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The virtuous circle of representation

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Abstract

Theoretical and empirical research shows that political representation is a dynamic process repeatedly connecting citizens and political elites. However, less is known about how citizens alone experience the process of political representation and connect electoral participation with representation. This article combines different literatures pertaining to the representative process in a dynamic framework. It explores causality between electoral participation and perceived responsiveness in citizens' minds using unique panel data. By arguing for two-way causality and the existence of a virtuous circle, the article refines the concepts' relationship beyond traditional conceptions that currently dominate the literatures on electoral behaviour and participatory democracy. The results indicate that the representative process may be a self-sustaining experience for citizens over time.

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1. Introduction

Representation is a dynamic process in which citizens participate in elections and representatives are responsive to citizen views and demands (see, for example, Dalton et al., 2011; Manin, 1997; Manin et al., 1999; Pitkin, 1967; Stimson et al., 1995; Wlezien, 1995). While electoral participation and responsiveness are each important on their own, they cannot be seen as mutually exclusive. Theoretical and empirical research shows that electoral participation is associated with responsiveness: political elites are responsive to those who voted (for example, Griffin and Newman, 2005 and 2013; Wlezien and Soroka, 2010), and citizens' decisions to vote are also fuelled by political supply (for example, Adams et al., 2006; Geys, 2006; Plane and Gershtenson, 2004). While these existing literatures demonstrate a theoretical and empirical connection between responsiveness and participation, less is known about the precise causal relationship between the concepts in citizens' minds. Does the belief that the political system is responsive make citizens turn out to vote? Or does causality rather travel from the act of voting to feelings of responsiveness in citizens' minds? While perceptions are certainly not an objective reflection of reality, 'perceptions *are reality* to the voters' (Dalton et al., 2011, 27, emphasis in original) and impact their behaviour. Therefore, this study investigates the relationship between individual-level electoral participation and perceived responsiveness over time to obtain a firmer grip on the dynamics of the representative process in citizens' minds.

Depending on the research interest, existing studies in the field generally take for granted the respective causal order between individual-level voter turnout and feelings of being represented. For example, the literature on electoral behaviour

follows a strong tradition of explaining electoral participation with perceived responsiveness, operationalized through external efficacy (for example, Almond and Verba, 1963; Blais et al., 2014; Karp and Banducci, 2008; Wessels and Schmitt, 2008). Higher levels of perceived responsiveness are considered predictors of higher voting probabilities. Studies in the field of participatory democracy, on the other hand, differ in their approach and regularly argue that feelings of responsiveness are, in fact, a consequence of having casted a vote (see, for instance, Ikeda et al., 2008; Pateman, 1970; Schlozman et al., 1995). Here, the act of voting is thought to trigger feelings of being represented. Empirical studies in both strands of representation literature show time and again that electoral participation and perceived responsiveness share a positive relationship.¹

With these different pieces of theoretical and empirical evidence, existing research might even imply a more complex connection between voter turnout and perceived responsiveness in citizens' minds. Indeed, it is implausible that electoral participation and responsiveness as important elements of the representative process would share a simple relationship that predominantly runs one way in citizens' minds. Rather, the wealth of research supporting each of the above views implies a multifaceted and interlocked relationship between voting and perceived responsiveness. Recurring elections and regular efforts of making citizens feel represented suggest a dynamic conception of the positive relationship between voting and perceived responsiveness –

¹ Related studies in the field of vote choice, however, show that low levels of perceived responsiveness can still lead to voter turnout; yet they often result in a vote choice for a protest party (see e.g. Dassonneville, 2012; Southwell and Everest, 1998).

a 'virtuous circle' (Brehm and Rahn, 1997; Norris, 2000; Putnam, 1993; Strömbäck and Shehata, 2010). However, this theoretically and empirically plausible dynamic relationship has not been put to test yet.

For the first time, this article more closely studies the constituting individual-level processes and the empirical evidence for a virtuous circle of representation. It tests popular but competing hypotheses from different literatures, pertaining both to citizens' experience of political representation in essential ways. Previous studies were restricted by data limitations and were not able to model and test the competing hypotheses in accordance with their theories. Additionally, the article investigates the potential interaction of these hypotheses in a dynamic framework and thus considers them for the first time as compatible rather than competing predictions. To do so, a unique set of high-quality panel data from the Netherlands is used that spans four waves of data collection and two parliamentary elections over a period of only three years. This research design of multiple panel waves over a short period of time and using a probability sample provides the first opportunity to model the individual-level expectations simultaneously and to answer the research questions. The article adds to and integrates three existing literatures in the field of political representation: those using electoral participation and perceived responsiveness as independent or dependent variables, those demonstrating the causal mechanisms at play, and those arguing for representation as a dynamic process. It thus also contributes to growing research endeavours in political science of generating dynamic individual-level theories and testing them with high-quality data.

The results highlight the joint importance of electoral participation and responsiveness as central elements of every representative process. Causality between them runs in both directions: (1) casting a vote activates perceived responsiveness, and (2) perceived responsiveness induces voter turnout. Neither relationship emerges as more strongly supported by the data. These findings also hold over two electoral cycles and, therefore, validate the long-running practice of using perceived responsiveness as a predictor of voter turnout as well as voter turnout as a predictor of perceived responsiveness in empirical studies. Additionally, the data support the idea of a virtuous circle of representation: feeling represented activates existing predispositions to vote, and the predispositions to vote prompt people to feel represented. These findings point towards a more dynamic and complex understanding of the relationship between important elements of representative democracy in citizens' minds. Moreover, the results indicate that representation can be a self-sustaining and positive experience for citizens.

The argument develops as follows. The next section elaborates on the theoretical base and argues for a theoretical model that conceives of two commonly used hypotheses as compatible rather than competing. Next, I present the panel data and methods used before analysing the data. The final section summarises the findings and reflects on their implications.

2. The dynamics of representation in citizens' minds

Political representation can be considered an on-going process, only temporally and substantively structured by elections in which citizens express their preferences and hold representatives accountable for their actions (see, for example, Manin, 1997, Manin et al., 1999). Stimson et al. (1995, 543) famously argued for representation as a continuous, interactive process between citizens' preferences and policy output over time. Specifically, the authors showed that 'policy responds dynamically to public opinion change'. Ever since, theoretical and empirical studies have frequently corroborated the idea of representation as an interactive and dynamic process in which expressed citizen preferences and representatives that are responsive to them form important elements (see, for example, Dalton et al., 2011; Disch, 2011; Manin, 1997; Manin et al., 1999; Mansbridge, 2003; Wlezien, 1995; Wlezien and Soroka, 2010). Conceptualised on the individual level, citizens express their preferences primarily through their vote choice, which necessitates casting a vote in the first place. Additionally, they observe and experience representatives and their actions and form perceptions of responsiveness. The individual-level concepts of electoral participation and perceived responsiveness as well as their relationship are well researched and generally propose two seemingly contradicting causal directions: firstly, perceived responsiveness is a predictor of the probability to vote, and secondly, voting is a predictor of perceived responsiveness.

The causal relationship running from perceived responsiveness to voter turnout mostly finds support in rational theories of electoral behaviour. According to Downs' (1957) famous calculus of voting, the expected utility of voting is crucial for making the walk to the polling booth worthwhile. The expected utility of casting a vote is

influenced by past experience and the choices on offer. Voters are more likely to cast a vote for a party or candidate, and hence turn out to vote, if their evaluation of the party's or candidate's past performance is positive (Blais et al., 2014; Clarke et al., 2004). Citizens estimate a higher expected utility if they benefitted from the party or candidate and its policies in the past. Past benefit is directly translated into expected future benefit and a voter then develops a view of which party or candidate is preferable to others. It means that a higher proximity of policy preferences between a voter and a party or candidate likely induces voter turnout (Wessels and Schmitt, 2008). This is because electoral participation entails a conscious choice for one candidate or party and against all others. Citizens cast a vote to express their support for a specific party or a specific candidate (Aarts et al., 2011; Blais et al., 2014). Conversely, research has also shown that citizens are more likely to abstain if the candidates are not close to their own preferences (e.g. Adams and Merrill, 2003). It means that it is not necessarily specific parties or candidates and voters' proximity to them that positively affect the expected utility to vote. Rather, it appears to be crucial whether *any* of the parties or candidates offer expected utility. In that sense '[v]oter participation is a rough, though consequential indicator of whether voters perceive elections to be meaningful' (Wessels and Schmitt, 2008, 21, emphasis in original). Therefore, the expected benefit of electoral participation depends, amongst others, on the extent to which citizens feel competing parties or candidates offer real alternatives, as well as on the perceived past benefit from existing parties.

Both of these factors relate to an individual's feeling of being represented or the level of perceived responsiveness. The perception of having at least one good option to choose from translates into a citizen's feeling of being represented. Similarly, if

voters feel that they benefit from policy output, a high level of perceived responsiveness can be inferred. Both feelings have a positive effect on an individual's expected utility of voting.

From this perspective perceived responsiveness precedes electoral participation in citizens' experiences with the representative process. If individuals feel that the system is supplying them with the output (policy or policy proposal) they desire, they are more likely to support a specific party or candidate through their vote in the upcoming election. The higher perceived responsiveness levels are, the higher the probability of casting a vote. According to this conception, electoral participation is a consequence of perceived responsiveness. It emphasises the link running from the supply of policies and representation to electoral participation, representing the demand side of representation.

To translate this expectation into the empirical world, psychological as well as rational choice models of voter turnout commonly include predictors that aim at capturing citizens' feelings of representation and perceived responsiveness (see, for instance, Almond and Verba, 1963; Clarke et al., 2004; Smets and van Ham, 2013). Perceived responsiveness is most often operationalized through a battery of survey questions that measure external efficacy, defined as 'the belief that politics is responsive to citizens like oneself' (Aarts et al., 2014, 219ff; see also Chamberlain, 2012, 4; Esaiasson et al., 2015). To illustrate the wealth of research conducted in this area, consider a recent meta-analysis of individual-level explanations of voter turnout by Smets and van Ham (2013). The authors evaluate, amongst others, 48 tests in 15 different studies pertaining to the effects of political efficacy on voter turnout. They

conclude that ‘the majority of tests appears to confirm a positive and significant effect of efficacy’ (Smets and van Ham, 2013, 355). The attitude of efficacy positively affects voter turnout through the expected utility. According to this view, perceived responsiveness precedes electoral participation.

H1 Citizens with higher levels of perceived responsiveness are more likely to cast a vote.

However, a different and smaller literature argues for the reverse causal relationship in which electoral participation affects an individual’s perceived responsiveness. In support of this, cognitive psychologists, for example, argue that behaviour is not only a consequence of attitudes but can also be a cause (see, for example, Festinger, 1957). People behave in a certain way and may react emotionally or attitudinally only as a consequence. For the realm of political science, theorists of participatory democracy argue that political participation has positive effects on voters’ political attitudes (see Clarke et al., 2004; Finkel, 1985; Pateman, 1970). Here, voting is viewed as a ‘*minimum* expression of citizenship’ that promotes ‘effective, open, and responsive governance, while bolstering political interest, political knowledge, and feelings of efficacy and interpersonal trust’ (Clarke et al., 2004, 218, emphasis in original). In addition, voting is said to instigate feelings of citizen control as well as governmental responsiveness to ordinary citizens (Finkel, 1985, 893).

Ikeda et al. (2008) stress the cognitive process involving knowledge and information processing in their study on the consequences of political participation. They argue

that the act of political participation yields a set of emotional and cognitive effects for the individual. Firstly, going through the process of voting enables citizens to better understand the representative process. It creates ‘cognitive awareness’ (Ikeda et al., 2008, 78) of the main actors and the process of representation. And secondly, by casting a vote citizens are led to believe that they have a say in politics and that they can influence politics and policy outcomes (Ikeda et al., 2008). Both cognitive processes instigated by the act of voting impact the voter’s feeling of representation or perceived responsiveness. If a citizen participates in an election, he or she experiences the power of governmental control: through the process of casting a vote, a citizen practises what it means to hold representatives to account and to authorise them with a mandate to act on the behalf of citizens (see Manin, 1997). It positively affects a voter’s feeling of perceived responsiveness.

This indicates that the main causal mechanism underlying this connection lies in the acquisition of political knowledge that the act of voting involves (Butler and Stokes, 1974; McPhee and Ferguson, 1962). By casting votes, citizens get familiar with the political system. They invest time and effort into the democratic system and thus feel that they have had a stake in bringing about the outcome. Consequently, citizens feel more represented after voting. This view puts the act of voting first and the attitude of responsiveness as a consequence.

Empirical tests of this hypothesis are generally supportive. For example, Schlozman et al. (1995) show that the act of voting is associated with very high civic and policy gratifications. Almost all of the interviewed political activists (93 per cent) reported that voting included civic gratification. This means that for these individuals voting

was associated with feelings of civic reward. In addition, 61 per cent of respondents ‘cited a desire to influence government policy as very important in their decision to go to the polls’ (Schlozman et al., 1995, 21). In a more direct test of the causal claim running from electoral participation to responsiveness, Ikeda et al. (2008) find supporting evidence when also analysing a cross-sectional dataset involving 22 countries. Specifically, their findings show that ‘political participation enhances a voter’s sense of political efficacy’ (Ikeda et al., 2008, 86). It means that the act of voting matters for respondents’ attitudes towards representation. However, both studies are only based on cross-sectional data that severely limit any conclusions about causality. Nonetheless, the theoretical base of these studies and their empirical findings suggest that electoral participation might be the cause of perceived responsiveness: the act of voting enhances citizens’ perceived responsiveness.

H2 Casting a vote is likely to lead to higher levels of perceived responsiveness.

Each of the hypotheses implies a temporal order in which the cause precedes the effect. However, both are insensitive to the repeated nature of the representative process, and they are thus silent on what happens after the cause has led to the effect. Elections are recurring events and so are politicians’ efforts of making citizens feel represented. Representation is a dynamic process (for example, Dalton et al., 2011; Stimson et al., 1995). Testing whether responsiveness precedes voting or vice versa does not do full justice to the dynamism of representative democracy. In addition, the wealth of research supporting both views points at a more complex but positive relationship. It hints at the potential existence of a ‘virtuous circle’ (Brehm and Rahn,

1997; Norris, 2000; Putnam, 1993) of representation. Such a conception of representation provides a more complete and dynamic picture of the relationship between electoral participation and perceived responsiveness compatible with traditional conceptions in electoral behaviour and participatory democracy.

Virtuous circles have been identified in a number of research areas. For political science Norris (2000, 318) defines a virtuous circle as ‘an iterative process gradually exerting a positive effect on democracy’. It does not imply an ever-increasing level or impact; rather, it means that the contributing factors are circular in their causal relationship and thus sustain each other’s positive effects on democracy. Existing research has pinpointed a number of virtuous circles related to the democratic process (see for example, Aarts and Semetko, 2003; Brehm and Rahn, 1997; Brynin and Newton, 2003; Putnam, 1993; Strömbäck and Shehata, 2010). Irrespective of the precise field of study, the components of the iterative process in a virtuous circle are said to share a positive and reinforcing relationship over time. A virtuous circle of representation thus adds the element of time and acknowledges that representative democracy does not tend to be a one-shot game.

Given the empirical evidence for each of the hypotheses, it is likely that the complex relationship between electoral participation and perceived responsiveness also accumulates into a virtuous circle in citizens’ minds. Similarly, Verba et al. (1995, 500) recite philosophers of participatory democracy and argue that the process of political participation ‘would not only involve good citizens, but it would create them’. Feelings of being represented might trigger existing predispositions to vote, and the predisposition to vote might prompt perceived responsiveness. It would mean

that the above hypotheses are not competing over the correct causal direction between turnout and responsiveness, but that they are in fact complementary in a dynamic framework over time. Even though Verba et al. (1995, 501–3) find support for ‘good citizens’, the authors were not able to determine causal order due to the structure of their data. Empirical support for a virtuous circle of representation requires a positive and causal relationship between perceived responsiveness and voter turnout in either direction and over time (see Strömbäck and Shehata, 2010).

H3 Electoral participation and perceived responsiveness share positive and causal relationships over time.

3. Data and methods

Panel data serve the purpose of disentangling causal relationships with more than one endogenous variable particularly well (Galais and Blais, forthcoming; Finkel, 1995). Indeed, a cross-sectional study on the consequences of electoral participation for political efficacy acknowledges the superiority of a ‘more rigorous test’ with panel data (Ikeda et al., 2008, 80).

Recent panel data from the Netherlands are used to test the expectations. The LISS (Longitudinal Internet Studies for the Social Sciences) panel is administered by

CentERdata (Tilburg University, the Netherlands).² It is a high-quality web-based panel survey derived from a probability sample of households drawn from the population register by Statistics Netherlands. The survey ran annually between December 2007 and December 2014 and respondents were at least 16 years old. The entire panel records 8,000 respondents. With these unique features external validity of the obtained results is expected to be high. For this study data from four panel waves are used (December 2009, 2010, 2011, and 2012) that cover two national elections (2010 and 2012). Unlike many other panel data the LISS panel also ran during the time of two national elections. It allows tracking respondents' attitudes and behaviour in an unprecedented form before, after, and in-between national elections.

Each of the included waves covers questions on recalled voter turnout for the 2010 (9 June) and 2012 (12 September) elections, respectively. They asked respondents 'Nowadays, for one reason or another, some people do not vote. Did you vote in the most recent parliamentary election, held on...?' and offered them the response options of 'Yes', 'No', 'Not eligible to vote', and 'Don't know'. Only respondents answering with either 'Yes' or 'No' in the 2010 and 2012 waves are retained for the analysis. Self-reported voter turnout most often overestimates actual voter turnout (Selb and Munzert, 2013). This is also true for the LISS panel waves in December 2010 and 2012 in which turnout is over-reported by about 10 percentage points for each parliamentary election.

² More information about the LISS panel can be found at www.lissdata.nl.

Analogous to previous studies, perceived responsiveness is operationalized through external efficacy measured with two survey items (see, for example, Chamberlain, 2012; Esaiasson et al., 2015). For each of the following statements respondents were requested to answer with either ‘that is true’ or ‘that is not true’: ‘Parliamentarians do not care about the opinions of people like me’ (no care); ‘Political parties are only interested in my vote and not in my opinion’ (no interest). Despite the potential caveat of not directly asking about citizens’ perceived responsiveness, the items refer to specific representative actors within the system of representative democracy and the degree to which they are perceived to be sensitive to citizen opinion. While external efficacy and perceived responsiveness are distinct concepts, they have been shown to be sufficiently similar in theoretical and empirical terms to operationalize one through the other (see Esaiasson et al., 2015). Respondents answering with ‘that is not true’ to both questions are most efficacious and thus have the highest level of perceived responsiveness. Perceived responsiveness is modelled for all four waves. Since perceptions are difficult to measure through surveys and arguably include measurement error, perceived responsiveness is assumed to be a latent construct. It is composed of the two observed variables as well as a measurement error component.³

³ Perceptions of responsiveness differ from actual responsiveness (e.g. Lauermaun, 2014). However, Reher (2014) shows that actual responsiveness, conceptualised through congruence in issue priorities, also has a positive effect on voter turnout. And other research suggests that political elites are responsive to voters (e.g. Wlezien and Soroka, 2010). It is beyond the scope of this article to investigate the effects of alternative conceptualizations of responsiveness or their potential moderating effects.

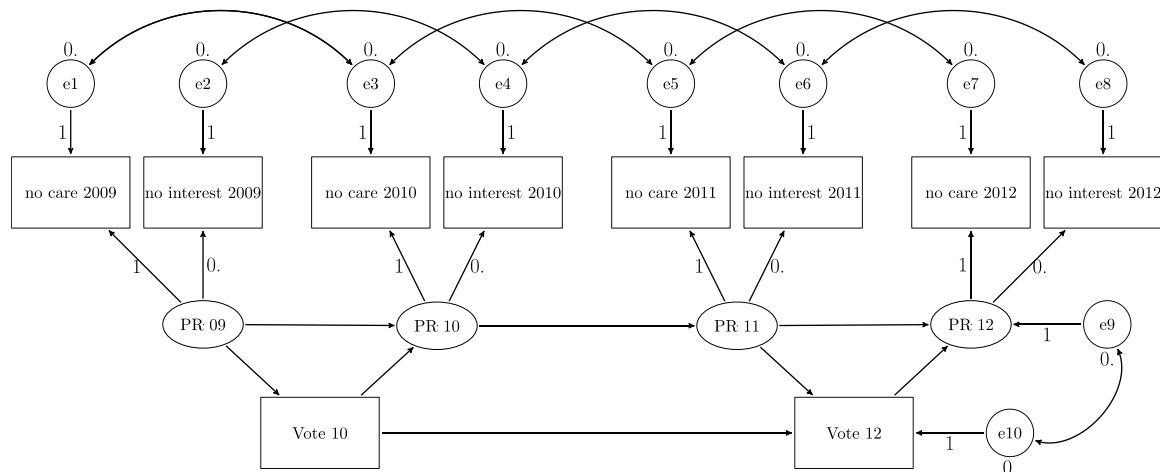
Following research on tests of causal direction (Galais and Blais, forthcoming; Finkel, 1995; Hooghe and Quintelier, 2013), this study applies a cross-lagged model. Previous studies in the field investigated the reciprocal effects of participation and political efficacy using US and German panel data from the 1970s (see Finkel, 1985 and 1987). Instead of mainly modelling the synchronous effects (see Finkel, 1985, 897), this study estimates cross-lagged correlations to model the temporal order as the theories suggest. It models the causal path from X at time point t_1 on Y at time point t_2 , while simultaneously modelling the effect of Y at time point t_1 on X at time point t_2 . This approach allows assessing the relative effect of the causal path in the same model.

One potential pitfall of this approach is that if effects are current they are already present in the lagged dependent variable. However, this will be less of a concern in this study because electoral participation is here operationalized through a recall question a short time after elections took place. It means that the effects cannot be concurrent. This approach is conservative, biased in favour of the null hypothesis of no effect. It means that findings not in line with the hypotheses may not be a surprise but supportive evidence should be taken more seriously. Moreover, compared to previous research, this study further improves on the timing of causality. The unique setup of the panel with annual waves in December and national elections held in June 2010 and September 2012, respectively, allows modelling the temporal order and causal structure twice with rather short time lags. The assumed time lags for the causal links running from responsiveness to voting equal six and nine months. For the reverse causal direction the assumed time lags are five and three months. With these methodological differences to existing studies, this article allows modelling the

temporal order and causal structure and dynamics of representation in citizens' minds more fully.

Structural equation modelling in R (package *lavaan*; Rosseel et al., 2015) is applied to the data; latent factors are assumed for the concept of perceived responsiveness, but for voter turnout the observed items are used. Autocorrelations are included to account for some of the effects of time-constant, unobserved variables (Galais and Blais, forthcoming; Finkel, 1995). Additionally, the error terms of the responsiveness items are allowed to correlate between consecutive waves. This accounts for omitted contextual factors such as electoral competition or individual-level factors that may affect the latent constructs (Galais and Blais, forthcoming; Finkel, 1995). As a final precaution against threats to endogeneity due to omitted variable bias, the error terms associated with the endogenous factors are allowed to correlate. The resulting coefficient represents covariation between the two factors that is not explained by the hypothesised cross-lagged or stability processes (Finkel, 1995). Autocorrelations and cross-lagged correlations are computed twice: firstly, for the causal connection between responsiveness in 2009 and voting in 2010, on the one hand, and voting in 2010 and responsiveness in 2010, on the other hand. Secondly, the relationships between responsiveness 2011 and voting in 2012 are modelled, as well as between voting in 2012 and responsiveness in 2012. Figure 1 illustrates the assumed structure.

Figure 1. Assumed model for perceived responsiveness and voter turnout.



Next to the measurement model, the following set of equations is used to estimate the reciprocal effects where U represents an error term:

$$\text{Turnout}_{2010} = \beta_1 \text{Responsiveness}_{2009} + U.$$

$$\text{Responsiveness}_{2010} = \beta_1 \text{Responsiveness}_{2009} + \beta_2 \text{Responsiveness}_{2010} + U$$

$$\text{Responsiveness}_{2011} = \beta_1 \text{Responsiveness}_{2010} + U$$

$$\text{Turnout}_{2012} = \beta_1 \text{Turnout}_{2010} + \beta_2 \text{Responsiveness}_{2011} + U$$

$$\text{Responsiveness}_{2012} = \beta_1 \text{Responsiveness}_{2011} + \beta_2 \text{Turnout}_{2012} + U.$$

The data allow testing the hypotheses pertaining to causal direction on two occasions, each with the very same respondents, while the full model serves as a test for the third dynamic hypothesis. Logistic regression estimates are based on weighted least squares means and variances with robust standard errors. After listwise deletion the sample contains a total of 3,468 respondents. Table 1 summarises the individual variables.

Table 1. Summary of variables, $N = 3,468$.

		that is true	that is not true
2009	no care	2184 (63%)	1284 (37%)
	no interest	2588 (74.6%)	880 (25.4%)
2010	no care	2212 (63.8%)	1256 (36.2%)
	no interest	2496 (72%)	895 (28%)
2011	no care	2291 (66%)	1177 (34%)
	no interest	2573 (74.2%)	895 (25.8%)
2012	no care	2332 (67.2%)	1136 (32.8%)
	no interest	2616 (75.4%)	852 (24.6%)
all	all	1285 (36.9%)	291 (8.4%)
		yes	no
2010	turnout	3026 (87.2%)	442 (12.8%)
2012	turnout	3030 (87.4%)	438 (12.6%)

4. Results

First each variable is tracked over time in order to test for the stability of attitudes and reported behaviour. Additionally, it needs to be verified whether or not the assumption of four wave-specific latent factors for perceived responsiveness holds. A confirmatory factor analysis corroborates the assumed latent structure of perceived responsiveness across survey waves. Common fit indices such as CFI (.999), TLI (.999) and RMSEA (.025; 95 per cent confidence interval = .017 – .033) show that the assumed structure fits the data very well. All items load as expected with statistically significant factor loadings between .893 (no care 2009) and .954 (no interest 2012). Covariances between factors are high (between .745 and .813) and indicate over-time

stability.⁴ Information on the response distribution across all perceived responsiveness items and time confirms this result (see Table 1). As can be seen, around 37 per cent of surveyed respondents stated ‘that is true’ to all items at all four measurement occasions. It means that more than a third of the Dutch population continuously expressed the lowest possible level of perceived responsiveness between 2009 and 2012. In contrast, only 8.4 per cent of respondents continuously felt the highest possible level of perceived responsiveness. These first results indicate that more than a third of the people held stable but also not very enthusiastic attitudes of perceived responsiveness between 2009 and 2012.

The variation in reported voter turnout across measurement points supports again the pattern of stability (see Table 2). Of those respondents who said they voted in 2010, 93.6 per cent reported their turnout in 2012 as well. Nonetheless, relevant variation remains: 190 respondents indicated their electoral participation in 2010 but claimed their abstention in 2012, and 194 respondents said they abstained in 2010 but reported their turnout in 2012.

⁴ A one-factor model with all ten indicators loading onto the same latent construct fits the data poorly (RMSEA = .128; 95 per cent confidence interval = .123 – .133) and the items pertaining to voting have a very different loading than those related to perceived responsiveness, which means that wave-specific constructs are not likely driven by a common factor.

Table 2. Reported voter turnout in 2010 and 2012.

		2010		
		Voted	Abstained	Total
2012	Voted	2836 (93.6%)	194 (6.4%)	3030 (100%)
	Abstained	190 (43.4%)	248 (56.6%)	438 (100%)
	Total	3026 (87.3%)	443 (12.8%)	3468 (100%)

Turning to the structural equation model, Table 3 presents the unstandardized estimates for the cross-lagged model applied to the data for the entire period 2009–2012. Model fit indices indicate that the assumed structure fits the data well (CFI = .998, TLI = .985, RMSEA [95 per cent confidence intervals] = .045 [.038; .051]). The RMSEA *p*-value of .923 also indicates that the assumed model presents a close fit for the data. Firstly, the results confirm findings from the descriptive table on over-time stability. Autocorrelations are quite high and range between .834 and .909 (standardised). It means that perceived responsiveness in one year is highly associated with past or future levels of perceived responsiveness. In a similar vein, reported electoral participation is quite stable over time (.741), as already indicated by the frequency table above.

Table 3. Cross-lagged model: unstandardized coefficients with robust standard errors and model fit.

Independent Variable	Dependent Variable	Estimate	Standard Error	P-Value
<i>autocorrelations</i>				
Responsiveness 2009	Responsiveness 2010	.839	.020	.000
Responsiveness 2010	Responsiveness 2011	.909	.017	.000
Responsiveness 2011	Responsiveness 2012	.891	.021	.000
Turnout 2010	Turnout 2012	.741	.022	.000
<i>cross-lagged coefficients</i>				
Responsiveness 2009	Turnout 2010	.173	.038	.000
Turnout 2010	Responsiveness 2010	.086	.027	.001
Responsiveness 2011	Turnout 2012	.084	.034	.013
Turnout 2012	Responsiveness 2012	.100	.039	.011
Sample size: 3468	Degrees of freedom: 22			
		CFI: .998		
		TLI: .995		
		RMSEA [95% confidence interval]: .045 [.038; .051]		
		RMSEA <i>p</i> -value: .923		

Figure 2. Results of modelling the causal structure of perceived responsiveness and turnout: standardized coefficients.

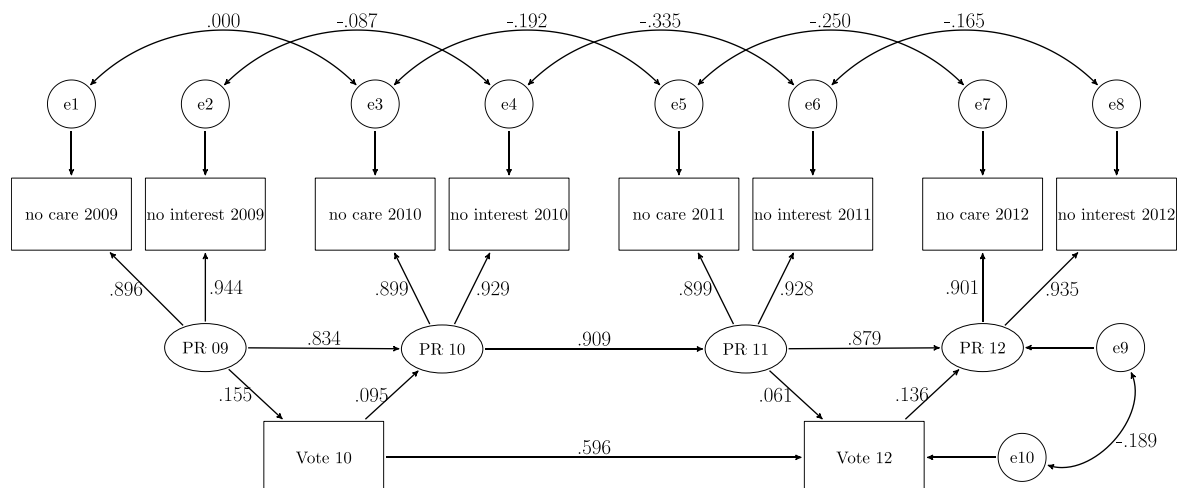


Figure 2 displays the coefficients standardised over the entire model; all are statistically significant at the 95 per cent level and in the expected direction. Coefficients are directly comparable. Around both modelled national elections either hypothesis on causal direction finds support in the data, which speaks for the reliability of the results. Perceived responsiveness is a positive causal explanation for voter turnout. It means that the higher levels of perceived responsiveness are six and nine months prior to a national election the higher the likelihood that citizens turn out to vote. This finding supports electoral behaviour theories and the proposed causal mechanism that political supply impacts the expected utility of casting a vote.⁵ Equally, the results show that perceived responsiveness is a causal outcome of reported electoral participation. This means that citizens who voted tend to have higher levels of perceived responsiveness five and three months after the election. This is supportive of theories of participatory democracy. The presumed causal mechanism is that the act of voting enables experiencing governmental control and the feeling of having a stake in politics, which translates into higher levels of perceived responsiveness afterwards. An analysis of indirect effects shows how much levels of perceived responsiveness differ between respondents who said they voted and those who said they abstained. In the context of both elections reported turnout increases the odds of feeling represented by around 2 per cent. These results are consistent with the account of causal mechanisms.

⁵ Estimates of indirect effects would likely be biased. Calculating the indirect effects would involve an extra causal path due to the timing of panel waves and consecutive measures of perceived responsiveness.

In general, effect sizes for each of the causal links are small in the context of each of the national elections (.155 versus .061 and .095 versus .136). Wald's tests return statistically significant differences at the 95 per cent level for the causal links around both elections. It means that the causal path between responsiveness 2009 and turnout 2010 is indeed stronger than the one running from turnout 2010 to responsiveness 2010. However, it also means that the causal path from responsiveness 2011 to turnout 2012 is weaker than the one from turnout 2012 to responsiveness 2012. These features point towards a causal relationship between voter turnout and perceived responsiveness that runs both ways, which supports both theories. The causal relationship varies in strength.

Evidently, voting and perceived responsiveness share a complex relationship that entails different causal mechanisms. Both apply but for different parts of the representative process. This means that theories of electoral behaviour and participatory democrats are both correct on their own. People seem to use information on the perceived level of responsiveness as cues for their decision to turn out on Election Day. Additionally, the act of voting affects citizens' perceptions of the level of responsiveness in the period to follow.

Finally, the unique setup of the panel with four waves of data collection and two parliamentary elections also allows testing a more complex, over-time hypothesis about the relationship between voting and perceived responsiveness. As can be seen from the results in Table 3 and Figure 2, each of the four coefficients associated with a causal connection between the concepts is positive and statistically significant at the

95 per cent level.⁶ It means that the findings corroborate the idea of a virtuous circle with circular positive effects over time. Feeling represented activates existing predispositions to vote, and the predispositions to vote prompt people to feel represented. For each of the relationships different causal mechanisms may be at play. Firstly, the perceived and expected utility from political parties facilitates the connection running from perceived responsiveness to voter turnout. Secondly, the acquisition of knowledge and the experience of governmental control provide the foundation for perceived responsiveness as a consequence of voter turnout. The results are consistent with the presumed mechanisms. It means that the important elements of representative democracy are dependent on each other and share a dynamic and interlocked relationship. Steadily, perceived responsiveness and voter turnout contribute to citizens' positive attitudes and participation in the representative process. It implies that citizens who either feel represented or have voted have a larger probability of staying within the wheel of representative democracy, at least over the course of two electoral cycles. This also indicates that citizens who once dropped out of the positive spin of the representative process can become part of it again. Both, the act of voting and feelings of being represented have equal capacity to instigate positive effects on citizens' attitudes towards the representative process.⁷

⁶ The substantive results are robust to the inclusion of individual-level control variables, such as gender, age, marital status and education.

⁷ However, according to existing research on protest voting (see Dassonneville, 2012; Southwell and Everest, 1998), it may also be that some citizens still turn out to vote even though they do not feel represented. In those instances they more often than not cast a vote for a challenger party.

At the same time, panel data also necessitate bearing in mind the context of the survey. In the period 2010–2012 the Netherlands was led by a minority government consisting of the Conservative Liberals and the Christian Democrats, and Geert Wilders' Freedom Party supported it in parliament. It was operating during a time in which the national economy and Europe in general were a constant part of public discussion largely at the expense of other policy issues. In April 2012, the government fell after the Freedom Party refused to support further austerity measures and an early election was called for, which took place in September 2012. These special circumstances might also explain why the connection between feelings of representation and electoral participation were somewhat lower in either direction around the 2012 election. Nonetheless, the results of the full model support the idea of a virtuous circle of representation in citizens' minds. Voter turnout and perceived responsiveness share a positive, two-way causal relationship that persists over time.

5. Summary and conclusion

Representation is a dynamic process involving citizens that express their preferences and representatives that are responsive to them. This study set out to investigate how citizens experience this dynamic process over the course of several years and spanning two national elections.

Numerous studies in electoral behaviour and participatory democracy have modelled the effects of perceived responsiveness on voter turnout and vice versa. The causal mechanisms underlying each hypothesis on a citizen-level are well documented. Perceived responsiveness should cause a higher probability to vote because citizens who find a political alternative close to their own preference will estimate a higher personal utility, if the preferred party enters government. Voter turnout, on the other hand, should lead to higher levels of perceived responsiveness because voters, as opposed to non-voters, have experienced governmental control. Moreover, they have had a stake in bringing about the political outcome. Previous research supporting each of the views generally neglects tests of direct causality and usually assumes the causal direction runs in its favour. Therefore, so far, political science has only been able to treat the connection between electoral behaviour and perceived responsiveness as a positive statistical association.

Aside experimental research, panel data are the only way to model the temporal order between cause and effect. However, existing studies were not able to appropriately model the theoretical expectations due to the timing of panel waves. High-quality panel data from the Netherlands that cover four waves and two parliamentary elections over the course of only three years finally enabled studying the causal direction between perceived responsiveness and electoral participation in more detail.

On the basis of results obtained from structural equation modelling the article argued for a more complex relationship between perceived responsiveness and voting beyond traditional conceptions. It was found that causality runs both ways: perceived responsiveness is as much a cause as it is a consequence of electoral participation,

which means that the main elements of the representative process are more heavily connected in citizens' minds than previously known. The results also validate the long-running practice of using perceived responsiveness as a predictor of voter turnout as well as voter turnout as a predictor of perceived responsiveness. These findings also hold over two electoral cycles, which indicates the existence of a virtuous circle of representation in citizens' minds. Feeling represented activates existing predispositions to vote, and the predispositions to vote prompt people to feel represented. It means that representation can be a self-sustaining, positive experience for most citizens. Additionally, for those who once dropped out of the positive spin of representation it does not seem to matter at which stage (participation or responsiveness) they re-enter to experience the positive effects. Such an interlocked conception of representation is also plausible given the nature of representative processes with recurring elections and continuous efforts by politicians to make citizens feel represented.

At the same time, panel data and causal tests of reciprocity come with their own set of restrictions, which future studies should improve on. Firstly, while the results are consistent with the theorised causal mechanisms, the provided evidence should be substantiated with experimental studies. Secondly, the results only provide first evidence for a virtuous circle and future studies should investigate the factors that can strengthen or weaken it. For example, we do not observe full voter turnout in elections. This points at the fact that the virtuous circle of representation may not be fully encompassing, and neither does it have to be. A virtuous circle does not necessarily imply ever-increasing levels. It rather means that the contributing factors are circular in their causal relationship. Nonetheless, other factors are evidently at

play, which the effect sizes in the analysis already hinted at. Contextual circumstances such as compulsory voting, the age of democracy, electoral rules, party competition, campaigning or elite manipulation that were econometrically taken into account in the current analysis could be moderating factors that strengthen or weaken the virtuous circle (see also Blais et al., 2014 on contextual effects). Actual responsiveness or elite-citizen congruence could also have moderating effects. Thirdly, although the employed research design and quality of the data presented a significant improvement over earlier work, a longer timeframe is necessary to consider how quickly citizens can be boosted by the cycle once they dropped out or how long run the phenomenon of a virtuous circle in citizens' minds is. However, given the centrality of electoral participation and representation in representative democracies, the framework of this study can be extended to different national settings and incorporate different factors that can weaken or strengthen the virtuous circle. The present study offered a first step by providing individual-level evidence for political representation as a dynamic process in citizens' minds.

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