, Gelman and King relied on

aggregate data of opinion polls of US presidential elections which cover a larger part of the entire electoral cycle. Because they found no evidence of persuasion effects, the authors conclude that campaigns make voters align to the party or candidate which is in line with their predispositions (but see Wlezien and Erikson 2002).

To distinguish activation and persuasion, electoral panels have to assume that party predispositions can be measured even if they are not activated. This is usually done by asking survey respondents about their party identification before the hot phase of the campaign (Lazarsfeld et al. 1944, Finkel 1993, Lachat 2007). In contrast to voting choice or voting intention, party identification refers to latent predispositions towards a party. They should not be influenced by short term events such as campaigns and present stable individual level traits. But also if the concept of party identification allows for change over time, it should be more stable than voting intention. Surprisingly, there have been only very few empirical tests on whether this holds also for observed measures of party identification. A study with German data found no significant differences between the volatility of party identification and the volatility of voting behaviour (Falter et al. 2000). Own analyses based on Swiss data did not find such differences, either.² Another study based on the SOEP data found party identification to be influenced by various short term influences (Schmitt-Beck et al. 2006). This leaves us with doubts whether survey questions on party identification before campaigns are able to measure true latent predisposition. If this is not the case, activation and persuasion may be confounded, because predispositions are not activated before campaigns.

Household panel studies offer an alternative approach with enables between activation and persuasion. As electoral panels, they focus on individual dynamics. But in contrast to them, we can compare party preferences with preferences at the last election instead of comparing party preferences with predispositions before the start of the campaign. The main difference between the two approaches is that predispositions are most likely activated at the last election but are less likely activated at the onset of the campaign. When comparing voting intentions with the party preference at the last election, we should be better able to distinguish activation from persuasion than it is possible with electoral panels.

We are interested in whether the sum of campaign related information, which includes advertisement, communication and media coverage makes citizens change between parties. The closer elections are, the more intense and frequent is such information. If

² Selects panel 1999-2003. Results are available from the author.

campaigns have persuasion effects, changes between parties should become more frequent, the closer elections are. If campaigns have activation effects, activation should become more frequent, the closer elections are.

2. The role of political awareness

To understand campaign effects, we need to determine if campaign efforts have different effects on different people (e.g. Hillygus and Jackman 2003, Fournier 2006). A key moderator of opinion change is political awareness. Several theoretical arguments relate political awareness and opinion change. Here, we limit the discussion to the context of electoral campaigns for national elections, which are characterized by a high competition, familiarity of issues and intensity.

Most theoretical approaches which explain the influence of political awareness on opinion change rely on memory based processing. It assumes that individuals have different considerations stored in memory. When answering a survey question, responses report the consideration that is on the top of their head at that moment (Zaller 1992). Campaigns may influence this process through two channels: first through the reception of information and second through the acceptance of information (Converse 1964, McGuire 1968, Zaller 1992).

We first focus on *information acceptance*. Individuals with low levels of political awareness are more responsive to media content and other campaign activities. The little aware have fewer bases from which to form political judgments and to assess whether the new information is in line with their predispositions or not. In contrast, highly knowledgeable individuals are able to assimilate new information to their predispositions and to counter argue it (Iyengar and Kinder 1987, Zaller 1992). They may therefore be especially resistant to the influence of any single dose of information. For these reasons, political awareness should make opinion change less likely.

The relationship between *information reception* and opinion change is more ambiguous. In Zaller's approach, political awareness increases the probability of information reception, because highly aware citizens are more exposed and pay more attention to surrounding information. Information reception therefore makes changes more likely. However, there are alternative arguments which result in different theoretical expectation. First, information reception may also reinforce and stabilise opinions by reinforcing them. Second, the high density of electoral campaigns may cause a situation of information saturation, so that further information reception has no additional effect on opinion change (Claassen 2008). Finally, some authors do not discuss information reception at all (e.g. Hillygus and Jackman 2003). A reduction to

the acceptance part is given in experiments, where reception is given by the research design.

Depending on the role of information reception, the combined relationship of political awareness and opinion change takes a different form. In Zaller's model, the relationship is non-linear, with citizens of intermediate levels of political awareness being most likely to change their preference. If information reception is irrelevant or controlled by an experiment, we expect that opinion stability increases with political awareness.

An alternative to memory based information processing is online processing (Hastie and Park 1986, Lodge, McGraw and Stroh 1989). People who are highly attentive to the flow of political news are likely to think a great deal about political affairs and evaluate this information. Although they forget the specific information content, the evaluation of the information is stored in memory. When new relevant information is acquired, the evaluations or opinions are updated. Therefore, if asked about their voting intentions, these individuals retrieve and report their on-line evaluations. On-line evaluations are relatively stable, because they are based on large sets of previously acquired information, so that new pieces of information have only small impact on them. As a consequence, recent news media content should have relatively little effect on highly attentive citizens. In contrast, citizens who pay little attention to the flow of news are unlikely to have such general political evaluations stored in memory. When asked about their voting intention, they rather apply memory based processing as described above and recall whatever they can about parties on the spot. In the case of on-line processing, the influence of communication should be smaller at any point in time because on-line processors hold stronger attitudes than memory based processors (Chong and Druckman 2007: 25). Online processing thus expects greater stability for highly aware citizens.

Apart from information processing, the effect of political awareness depends on the nature of the information flow. It matters whether the information flow is one-sided or two-sided, whether the campaign is intense and whether the discussed subjects are familiar (Zaller 1992, Kriesi 2005). So far, empirical results on the relationship between political awareness and opinion change have remained ambiguous and differ according to research designs, measurement of political awareness and contexts studied. Furthermore, the effect depends on the nature of the information flow.

Apart from political awareness, also *predisposition strength* is important for opinion change. Predisposition strength increases opinion stability and, for two reasons, may interfere into the relationship between political awareness and opinion change. First,

in memory based processing, the rejection of information is conditional on the existence of predispositions (e.g. Zaller 1992). If there are no predispositions, information simply cannot be rejected due to its inconsistency with predispositions. It may be necessary to explicitly control for interactions between awareness and predispositions in statistical models (Lachat 2007, but see Zaller 1992: 138). In the case of on-line processing, interactions between predisposition strength and awareness are not inherent in the model, because the negative relationship between awareness and opinion change does depend on the existence of predispositions. A second reason why predisposition strength may interfere into the effect of political awareness on preference change is a relative strong correlation between political awareness and predisposition change. Failing to control for predisposition strength in empirical models may result in a wrong negative relation between political awareness and opinion change. Drukman and Chong (2007) even argue that highly aware citizens are more likely to change if predisposition strength is controlled for. Yet, there are also two arguments against the inclusion of predisposition strength into causal models of change in party preference. First, the causal impact of political awareness may be underestimated if predisposition change is included. If political awareness partly causes predisposition strength, regression coefficients of political awareness show only the direct impact of political awareness on opinion change. Second, there may be a problem of endogeneity when *change in party preferences* is explained by the *strength of party preferences*, because the two may refer to the same underlying concept and therefore be too closely related. This problem does not arise in most research on public opinion, because the dependent variable is issue opinions, and therefore less closely related to party identification. Also in the USA, there is less tautology when electoral choice is explained, because voters choose between candidates rather than parties.

Not only persuasion, but also activation is influenced by political awareness and predisposition strength. We expect activation to be most likely for the least aware citizens and for citizens with no or weak predispositions, because they are more easily influenced.

Campaign effects, which are measured through the closeness to elections, may not only influence the probability of persuasion and activation, but may also interact with political awareness. Our theoretical discussion gives no clear expectations on the nature of this relationship. On the one hand, the little aware may react more strongly to the closeness to elections because they are more easily influenced than the highly aware. On the other hand, the highly aware may react more strongly to information

and the closeness to elections because they are more attentive and more easily reached by campaigns.

3. Data and model specification

Data source

We use household panel data from Germany, Great Britain and Switzerland to test for campaign effects and the role of political awareness. The data collection is organised independently in each country. The *German Socio Economic Panel* (SOEP) has been running annually since 1984 and includes additional samples from 1990 (East Germany), 1998, 2000, and 2006.³ The *British Household Panel Study* (BHPS) started in 1991 and includes an additional sample for Scotland and Wales which started 1999. Because of the distinct party system, the sample on Northern Ireland has not been considered. The *Swiss Household Panel* (SHP) started 1999 with a representative sample of Swiss households. A second random sample has been added in 2004.

As all survey data, household panels suffer from initial non-response. Additionally, panels have potential problem with survey attrition. To correct for potential bias, we adapt different measures. First, we include the number of survey responses and a time trend as controls into the analyses. Second, we estimate models with and without weights. Because weights do not change the conclusions, results displayed here are not weighted.

The electoral - and party system, as well as the degree of federalism, vary strongly between these countries. For each country, several electoral cycles are covered. In Switzerland, elections are generally less salient because of the frequent direct democratic referenda votes.

Question wording

The question asked about party preference in household panels varies between the countries analysed (see table 1). In Germany, respondents are asked about their party identification, which results in 48 percent of citizens naming a party. In Switzerland, respondents are asked about their voting intention, which results in 61 percent of citizens naming a party. In Great Britain, respondents are first asked about their party identification. Non-supporters are then asked about the closeness to any party. Those who still haven't named a party are then asked about their voting intention.⁴ In total,

³ The high-income sample from 2002 (sample G) has been excluded.

⁴ This question has not been asked in 1992. The actual voting choice in the elections was asked instead.

76 percent of respondents name a party in one of these questions. Here, we use party preference as an umbrella term encompassing both party identification and voting intention.

The differences in the question wording complicate the comparison of results, particularly because they relate to two different concepts in electoral research: party identification and voting intention. But as mentioned above, the difference between party identification and voting intention is empirically less clear than theoretically. Empirically, the most important difference between survey questions on party identification and on voting intention is that more citizens have a voting intention than a party identification. Those who have a party identification are more stable than those without a party identification. But among respondents where both party identification and voting intentions are measured, the two do not differ in stability. Additionally, several studies on the stability of party identification have shown that party identification does react to short terms shocks (Schmitt-Beck et al. 2006, Wawro 2002, Yoon and Green 2002). We consider it therefore as justified to use both voting intentions and party identifications as measures for party preferences in our analysis. However, the differences in question wording have to be kept in mind for the interpretation of diverging results between countries.

CH	“If there was an election for the National Council tomorrow, for which party would you vote?”
DE	“Many people lean toward a particular party for a long time, although they may occasionally vote for a different party. How about you: do you in general lean toward a particular party? If so, which one?”
GB	“Are you a supporter of any one political party?” If no: “Are you closer to one political party than to the others?” If no: “If there were to be a General Election tomorrow, which political party do you think you would be most likely to support ? ”

Table 1 : Question wording for party preference in the different household panels

Model specification

In our model, we want to test whether campaigns affect the probability to be persuaded or activated. Persuasion and activation refer to transitions in party preference since the last election. If the party preference has changed to another party since the last election, a persuasion has occurred. If respondents have changed between a party preference and no party preference, an activation or deactivation has taken place. To estimate probabilities for transitions, we select only individuals who have a positive probability for all transitions, or, in the language of event history analysis, who are at risk of the events happening. For our purpose, this means that we

restrict the analysis to individuals who have had a party preference at the last election. Respondents who did not have a party preference at the last election have a probability of 0 to change between parties. To measure the party preference at the last election, we use the party preference reported within 365 days of the election date. Individuals who did not name a party preference within 365 days of the last election are excluded from the analysis.

Additionally, we include only citizens above 18 years into the analysis. In Germany, this leaves us with 17'252 respondents and 111'911 observations. The number of observations per respondent varies between 1 and 24, with an average value of 10 waves of participation per respondent. In Great Britain's we dispose of 84'869 observations from 8726 respondents. On average, there are 12 observations per individual. In Switzerland, 17'643 observations from 5186 respondents are available, with 6 observations on average.

The restriction of the sample to observations with a party preference at the last elections implies that we do not observe activation in our data. However, we do observe de-activation, which is equivalent regarding the mechanisms (cf table 2). After selecting individuals who had a party preference at the last elections, we have three different possible transitions, which are the categories of the dependent variable: Respondents may report the same party preference as in the last election (1), no party preference (2), or another party preference than at the last election (3). The frequencies of the dependent variable (table 2) show that persuasion is least likely in Germany. This is most likely due to the different question wording, because the most unstable voters do not have a party identification are therefore not in the sample.

Transition	Last election	Current obs.	CH	DE	GB
	No preference.		excluded	excluded	excluded
Reinforcement (1)	Party preference	same party	61 %	65 %	72 %
Activation (2)	Party preference	no party	20 %	25 %	12 %
Persuasion (3)	Party preference	other party	19 %	10 %	16 %
N observations			23'985	111'911	84'869
N individuals			6190	17'252	8726

Table 2 : Descriptive statistics of the dependent variable

The main explanatory variable, *closeness to elections* is measured through the distance in days between the interview date and the closest national election. The closeness may either refer to the *next future election* or to the *closest election* of the

past or the future. There are theoretical justifications in favour of both approaches. Because electoral campaigns take place before elections, the distance to the next election seems a natural solution. But thinking about media coverage related to elections, attention is also high after elections: The electoral outcome is analysed, coalitions and governments have to be formed and policies and policy changes are communicated and commented. In this perspective, attention is lowest in the middle of the electoral cycle when both the past and the next election are relatively distant. We tested both measures of closeness to elections empirically. Preliminary analysis showed clearly that the later approach performs better. Therefore, closeness to election in the models refers to either the past or the next election, whichever is closer. The distance in days between the interview and the closest election has been divided by 365 so that the measure captures the distance in years. Additionally, it has been multiplied by -1, so that higher values correspond to closer elections.

Political awareness is measured through interest in politics in the previous wave.⁵ In the SOEP and BHPS, political interest is measured as an ordinal variable with four categories. In Switzerland, political interest is measured on a scale from 0 (not at all interested) to 10 (very interested). For comparison reasons, this variable has been recoded into four ordinal categories. Additionally, we control for educational levels, which measures rather the ability than motivation of political awareness. In each country, 3 educational levels are distinguished: low educational level and incomplete education (1), intermediate educational level (2) and high educational level (3).

The strength of *party identification* is measured in the SOEP and the BHPS only, where respondents are asked about their party identification or closeness to a party. In the model, the strength of party identification in the previous wave is taken with four ordinal categories. In Switzerland, where voting intentions, but not party identification is collected, there is no equivalent measure for predispositions strength. As a proxy, we rely on the self-situation on a left-right scale from 0 to 10. Respondents who situate themselves on either side of the scale are considered as having political predispositions. They are opposed to respondents who either are not able or willing to situate themselves on the left-right scale, or who report the median value of 5.

⁵ The most widely used indicator of political awareness is political knowledge, which is not available in the data at hand. But there is also a substantial argument for relying on political interest instead of political knowledge. Several studies have shown that political knowledge varies over the electoral cycle (e.g. Andersen, Tilley and Heath 2005, Fridkin et al. 2007, Lenz 2009). For our analysis, political awareness should be independent from the electoral cycle and measure individual heterogeneity.

We estimate campaign effects using random effects models which take account of both the variance within and between individuals and control for the clustering of the data. This is done with the `gllamm` software by Rabe-Hesketh and Skrondal. Regression coefficients are estimated for activation and persuasion with reinforcement as the reference category. Models are estimated for each country separately. With the SOEP data, we could not use the `gllamm` software due to computational time required. Two separate random effect models for activation and persuasion with reinforcement as the reference category have been used instead (`xtlogit` command in Stata).

For hypotheses testing, we introduce the covariates successively into the model. First, a model with no covariates serves as a benchmark (M0). Then we add the closeness to national elections, political interest and the control variables, which consist of a wave identifier, educational levels and the number of panel interviews of the individual (M1). Predisposition strength is added in a separate step (M2) due to potential endogeneity. Finally, we add interaction terms between closeness to election and interest in politics (M3).

4. Results

Germany

Regression coefficients in Germany are shown in table 3. There is clear evidence for activation effects. The closer elections are, the less likely is deactivation. There is also clear evidence for persuasion effects. The closer elections are, the more changes between parties are observed. It is rather surprising in view of previous literature that persuasion effects of campaigns appear more than twice as strong as activation effects.

	M3			
	activation		persuasion	
	b	t	b	t
Closeness to election	-0.21 **	(-3.0)	0.10	(0.7)
Interest in politics: low	-0.37 ***	(-4.4)	0.20	(1.2)
Interest in politics: high	-0.72 ***	(-8.0)	0.31	(1.9)
Interest in politics: very high	-0.83 ***	(-7.1)	0.21	(1.1)
Educational level: intermediate	0.07	(1.9)	0.40 ***	(7.0)
Educational level: high	-0.47 ***	(-10.1)	0.28 ***	(4.0)
Predisposition: low	-0.66 ***	(28.0)	-0.45 ***	(-12.0)
Predisposition: high	-1.39 ***	(-45.2)	-0.74 ***	(-17.2)
Predisposition: very high	-1.83 ***	(-28.6)	-1.06 ***	(-14.5)
Number of waves of part.	-0.01 **	(-3.3)	-0.02 ***	(-4.5)
Year	0.02 ***	(9.1)	-0.08 ***	(-27.1)
Low interest*closeness	0.02	(0.2)	0.24	(1.7)
High interest*closeness	-0.01	(-0.2)	0.24	(1.7)
Very high interest * closeness	0.10	(1.0)	0.12	(0.8)
Constant	-0.15	(-1.5)	-1.26	-6.97
* 95 %; ** 99 %; *** 99.9 %				
variance random effect activation	2.94		6.28	
log likelihood	-47263		-27185	
* 95 %; ** 99 %; *** 99.9 %				

Table 3 : Activation and persuasion effects in Germany (M1, M2) ; n (individuals) : 17'325 ; n (observations): 111'911

The effect of political awareness on activation is as expected. The more interested respondents are, the less likely they are to be deactivated. Deactivation is measured by transitions from a party preference at the last election to no party preference. For persuasion, there is smaller but also a negative effect for political awareness. The closer elections are, the more likely it is to change to another party than the one supported at the last election. If we control for predisposition strength (M2), the effect of political awareness decreases for activation and becomes insignificant for persuasion.

Predisposition strength at the previous wave highly influences activation and persuasion. The stronger the party identification is, the less likely becomes political persuasion and activation. The number of waves which a respondent has participated in the panel is negatively correlated with both activation and persuasion. This shows that stable individuals are overrepresented in the panel. The inclusion of this variable into the model should reduce the possible bias from survey attrition. The coefficients of the year variable show that activation has become more likely and that persuasion has become less likely between 1984 and 2008. Finally, citizens with higher educational levels are less likely to be deactivated and more likely to be persuaded.

Table 4 presents the model which includes interaction effects between closeness to elections and political awareness. The effects are however not significant and do not

improve the fit of the model. There seems to be no heterogeneity in the reaction to campaigns according political awareness. The highly aware are most stable irrespectively of the closeness to elections.

	M3			
	activation		persuasion	
	b	t	b	t
Closeness to election	-0.21 **	(-3.0)	0.10	(0.7)
Interest in politics: low	-0.37 ***	(-4.4)	0.20	(1.2)
Interest in politics: high	-0.72 ***	(-8.0)	0.31	(1.9)
Interest in politics: very high	-0.83 ***	(-7.1)	0.21	(1.1)
Educational level: intermediate	0.07	(1.9)	0.40 ***	(7.0)
Educational level: high	-0.47 ***	(-10.1)	0.28 ***	(4.0)
Predisposition: low	-0.66 ***	(28.0)	-0.45 ***	(-12.0)
Predisposition: high	-1.39 ***	(-45.2)	-0.74 ***	(-17.2)
Predisposition: very high	-1.83 ***	(-28.6)	-1.06 ***	(-14.5)
Number of waves of part.	-0.01 **	(-3.3)	-0.02 ***	(-4.5)
Year	0.02 ***	(9.1)	-0.08 ***	(-27.1)
Low interest*closeness	0.02	(0.2)	0.24	(1.7)
High interest*closeness	-0.01	(-0.2)	0.24	(1.7)
Very high interest * closeness	0.10	(1.0)	0.12	(0.8)
Constant	-0.15	(-1.5)	-1.26	-6.97
variance random effect activation				
log likelihood	2.94		6.28	
	-47263		-27185	

* 95 %; ** 99 %; *** 99.9 %

Table 4 : Activation and persuasion effects in Germany (M3) ; n (individuals) : 17'325 ; n (observations): 111'911

Great Britain

The results of Great Britain in the models 1 and 2 are similar to Germany. There is clear evidence that campaigns influence activation and persuasion. With the closeness to elections, the probability for deactivation decreases and the probability for persuasion increases. Again, the persuasion effect has about twice the size of the activation effect.

The interest in politics impacts both activation and persuasion. As in Germany, political interest has a very strong effect on deactivation. Unlike in Germany, the influence is also considerable for persuasion. Controlling for predisposition strength reduces the coefficients for political interest. There is a weak nonlinearity in the relationship between awareness and persuasion once predisposition strength is controlled for. However, the nonlinearity does not follow the pattern expected by Zaller's RAS model.

Again, predisposition strength has a strong stabilizing effect. Both deactivation and persuasion become less likely with strength of party identification. Deactivation has become more frequent over time and persuasion has become less frequent. The negative coefficients of the number of waves of participation indicate an attrition effect in the panel survey towards more stable respondents. Finally, deactivation and persuasion seem to become more likely for higher educational levels.

	M0	M1				M2			
		activation		persuasion		activation		persuasion	
		b	t	b	t	b	t	b	t
Closeness to election		-0.07 ***	(-3.7)	0.13 ***	(-7.4)	-0.07 ***	(-3.8)	0.13 ***	(7.1)
Interest in politics: low		-0.73 ***	(-17.4)	-0.26 ***	(-5.9)	-0.63 ***	(-15.2)	-0.22 ***	(-4.9)
Interest in politics: high		-1.31 ***	(-27.8)	-0.48 ***	(-9.8)	-1.07 ***	(-22.7)	-0.34 ***	(-6.9)
Interest in politics: very high		-1.74 ***	(-20.3)	-0.51 ***	(-7.5)	-1.31 ***	(-15.8)	-0.24 **	(-3.4)
Educational level: intermediate		0.15 **	(3.3)	0.14 **	(3.2)	0.16 **	(3.4)	0.13 **	(2.8)
Educational level: high		0.20 **	(-3.0)	0.29 ***	(4.7)	-0.16 *	(-2.4)	0.34 ***	(5.3)
Predisposition: low						-0.94 ***	(-14.5)	-0.70 ***	(-10.4)
Predisposition: high						-1.78 ***	(-24.6)	-1.31 ***	(-18.4)
Predisposition: very high						-2.39 ***	(-19.7)	-1.79 ***	(-16.9)
Number of waves of part.		-0.06 ***	(-10.1)	-0.06 ***	(-10.2)	-0.05 ***	(-7.9)	-0.04 ***	(-0.04)
Year		0.07 ***	(21.8)	-0.02 ***	(-5.9)	0.08 ***	(22.7)	-0.02 ***	(-4.9)
Constant		-1.48 **	(-13.7)	-0.95 ***	(-8.8)	-0.65 ***	(-5.7)	-0.35 **	(-2.8)
var. random effect activation			3.63				3.12		
var. random effect persuasion			4.71				4.09		
covariance random effects			2.98				2.32		
log likelihood	-54912	-53938				-53366			

* 95 %; ** 99 %; *** 99.9 %

Table 5: Activation and persuasion effects in Great Britain (M1, M2) ; n (individuals) : 8726 ; n (observations): 84*869

In contrast to Germany, there is a significant interaction between political awareness and closeness to elections for persuasion, as can be seen at coefficients in table 6 and the basis of predicted probabilities in Figure 1. Citizens with low levels of political awareness react most strongly to the closeness to elections and therefore to electoral campaigns. For activation effects however, the differences are not significant.

	M3			
	activation		persuasion	
	b	t	b	t
Closeness to election	-0.02	(-1.2)	0.23 ***	(5.4)
Interest in politics: low	-0.71 ***	(-7.7)	-0.32 ***	(-3.9)
Interest in politics: high	-1.17 ***	(-12.3)	-0.51 ***	(-8.0)
Interest in politics: very high	-1.33 ***	(-18.2)	-0.40 ***	(-3.9)
Educational level: intermediate	0.16 **	(3.00)	0.13 *	(-2.5)
Educational level: high	-0.16 ***	(-3.5)	0.34 ***	(5.1)
Predisposition: low	-0.94 ***	(-10.2)	-0.70 ***	(-8.9)
Predisposition: high	-1.78 ***	(-19.2)	-1.32 ***	(-16.7)
Predisposition: very high	-2.39 ***	(-16.8)	-1.80 ***	(-16.3)
Number of waves of part.	-0.05 ***	(-3.2)	-0.04 ***	(-4.8)
Year	0.08 ***	(26.6)	-0.02 ***	(-6.9)
low interest*closeness	-0.07	(-0.7)	-0.09	(1.8)
high interest*closeness	-0.08	(-0.6)	-0.15 *	(-2.3)
very high interest * closeness	-0.01	(-0.5)	-0.13 *	(2.2)
constant	-0.59 ***	(-6.7)	-0.23	(-2.3)
variance random effect activation	1.76			
variance random effect persuasion	1.30			
covariance random effects	1.54			
log likelihood	-53365			

Table 6: Activation and persuasion effects in Great Britain (M3) ; n (individuals) : 8726 ; n (observations): 84'869

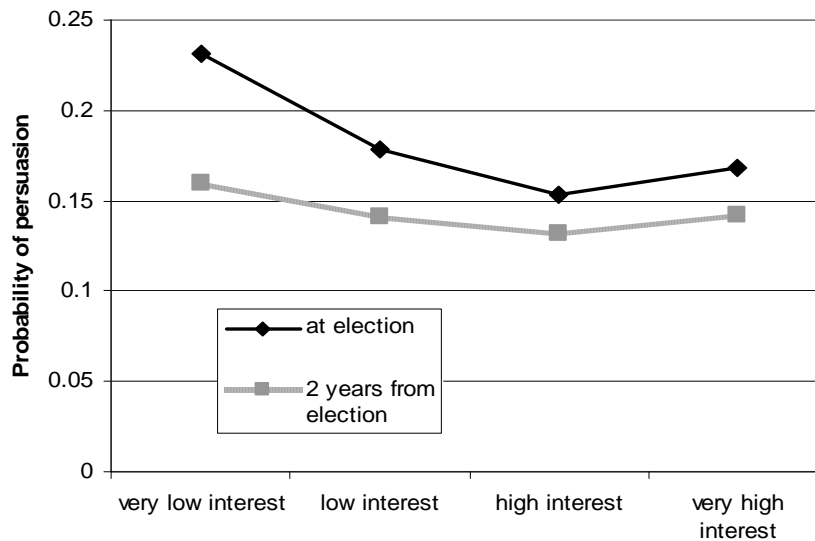


Figure 1 : Predicted probabilities for persuasion in the interaction model, GB

Switzerland

The output of the random effects models 1 and 2 for Switzerland is presented in table 7. It confirms that deactivation is most likely when elections are distant and that persuasion is most likely when elections are close. Again, persuasion effects are stronger than activation effects.

Political awareness influences activation and persuasion linearly. The higher the political interest is, the less likely are deactivation and persuasion. Again, the impact of political awareness is stronger for activation than for persuasion. Predispositions have a very strong impact in Switzerland too, despite the measurement of predisposition strength with a proxy variable. Respondents who situated themselves on either side of a left right scale are more stable than the other respondents. There is no attrition effect regarding deactivation, but respondents who participated in fewer waves are more likely to change between parties than respondents who participated most of the time. Furthermore, deactivation has become less frequent over time and persuasion has become more frequent. Finally, education does not seem to matter for persuasion. But as in Germany and Great Britain, higher educational levels decrease the probability of deactivation.

	MO	M1				M2			
		activation		persuasion		activation		persuasion	
		b	t	b	t	b	t	b	t
closeness to election		-0.15 ***	(-3.9)	0.26 ***	(7.1)	-0.12 **	(-3.3)	0.26	(7.1)
Interest in politics: low		-0.50 ***	(-6.3)	-0.11	(-1.3)	-0.47 ***	(-6.1)	-0.09	(-1.1)
Interest in politics: high		-0.74 ***	(-7.7)	-0.32 ***	(-3.5)	-0.65 ***	(-7.3)	-0.29 **	(-3.2)
Interest in politics: very high		-0.98 ***	(-10.5)	-0.45 ***	(-5.1)	-0.89 ***	(-10.3)	-0.43 ***	(-5.0)
educational level: intermediate		-0.47 ***	(-3.7)	-0.09	(-0.8)	-0.42 ***	(-3.6)	-0.08	(-0.7)
educational level: high		-0.79 ***	(-5.4)	0.07	(0.5)	-0.55 ***	(-4.3)	0.10	(0.8)
Predisposition (1 yes, 0 no)						-0.85 ***	(-14.8)	-0.25 ***	(-4.2)
number of waves of participation		0.01	(-0.5)	-0.05 **	(-3.3)	-0.01	(-0.5)	-0.04 **	(-3.1)
year		-0.06 ***	(-5.7)	0.07 ***	(7.6)	-0.06 ***	(-6.6)	0.07 ***	(7.4)
constant		-0.44 *	(-2.3)	-1.10 **	(-6.4)	0.29	(1.7)	-0.97	(-5.7)
variance random effect activation	4.82	6.18			4.14				
variance random effect persuasion	3.73	4.26			3.75				
covariance random effects	2.63	3.47			2.59				
log likelihood	-19465	-19080			-19060				

* 95 %; ** 99 %; *** 99.9 %

Table 7 : Activation and persuasion effects in Switzerland (M1, M2) ; n (individuals) : 6190 ; n (observations): 23985

In table 8, interaction effects between closeness to elections and political awareness have been added to the model, but they are not significant and do not increase the fit of the model. This implies that citizens of all levels of political awareness react similarly to the closeness to election and therefore to campaign information.

	M3 interaction			
	activation		persuasion	
	b	t	b	t
closeness to election	-0.10	(-1.1)	0.20 *	(-2.1)
Interest in politics: low	-0.36 **	(-0.4)	0.03	(0.2)
Interest in politics: high	-0.90 ***	(-5.6)	-0.31 *	(-2.0)
Interest in politics: very high	-0.96 ***	(-6.6)	-0.34 *	(-0.3)
educational level: intermediate	-0.42 ***	(-3.6)	-0.08	(-0.7)
educational level: high	-0.56 ***	(-4.3)	0.10	(0.8)
Predisposition	-0.86 ***	(-14.8)	-0.25 ***	(-4.3)
number of waves of participation	-0.01	(-0.4)	-0.04 **	(-3.1)
year	-0.06 ***	(-6.6)	0.07 ***	(7.4)
low interest*closeness	0.10	(0.9)	0.12	(1.0)
high interest*closeness	-0.23	(-1.8)	-0.02	(-0.1)
very high interest * closeness	-0.06	(-0.5)	0.09	(0.9)
constant	0.32	(1.7)	-1.04	(-5.4)
variance random effect activation	4.15			
variance random effect persuasion	3.76			
covariance random effects	2.60			
log likelihood	-19055			

* 95 %; ** 99 %; *** 99.9 %

**Table 8 : Activation and persuasion effects in Switzerland (M3) ;
n (individuals) : 6190 ; n (observations): 23985**

Discussion

In all three countries analyzed, we found strong evidence for activation and persuasion effects of electoral campaigns. The fact that campaigns activate predispositions is in line with previous research (e.g. Anderson et al. 2005, Selb et al. 2009). For persuasion, scholars disagree whether campaigns persuade voters or not and empirical results seem to depend on the specific context and study design. Our finding, that campaigns do persuade voters is in line with recent results on US presidential elections (Hillygus and Jackman 2003, Johnston, Hagen and Jamieson 2004, Fridkin et al. 2007, Huber and Arcenaux 2007, Franz and Ridout 2010).

The resemblance of the results from the German, British and Swiss Household Panels with respect to persuasion is remarkable given their differences in the political system. Great Britain has a majoritarian electoral system with 2 dominant parties. Germany and Switzerland present proportional electoral systems with many parties, particularly in Switzerland. Switzerland is further characterized by direct democracy, strong federalism and no clear distinction between government and opposition parties, because the four largest parties form a government coalition together.

The predicted probabilities calculated from model 1 (without control for predisposition strength) and assuming an individual random effect of 0 are shown in

Figure 2 for persuasion effects.⁶ Due to the differences in the panels regarding the question wording and the time period covered, the absolute level of persuasion cannot be compared directly between countries. But the lower level for persuasion in Germany is most likely due to the fact that individuals without party identification are not in the sample due to the question wording.

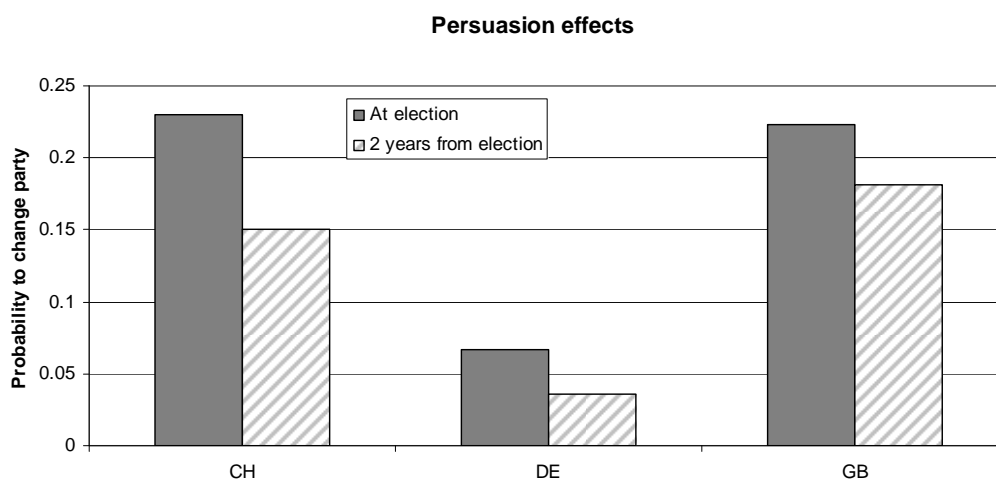


Figure 2 : Predicted probabilities for persuasion in CH, DE, GB

The consistent results in the three countries are even more remarkable considering the differences in question wording. The fact that the SOEP asks about party identification, did not make respondents to be less influenced by the electoral cycle than in Switzerland and Great Britain, where voting intention has been collected. Although this was not the subject of this paper, it suggests that measures of party identification and voting intention are not as different as suggested by theory. Questions on party identification do not seem to measure stable latent party predispositions, but are rather similar to measures of voting intention.

In all countries, activation was strongly influenced by political interest. The least interested respondents were most likely to be deactivated. For persuasion, the effect of political interest was less strong. But in all countries, the most aware citizens were least likely to change their party preference, in Great Britain and Switzerland also if predisposition strength has been controlled for. The linearity of the effect of political

⁶ Predicted probabilities refer to individuals with low interest in politics, intermediate educational level and mean number of interviews and year of data collection.

awareness suggests that information reception does not play a central role for the influence of political awareness in national elections. It is rather the resistance to new information of the highly aware that drives this relationship. In the perspective of memory based processing, this is because the highly aware accept mostly messages which are in line with their predispositions and reject messages that are not in line with predispositions. In the perspective of on-line processing, this is because the highly aware have already an evaluation based stored in memory, which is based on previous information. New information therefore has only little weight.

Previous studies, who analysed the role of political awareness for persuasion effects equally give a mixed picture. So far, they mostly focused on US presidential elections. Huber and Arceneaux (2007) found persuasion to be strongest for moderately aware citizens, Freedman, Franz and Goldstein (2004) for little aware citizens. In Franz and Ridout (2007), individuals with low and medium level of political awareness were mostly persuaded. Also Fridkin et al. (2007) found strongest effects for the lowest levels of political awareness, but the reception of information was controlled in the experimental setting, so that the result is not surprising. Other studies found no clear or significant relationship between political awareness and persuasion (Hillygus and Jackman 2003 and Claassen 2008). Despite the ambiguous results, these studies and the results from this paper are in so far consistent as the highly aware are never the most reactive to campaigns as far as persuasion is concerned. Differences exist in whether there is heterogeneity regarding political awareness and whether citizens with low or intermediate levels of political awareness are mostly affected.

Among all variables tested in our models, predisposition strength has by far the strongest impact on activation and persuasion. The stronger party identification is, the less likely are changes between parties and deactivation. This effect is not surprising and even has a flavor of tautology. But what is important, is that the inclusion of predisposition strength into the model did not alter the shape of the relationship between political awareness and persuasion as claimed by Chong and Druckman (2007).

For activation, there was no significant interaction between political awareness and closeness to elections. This shows that electoral campaigns affect citizens of different levels of political awareness similarly. In other words, the little aware have a higher tendency to switch between having no party preference and having a party preference irrespectively of the electoral cycle.

For persuasion, the interaction between closeness of election and political interest is less clear. In Germany and Switzerland, the coefficients are not significant and the

inclusion of interaction effects does not improve model performance. We can thus say that the little aware are more volatile in general, but they do not react more strongly to electoral campaigns than the highly aware. In Great Britain however, there is a significant interaction between political awareness and the electoral cycle. The closeness to election is most important for the little aware but hardly impacts citizens with higher levels of political awareness.

Apart from these hypotheses, there is an interesting difference in the time trend between Switzerland on the one hand and Germany and Great Britain on the other. While deactivation has become more frequent in Germany and Great Britain over time, there is a decrease in deactivation in Switzerland since 1999. This difference may be related to trends in electoral turnout, which increased in Switzerland since 1995, while turnout rates are decreasing in most other West European democracies. Also for persuasion, the effect in Switzerland points to a different direction than in Germany and Great Britain. The increasing volatility in Switzerland corresponds to aggregate changes in party strength which occurred since 1999 mostly due to the rise of the Swiss People's Party (SVP).

5. Conclusion

In this paper, we used household panel data to study activation and persuasion effects of electoral campaigns. Household panels enable us to look at transitions in party preference, which have the last election as a reference point. By recurring to the last election, we are better able to distinguish activation and persuasion effects than it is possible with electoral panels. Because at the last elections, predispositions are most likely activated, we can assume that changes between parties since the last election are due to persuasion and not to activation.

The household panels of Germany, Great Britain and Switzerland survey each year the same respondents on their party preferences. They thus allow the study of individual dynamics over the electoral cycle. In this paper, we captured campaign effects through the time difference between the interview and the closest election, which may be in the past or the future. The underlying assumption is that campaign activities, media coverage and other campaign related information are proportional to the closeness to election. Campaigns thus refer to the sum of campaign related information and not to any specific activities or events. If campaigns have activation effects, we expect activation to be most likely when elections are close and deactivation most likely when elections are distant. If campaigns have persuasion effects, we expect changes between parties to be most frequent when elections are close.

With this approach, we found strong evidence for activation and persuasion effects in all three countries studied. For activation effects, this is in line with previous research. For persuasion effects, there has been mixed evidence so far. Our result of strong persuasion effects is however in line with recent studies on US presidential elections. Because we analysed several elections in very different countries with respect to electoral and party systems, our findings suggest that electoral campaigns persuade voters also outside the context of US president elections.

We also found in all countries that political awareness influences activation and persuasion. The highly aware are more stable and therefore less likely to be deactivated or persuaded than the little aware. Except for Germany, the relationship remains significant and negative even when predisposition strength is controlled for. However, with one exception, there is no interaction between the closeness to election and political awareness. This means that the higher volatility of the little aware does not depend on information density reflected in the electoral cycle. Instead, little and highly aware citizens react similarly to the campaign. Only in Great Britain, the least aware react strongest to the electoral campaign.

Although this study found that campaigns persuade voters, it cannot say how and in which direction. The measure for campaign effect used is very general and does not relate to any specific campaign activities or campaign events. The contribution that household panel data can make to research on electoral campaigns should be seen as a complement to other approaches such as experiments, rolling cross sections and electoral panels.

6. Literature

- Alvarez, R. Michael. 1997. *Information and Elections*. Ann Arbor: University of Michigan Press.
- Andersen, R., J. Tilley and A.F. Heath. 2005. Political knowledge and enlightened preferences: party choice through the electoral cycle, *British Journal of Political Science* 35: 285–302.
- Arceneaux, K. 2005. Do campaigns help voters learn? A cross-national analysis. *British Journal of Political Science* 36: 159–173.
- Bartels, Larry M. 2000. Panel Effects in the American National Election Studies. *Political Analysis* 8:1-20.

- Bartels, Larry M. 2006, 'Priming and persuasion in presidential election campaigns', in H.E. Brady and R. Johnston (eds), *Capturing Campaign Effects*, Ann Arbor, MI, USA: The University of Michigan Press, pp. 78–112.
- Berelson, Bernard R. Lazarsfeld, Paul F. and William N. McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Brady, H., Johnston, R. and J. Sides. 2006. *The Study of Political Campaigns*. In: Brady, H. and R. Johnston (eds.), *Capturing Campaign Effects*. Ann Arbor: The University of Michigan Press.
- Brandenburg, Heinz and Marcel van Egmond. 2008. *The Opinionated British Press and their Influence on Political Attitudes during the 2005 UK Election Campaign*. Paper prepared for the Elections, Public Opinion and Parties (EPOP) Annual Conference, Manchester, 12th - 14th September, 2008
- Campbell, James E. 2000. *The American campaign: U.S. presidential campaigns and the national vote*. College Station: Texas A&M University Press.
- Claassen, Ryan L. 2008. *Awareness Effects and Campaign Effects: Maximum Effects for Minimum Citizens?* Annual Meeting of the American political Science Association, August 28-31, 2008.
- Chong, D. and J.N. Druckman. 2007. *Framing theory*. *Annual Review of Political Science*, 10, 103-126.
- Converse, P. E. 1964. *The nature of belief systems in mass publics*. In D.E. Apter (ED.), *Ideology and discontent*. New York: Free Press.
- Falter, J.W., Schoen, H. and Caballero, C. (2000). "Dreiig Jahre danach: Zur Validierung des Konzepts Parteiidentifikation in der Bundesrepublik", in M. Klein et al. (eds). *50 Jahre Empirische Wahlforschung in Deutschland*. Wiesbaden:Westdeutscher Verlag.
- Finkel, Steven F. 1993. *Reexamining the "Minimal Effects" Model in Recent Presidential Elections*. *Journal of Politics* 55(2): 1-21.
- Finkel, S.E. and P.R. Schrott (1995), 'Campaign effects on voter choice in the German election of 1990', *British Journal of Political Science* 25: 349–377.
- Fournier, Patrick. 2006. *The Impact of Campaigns on Discrepancies, Errors, and Biases in Voting Behavior*. In: Brady, Henry E. and Richard Johnston (eds.). *Capturing Campaign Effects*. Ann Arbor: The University of Michigan Press.

- Fridkin, Kim L., Patrick J. Kenney, Sarah Allen Gershon, Karen Shafer, and Gina Serignesses Woodall. 2007. Capturing the Power of a Campaign Event: The 2004 Presidential Debate in Tempe. *Journal of Politics* 69: 770-785.
- Gelman, Andrew and Gary King 1993, Why Are American Presidential Election Campaign Polls so Variable When Votes Are so Predictable? *British Journal of Political Science*, 23, (4): 409-451.
- Hastie, Reid and Bernadette Park. 1986. The Relationship Between Memory and Judgement depends on whether the judgment task is memory-based or on-line. *Psychological Review* 93:258-68.
- Hillygus, D.S. and S. Jackman. 2003. Voter decision making in election 2000: campaign effects, partisan activation, and the Clinton legacy, *American Journal of Political Science* 47: 583–596.
- Holbrook, Thomas M. 1996. *Do campaigns matter?.* Thousand Oaks, Calif.
- Iyengar, Shanto, Donald R. Kinder, Mark D. Peters, and Jon A. Krosnick. 1984. The Evening News and Presidential Evaluations. *Journal of Personality and Social Psychology* 46(4):778-787.
- Iyengar, Shanto and Donald R. Kinder. 1987. *News that Matters.* Chicago: University of Chicago Press.
- Iyengar, Shanto. and A.F. Simon. 2000. 'New perspectives and evidence on political communication and campaign effects', *Annual Review of Psychology* 51: 149–169.
- Johnston, R., Blais A., Brady HE, Cret J. 1992. *Letting the People Decide: Dynamics of a Canadian Election.* Stanford, CA: Stanford University Press.
- Kinder, Donald R. 2007. Curmudgeonly Advice. *Journal of Communication* 57(1): 155-162.
- Kriesi, H. 2005., *Direct Democratic Choice. The Swiss Experience,* Lanham, MD, USA: Lexington Books.
- Krosnick, Jon A. and Laura A. Brannon. 1993. The Media and th Foundations of Presidential Support: George Bush and the Persian Gulf conflict. *Journal of Social Issues.* 49: 167-182.
- Krosnick, Jon A. and Donald R. Kinder. 1990. Altering the Foundations of Support fort he President through Priming. *American Political Science Review* 84:497-512.

- Lachat, Romain. 2007. *A Heterogeneous Electorate: Political Sophistication, Predisposition Strength and the Voting Decisions Process*. Baden-Baden: Nomos.
- Lazarsfeld, P.F., B. Berelson and H. Gaudet. 1944. *The People's Choice. How the Voter Makes up His Mind in a Presidential Campaign*, New York: Columbia University Press.
- Lenz G. 2009. Learning and Opinion Change, Not Priming: Reconsidering the Evidence for the Priming Hypothesis. *American Journal of Political Science* 53(4).
- Lodge, Milton, Kathleen McGraw and Patrick Stroh. 1989. An Impression-Driven Model of Candidate Evaluation. *American Political Science Review* 83(2): 399-419.
- Lodge, Milton, Marco R. Steenbergen, Shawn Brau (1995). The Responsive Voter: Campaign Information and the Dynamics of Candidate Evaluation. *The American Political Science Review* 89 (2): 309-326.
- Marquis Lionel, 2006. *La formation de l'opinion publique en démocratie directe. Les référendums sur la politique extérieure suisse (1981-1995)*. Zürich.
- McGraw, Kathleen, Milton Lodge, and Patrick Stroh. 1990. On-line Processing in Candidate Evaluation: The Effects of Issue Order, Issue Importance, and Sophistication. *Political Behavior* 12(1): 41-58.
- McGuire, William. 1968. Personality and Susceptibility to Social Influence. In *Handbook of Personality Theory and Research*, edited by E. Borgatta. Chicago: Rand McNally.
- Page, Benjamin I. and Robert Y. Shapiro, 1992. *The Rational Public*. Chicago: Univ. of Chicago Press.
- Selb, Peter, Hanspeter Kriesi, Regula Hänggli and Mirko Marr. Partisan choices in a direct democratic campaign. *European Political Science Review*. 1(1): 155-172.
- Shaw DR. 1999. The impact of TV ads and candidate appearances on statewide presidential votes. *American Political Science Review* 93: 345-61.
- Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York: Cambridge University Press.
- Wlezien, R., & Erikson, R. S. 2002. The timeline of presidential election campaigns. *Journal of Politics*, 64: 969-993.

Zaller J. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.