

Knoll, Bodo; Pitlik, Hans; Rode, Martin

Article — Published Version

TV Consumption Patterns and the Impact of Media Freedom on Political Trust and Satisfaction with the Government

Social Indicators Research

Provided in Cooperation with:

Springer Nature

Suggested Citation: Knoll, Bodo; Pitlik, Hans; Rode, Martin (2023) : TV Consumption Patterns and the Impact of Media Freedom on Political Trust and Satisfaction with the Government, Social Indicators Research, ISSN 1573-0921, Springer Netherlands, Dordrecht, Vol. 169, Iss. 1, pp. 323-340, <https://doi.org/10.1007/s11205-023-03160-3>

This Version is available at:

<https://hdl.handle.net/10419/307776>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>



TV Consumption Patterns and the Impact of Media Freedom on Political Trust and Satisfaction with the Government

Bodo Knoll¹ · Hans Pitlik² · Martin Rode³

Accepted: 8 June 2023 / Published online: 5 July 2023
© The Author(s) 2023

Abstract

This paper empirically assesses the impact of media freedom on citizen's trust in politicians and satisfaction with national governments. Restrictions potentially allow governments to provide citizens with biased information, which may then increase trust in, and satisfaction with, ruling elites. Yet, these restrictions may also be perceived as a signal that the latter are not trustworthy. Employing data from the European Social Survey to compare respondents with different levels of media consumption, we show that unfree media are partially effective in manipulating perceptions. Using age as an instrument for the time dedicated to media consumption, we find that higher levels of media freedom reduce citizen's trust in government but are unrelated to satisfaction with national governments.

Keywords Political trust · Government satisfaction · Media freedom · TV consumption

JEL Classification D72 · D83 · H80

1 Introduction

Freedom of the media is considered a fundamental institution of political democracy. The well-documented recent erosion of media freedom, especially visible in certain parts of Eastern Europe's young democracies, may be one of its most important challenges in the twenty-first century. Nonetheless, even in established democratic regimes, politicians actively develop strategies to influence public opinion via increased media control, often with the aim of manipulating voters' perceptions of government and opposition groups. Based on the idea that political media control matters for opinion formation, this paper studies interactions between media freedom, media consumption patterns, and trust of citizens in politicians, as well as satisfaction with national governments and provided services.

✉ Bodo Knoll
bodo.knoll@rub.de

¹ University of Bochum, Bochum, Germany

² Austrian Institute of Economic Research (WIFO), Vienna, Austria

³ Universidad de Navarra, Pamplona, Spain

Identifying the impact of restricted media freedom is important, as exposure to systematically biased media content impacts on political knowledge, public opinion, voter turnout, and eventually election results. For example, recent literature has shown that perceptions matter more than facts for attitude formation and voting behavior (e.g., Di Guilmi & Galanis, 2021; Gimpelson & Treisman, 2018). A central question in the debate over political influence on media content is therefore how citizens' attitudes are affected (e.g., Leeson & Coyne, 2005). On the one hand, restrictions of media freedom potentially allow governments to provide systematically biased information about their own performance. This may influence voter perceptions of policy outcomes, and, as a result, increase satisfaction with and foster trust in government. On the other hand, political media interference may be interpreted as a signal that information is framed in favor of ruling elites. If the public is aware of political influence, trust in the controlled media is likely to decline. Hence, increased media control could even have the contrary effect on public attitudes and perceptions, causing a decline in trust and citizen satisfaction with the government.

Over the last decades the media landscape and the patterns of media use have transformed substantially. Consumption patterns have changed, particularly as a result of the spread of the internet and social media. Online media sources have gained importance at the expense of traditional news, and there also appears to be a clear age-related pattern regarding news consumption, generally observing younger people to use the mainstream media to a much lower degree (Newman, 2011). As Robinson et al. (2018) highlight, television is still the world's dominant source of political information, but its impact is certainly not as large as before the emergence of social media platforms, and it may increasingly be a medium used more by the elderly rather than younger people. In addition, the dividing lines between political news and entertainment, as well as the separation of consumers and producers of news, have become increasingly blurred in the age of the internet and social media (Williams & Delli Carpini, 2011).

Yet, government control of internet contents and use is technically much more difficult and harder to execute. Internet contents may be biased through undue influence of many actors, but certainly not by governments exclusively. In addition, perception is likely to depend on individual media usage habits, i.e., whether citizens get their information mainly from television, radio, newspapers, etc., and how much media content is consumed on a daily basis (Avery, 2009).

This paper investigates the effect of having free media on citizens' trust in politicians, and perceptions of government performance. Media freedom is defined in a broad sense, specifying the absence of government regulations concerning content, financing, or organization. Based on the idea that the impact of a biased media content is directly dependent on the quantity (and quality) of individual media consumption (especially TV consumption), we examine the heterogeneous effects of watching TV using data from the European Social Survey (ESS) for 25 European countries, conditional on the countries' media freedom. Our findings show that, by itself, higher media freedom is on average unrelated to people's trust in politicians and satisfaction with national governments.

Unfree media, however, may be partially effective in manipulating citizen's perceptions: People who consume a lot of television are susceptible to manipulation. By using age of individuals as an instrument for media consumption, we exploit an exogenous variation in TV exposure to establish a causal relationship between media freedom and individual perceptions of the government. Our results indicate that individuals who consume more TV also experience a larger increase in political trust in countries with comparatively lower media freedom, while there seems to be no impact on satisfaction with national government. The reason we find a partial effect of TV viewing on political trust may be that

trust in politicians is a much less specific measure than satisfaction with the government. It captures how much individuals trust politicians in general, rather than what they think about specific politicians and their programs. In that sense, political trust depends to a large degree on the general expectations that individuals have about the functioning of the political process. Satisfaction with the results of particular policies, in turn, is probably much better captured by satisfaction with government.

Specifically, the paper makes two distinctive contributions to the literature: First, we identify the impact of media freedom on political trust and government satisfaction. Second, our findings show that TV consumption patterns of individuals are relevant; above average TV consumption facilitates manipulation of trust perceptions. The partial success of these strategies provides incentives for populist governments in institutionally weaker democracies to establish greater control over the media. We further identify the electoral groups that these governments attempt to target in the process.

2 Political Trust, Government Satisfaction, and Media Freedom: An Overview

A key function of the media consists in providing citizens with information on policies, which is closely connected to the preference formation of voters in democratic regimes. In particular, the role of traditional mass media in election campaigns and the impact on voting behavior have been extensively studied in the social sciences (e.g., Ansolabehere et al., 1991; Beck et al., 2002; Benesch et al., 2019; Bernhardt et al., 2008; Besley & Prat, 2006; Gerber et al., 2009; Hetherington, 1996; Strömbäck & Shehata, 2010). There seems to be a general consensus on the importance of mass media for the formation of individual political preferences and attitudes. For instance, Meulemann (2012) shows that public control over the media increases the preferences for information over entertainment in individual media use. Recently, research has focused more specifically on the political impact of social media and “fake news” (Allcott and Gentzkow, 2017; Ceron & Memoli, 2016; Enli & Rosenberg, 2018), often triggering calls for a stricter regulation of what has also been called the new media.

Increased control over newspapers, TV and radio stations, and the internet should therefore allow governments not only to influence citizens’ perceptions about certain political projects; it also allows to disguise corruption scandals, or camouflage political fraud and failures (Leeson, 2008; Leeson & Coyne, 2005). Indeed, there is strong empirical evidence that independent mass media serve as a watchdog for the government and its activities (e.g., Bhattacharyya & Hodler, 2015; Camaj, 2013; Chan & Suen, 2009).

Relatedly, the overall performance of governments may be measured by the level of trust of the citizens (Bouckaert and Van de Walle, 2003), although it is unclear whether this is driven by actual government performance. For many Western democracies a trust decline is also routinely diagnosed (e.g., Van de Walle et al., 2008). Some political scientists have linked these developments to the presence of negative media coverage (e.g., Mair, 2006; Moy et al., 1999), where greater exposure to political news is supposed to lead to mistrust in government, for example due to a focus on negative political campaigning. According to this strand of the literature, it is mainly the interaction of journalists and citizens that leads to increasing political mistrust, where especially intense TV consumption may instigate political cynicism and be harmful to political confidence (i.e., the “video-malaise

hypothesis”). Conversely, if governments have the power and instruments to control media content, this can increase trust in government for media consumers.

Up to date, less attention has been put on perceptions of the media’s institutional and legal framework itself: Whether people trust politicians likely depends on their perception of the media; i.e., it makes a difference whether media is believed to provide unbiased information, or not. A few studies focus on the relationship of media freedom and political trust and find that positive trust effects can be derived from the unbiased exercise of the media’s control function. Provided that free media perform better in detecting corruption (Brunetti and Weder, 2003; García-Sánchez et al., 2016), they should contribute positively to trust in politicians and to general satisfaction with political elites.

The presumption that free media will promote the quality of government and, consequently, trust in public institutions is not as straightforward as it seems. Färdegh (2013) shows that media access is just as important as media freedom in explaining variations in government quality across European countries, meaning that media use is an equally important factor for political trust. Additionally, Norris (2011) finds that newspaper use is unrelated to attitudes towards democracy, but intense internet users are significantly more critical about the way democracy works in practice. According to her, only politically interested, engaged, and (already) trusting individuals consume political news, while non-trusting people usually stay uninformed. Therefore, media influence on political trust should not be overstated, as trusting people may become even more trusting through consumption of media news, while mistrusting individuals are unaffected by their (non-) consumption.

A closely related paper to ours is Avery (2009), who investigates the differential effects of media exposure on political trust formation. He argues that the impact of media consumption on trust is conditional on both, prior levels of trust, and the medium through which individuals receive news. Similar to Norris (2011), Avery (2009) also considers the notion that TV news consumption may have comparatively more detrimental trust effects than exposure to newspapers. Finally, Hanitzsch and Berganza (2012) analyze survey information on the trust of journalists in politicians. They find that general trust levels in the society, private vs. state ownership of the media, and indicators of political performance are most important in explaining variation in journalists’ political trust.

3 Data and Some Stylized Facts

3.1 Political Trust and Government Satisfaction

This paper employs data from the European Social Survey (ESS), which is a repeated cross-sectional survey covering more than 300,000 individuals in 32 European countries. The ESS started in 2002 and is since then conducted on a biennial basis. The ESS consists of core modules designed to provide a time series of attitudes and values for some topics and rotating modules with additional questions not included in each wave of the survey. Questions about media consumption are part of the core module. This standardized set of questions is available across waves and countries. In our final sample, it allows us to compare individual media consumption from 25 European countries and seven waves of the survey.

In all waves, the survey includes several questions related to trust in, and satisfaction with, different political institutions and the political process. In particular, respondents are asked to indicate their trust in politicians, as well as their satisfaction with the national

government, both on a scale from 0 to 10. For our purpose, these variables are rescaled, such that values range from 0 to 1, where higher values indicate more trust and higher satisfaction, respectively. Average trust in politicians in Europe was around 0.38 during the sample period, while satisfaction with the national government was somewhat higher at 0.42. Table 1 shows descriptive statistics on individual characteristics of respondents for our sample.

3.2 Media Freedom

To capture media freedom between 2002 and 2016, we use a composite indicator from data by Freedom House (FH). On an annual basis, FH provides three sub-indicators measuring the absence of governmental influence on the organization of media (political media freedom), the absence of government financing (economic media freedom), and the absence of legal regulations (regulatory media freedom), respectively. These are all based on expert surveys for the respective countries. The sum of the sub-indicators results in an overall indicator for media freedom, which takes on values between 0 and 100. For our purpose, we normalize the composite indicator for media freedom such that 0 denotes a country with a completely unfree media, while 1 denotes a country with complete media freedom. The comprehensive measure varies between 0.3 and 0.9 in the total sample.

Table 1 Summary statistics, individuals

	N	Mean	St. dev	Min	Max
No or low TV consumption	250,468	0.057	0.231	0	1
Medium TV consumption	250,468	0.291	0.454	0	1
High TV consumption	250,468	0.311	0.463	0	1
Very high TV consumption	250,468	0.342	0.474	0	1
No political TV consumption	250,468	0.060	0.237	0	1
Low political TV consumption	250,468	0.307	0.461	0	1
Medium political TV consumption	250,468	0.386	0.487	0	1
High political TV consumption	250,468	0.136	0.343	0	1
Very high political TV consumption	250,468	0.112	0.315	0	1
Retired	250,468	0.266	0.442	0	1
Household size	250,468	2.698	1.381	1	22
Age	250,468	49.222	17.286	14	123
Partner	250,468	0.641	0.480	0	1
Years of education	250,468	12.463	4.020	0	56
Voter	250,468	0.764	0.425	0	1
No social contact	250,468	0.099	0.299	0	1
Social contact	250,468	0.148	0.355	0	1
Citizen	250,468	0.963	0.190	0	1
Born in country	250,468	0.911	0.285	0	1
Male	250,468	0.483	0.500	0	1
Self-employed	250,468	0.132	0.338	0	1
Paid work	250,468	0.571	0.495	0	1

All trust and satisfaction variables are normalized on a 0–1 scale

Table 2 shows summary statistics for all variables at the macro level in our sample. Many European countries are characterized by a high level of media freedom. Since our sample also includes nations with comparatively more restrictions in press freedom, such as Ukraine, Turkey, Hungary, Bulgaria, or Croatia, variation across countries is quite substantial. Variation over time is nonetheless moderate, with larger changes only being observed for a few countries, such as Hungary, Israel, and Italy in our sample period.

3.3 Media Exposure

Since the main interest of this paper is the influence of media freedom on trust and satisfaction of citizens with government and democratic institutions, detailed information on individual media consumption is required. We draw on data from the first seven waves of the ESS, covering the years 2002–2014, where respondents were asked how much time they spend watching TV, listening to the radio, and reading newspapers. Furthermore, they were asked how much time of this media consumption is related to news or politics and current affairs.

The vast majority of individuals in the ESS declare to spend at least some time watching TV, whereas many respondents spend no, or very little, time on reading newspapers and listening to the radio. Furthermore, there is more interpersonal variation in TV consumption, as compared to radio and newspaper. This is in line with the mentioned findings by Robinson et al. (2018), who highlight that despite shifting consumption patterns across age groups, television remains the dominant source of political information for the vast majority of citizens. The prevalence of TV consumption among citizens suggests that this channel is also considered the most important from the perspective of politicians. For these reasons, we exclusively focus on TV intake in the following.

Since the ESS separately measures individuals' total TV consumption, and the time spent on political content, we can construct two different media exposure variables, measuring TV consumption and political TV consumption, respectively. Following Prior (2005), greater media choice makes it easier for people to find their preferred content: People who like news take advantage of abundant political information to become more knowledgeable, while people who prefer entertainment abandon the news and become less likely to learn about politics. Notwithstanding, as Williams and Delli Carpini (2011) point out, the tendency to increasingly blend entertainment and news could also mean that entertainment programs may contain relatively more political information nowadays. In practice,

Table 2 Summary statistics, countries

	N	Mean	St. dev	Min	Max
Trust in politicians	164	0.362	0.235	0.000	1.000
Satisfied with government	164	0.405	0.261	0.000	1.000
GDP p.c	164	35,053.675	13,370.141	7004.328	87,209.819
Inflation	164	2.859	2.869	−0.946	25.232
Unemployment rate	164	8.139	3.981	2.550	24.790
Media freedom (lag)	164	0.802	0.104	0.320	0.920

Indicators for media freedom are normalized on a scale from 0 to 1. GDP is gross domestic product converted to international dollars using purchasing power parity divided by 1,000,000,000. Population is measured in million residents

it may therefore be difficult to clearly separate overall TV consumption from political TV consumption.

To simplify the interpretation of our basic regression results, the categorical ESS variables are transformed into a series of dummy variables with the following categories: “No or low TV consumption”, “Medium TV consumption”, “High TV consumption”, and “Very high TV consumption” for both measures. Table 1 shows the recoding and frequencies of answers to each of the respective questions.

4 Empirical Strategy

To assess how media freedom is associated with political trust, and how this relates to different media consumption patterns of individuals, we test the specification in Eq. (1):

$$y_{ijt} = \beta_0 + \beta_1 \text{media freedom}_{jt} + \beta_2 \text{TVcons}_{ijt} + \beta_3 \text{media freedom}_{jt} \cdot \text{TVcons}_{ijt} + \beta_4 X_{ijt} + \beta_5 Z_{jt} + \eta_j + \rho_t + \epsilon_{ijt} \quad (1)$$

where y_{ijt} denotes either trust in politicians or satisfaction with the national government of individual i in country j at year t . Variable *media freedom* is the FH based media freedom indicator described above, while TV_{cons} is a set of dummy variables that measures the time respondents are exposed to TV. X is a vector of individual level control variables (i.e., age, gender, years of education, household size, partnership, high number of social contacts, citizenship, self-employment) and Z controls for time varying country characteristics that may be correlated with both, media freedom and trust or satisfaction with government (GDP p.c., unemployment rate, inflation). Time constant and country specific heterogeneity is captured by a full set of country and time fixed effects (η_j and ρ_t); ϵ_{ijt} denotes the error term. All standard errors are clustered at the country level.

We prefer a fixed-effects approach over multi-level modelling, as the latter would require many more cross-country units. Existing literature on multilevel analysis refers to the need of about 100 cross-sectional units on the upper level to obtain reasonable results with Maximum Likelihood-estimation (e.g., Maas & Hox, 2005). Our estimated models rely on just 25 national units and therefore offer a low number of degrees of freedom on the country level. This also severely limits inclusion of additional macro-variables which would lead to an omitted variable bias. Country fixed effects remove unobserved heterogeneity between countries in our data. Clustering can yet still be present even after including state and year effects, and valid inference requires controlling for clustering within countries (Pepper, 2002). Clustering at the country level accounts for the fact that observations within countries are not independently and identically distributed. Hence, reported standard errors are not based on a total of about 300,000 respondents but just 25 country-year observations. Employing multilevel analysis or country-years clustering leaves results qualitatively almost unchanged. Results are available on request. All estimates were performed with the Stata 14.2 package.

There are two reasons for interacting media freedom and media consumption as in Eq. (1): First, we expect a heterogeneous impact of media freedom, dependent on the time individuals spend watching TV. Changes in media freedom should therefore mainly have an impact on heavy media users. Citizens watching TV several hours a day are likely to be influenced by biased information, while non-TV-users are not directly affected. Second, media consumption and political trust, or government satisfaction, could also be

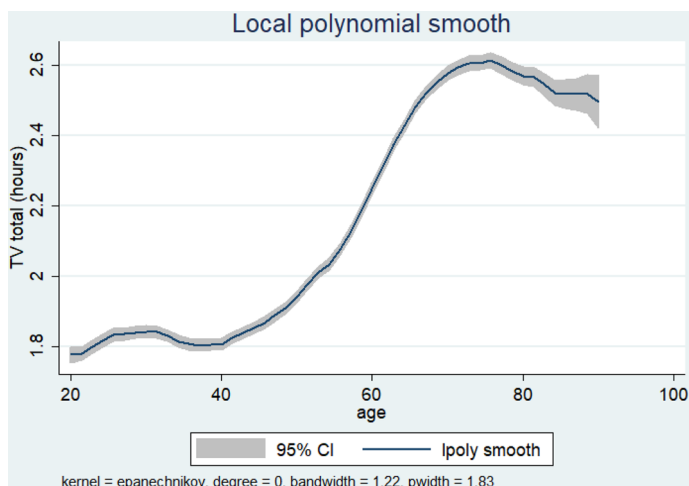


Fig. 1 Total TV consumption by age

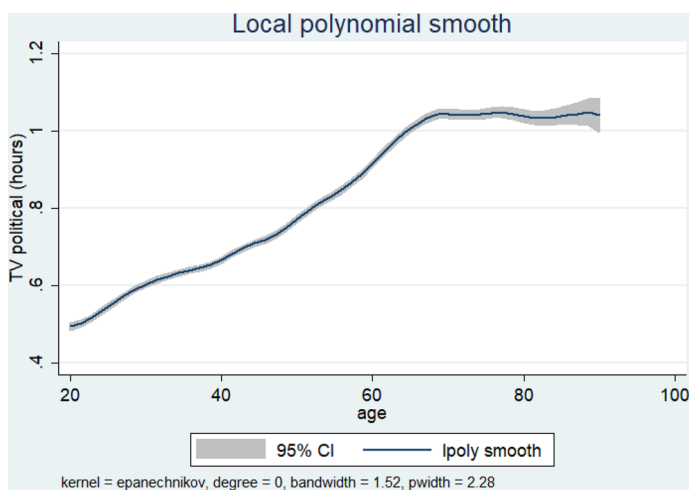


Fig. 2 Political TV consumption by age

endogenous, meaning that individuals with low trust and/or satisfaction systematically watch less TV.

We therefore distinguish between high and low media exposure, using age as an exogenous instrument. Older individuals tend to spend more time at home and therefore spend more time in watching TV. This is a natural setting for an instrumental variable (IV) estimation. Following this logic, Fig. 1 (Fig. 2) shows total (political) TV consumption time over the life-cycle, as calculated from data in the ESS. In both figures, it is clearly visible that the total time dedicated to watching (political) TV greatly increases with age, especially between an individual's late 50's and early 70's. Comparing trust and satisfaction

with government between old and young citizens thus allows us to employ an exogenous variation in TV consumption.

5 Results

5.1 OLS Baseline Results

We first run a series of OLS baseline regressions on the relationship between media freedom and trust in politicians, as well as media freedom and satisfaction with national governments. In a first step, Tables 3 and 4 show the impact of media freedom and the time spend on TV consumption. While Table 3 considers the impact of media freedom and TV consumption separately, Table 4 adds interaction terms between media freedom and the respective TV consumption dummies. In a second step, this analysis is repeated, employing political TV consumption in Tables 5 and 6. All tables show outcomes for both dependent variables, i.e., for satisfaction with national government (specifications (1)–(3)), and for political trust (specifications (4)–(6)). Furthermore, all estimations are shown with and without the full set of control variables, but always employing country and time fixed effects.

According to the findings in all four tables, there is no effect of media freedom on either of the dependent variables on average. The corresponding variable always enters the equation with a negative sign, but never reaches statistical significance. This finding would reject the hypothesis that governments can manipulate citizens' perceptions if they have sufficient control over the media. Given that media freedom is measured at

Table 3 Impact of media freedom and total TV exposure (I)

	Satisfied with government			Trust in politicians		
	(1)	(2)	(3)	(4)	(5)	(6)
Media freedom (lag)	−0.374 (0.601)	−0.378 (0.599)	−0.442 (0.397)	−0.333 (0.418)	−0.333 (0.417)	−0.384 (0.328)
Medium total TV	0.010* (0.004)	0.010* (0.004)	0.010* (0.004)	0.008 (0.006)	0.009+ (0.005)	0.009+ (0.005)
High total TV	0.010 (0.007)	0.012* (0.005)	0.012* (0.005)	0.009 (0.009)	0.012+ (0.007)	0.012+ (0.007)
Very high total TV	0.004 (0.010)	0.007 (0.008)	0.007 (0.007)	−0.003 (0.012)	0.004 (0.009)	0.004 (0.009)
Individual controls	No	Yes	Yes	No	Yes	Yes
Country controls	No	No	Yes	No	No	Yes
R ²	0.095	0.109	0.137	0.125	0.144	0.154
Observations	250,468	250,468	250,468	250,468	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. The reference category for TV consumption is “No or low total TV”. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4 Impact of media freedom and total TV exposure (II)

	Satisfied with government			Trust in politicians		
	(1)	(2)	(3)	(4)	(5)	(6)
Media freedom (lag)	-0.212 (0.650)	-0.231 (0.649)	-0.296 (0.444)	-0.110 (0.441)	-0.132 (0.443)	-0.186 (0.352)
Medium total TV	0.066* (0.031)	0.064* (0.031)	0.064* (0.026)	0.116*** (0.030)	0.110*** (0.029)	0.108*** (0.029)
High total TV	0.128** (0.038)	0.120** (0.038)	0.116*** (0.031)	0.172*** (0.029)	0.160*** (0.029)	0.154*** (0.027)
Very high total TV	0.165+ (0.086)	0.151+ (0.087)	0.143+ (0.076)	0.211*** (0.052)	0.192*** (0.053)	0.182*** (0.048)
Medium total TV × media freedom	-0.072+ (0.039)	-0.068+ (0.038)	-0.069* (0.032)	-0.137** (0.039)	-0.129** (0.038)	-0.126** (0.037)
High total TV × media freedom	-0.150** (0.048)	-0.139** (0.047)	-0.133** (0.037)	-0.208*** (0.038)	-0.189*** (0.036)	-0.181*** (0.033)
Very high total TV × media freedom	-0.207+ (0.108)	-0.185+ (0.107)	-0.175+ (0.093)	-0.274*** (0.069)	-0.242** (0.067)	-0.229*** (0.061)
Individual controls	No	Yes	Yes	No	Yes	Yes
Country controls	No	No	Yes	No	No	Yes
R ²	0.096	0.109	0.138	0.126	0.145	0.155
Observations	250,468	250,468	250,468	250,468	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. The reference category for TV consumption is “No or low total TV”. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

the country level, one can also safely exclude the possibility of individual perceptions influencing media legislation on the margin, unless the surveyed individual is Victor Orban or Vladimir Putin himself. Findings on this variable can thus be interpreted as reasonably causal.

Tables 3 and 5 further suggest that the more time respondents spend watching TV, the more they trust in politicians, and the higher their satisfaction with national governments seems to be, on average. This association is especially pronounced for TV programs about politics and current affairs, as shown in Table 5. As highlighted above, this association cannot be interpreted as causal though, as trusting individuals likely select themselves into watching relatively more (political) TV. The size of coefficients should therefore be regarded with due skepticism.

Despite of this issue, the (null) hypothesis that media freedom is irrelevant for political trust is challenged, once we introduce interaction effects with media consumption in Tables 4 and 6: For both dependent variables, we find a strong and statistically negative association to the interaction of media freedom with the TV consumption dummies. These become stronger the more time is spent watching TV, with effects being significant for overall TV consumption and political TV consumption. This would

Table 5 Impact of media freedom and political TV exposure (I)

	Satisfied with government			Trust in politicians		
	(1)	(2)	(3)	(4)	(5)	(6)
Media freedom (lag)	−0.362 (0.599)	−0.371 (0.596)	−0.434 (0.394)	−0.313 (0.414)	−0.319 (0.413)	−0.369 (0.323)
Low political TV	0.041*** (0.004)	0.034*** (0.004)	0.033*** (0.004)	0.059*** (0.002)	0.049*** (0.002)	0.048*** (0.002)
Medium political TV	0.051*** (0.004)	0.041*** (0.004)	0.040*** (0.004)	0.074*** (0.002)	0.062*** (0.003)	0.061*** (0.003)
High political TV	0.053*** (0.004)	0.041*** (0.004)	0.041*** (0.005)	0.080*** (0.002)	0.067*** (0.002)	0.067*** (0.003)
Very high political TV	0.054*** (0.005)	0.042*** (0.005)	0.043*** (0.005)	0.080*** (0.005)	0.069*** (0.005)	0.069*** (0.005)
Individual controls	No	Yes	Yes	No	Yes	Yes
Country controls	No	No	Yes	No	No	Yes
R ²	0.098	0.110	0.139	0.131	0.148	0.158
Observations	250,468	250,468	250,468	250,468	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. The reference category for political TV consumption is “No political TV”. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: ⁺ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

indicate that unfree media may be at least partially effective in manipulating citizen’s trust and performance perceptions, but only for those individuals who consume above a certain amount of TV. Again, the interaction terms cannot reasonably be interpreted as causal in this case. An attempt at identifying a reasonably causal impact of the interaction between media freedom and media consumption time on our dependent variables is made in the following section, where we turn to an IV estimation strategy.

5.2 Instrumental Variables Approach

As mentioned above, our empirical strategy used for the baseline estimations in Tables 3, 4, 5 and 6 may suffer from potential endogeneity issues. For example, TV consumption patterns are likely influenced by consumers’ trust in media freedom. Individuals who think that TV content is biased by government interventions may watch less (political content on) TV than those who believe in independent and trustworthy media. It may be also difficult to control for all unobserved personal characteristics that influence both an individual’s assessment of the government and its TV consumption. We try to account for these endogeneity concerns by providing a set of instrumental variables regressions that instrument TV consumption with the age of respondents. Figures 1 and 2 show nonparametric evidence that TV consumption is correlated with age. Older respondents spent more time watching TV than younger respondents. This holds both for total TV consumption and for political TV consumption. According to these figures, respondents at age 20–40 are exposed to TV content for about 2 h per weekday on average. Between 40 and 70 TV

Table 6 Impact of media freedom and political TV exposure (II)

	Satisfied with government			Trust in politicians		
	(1)	(2)	(3)	(4)	(5)	(6)
Media freedom (lag)	-0.259 (0.646)	-0.264 (0.647)	-0.337 (0.436)	-0.249 (0.436)	-0.247 (0.444)	-0.304 (0.348)
Low political TV	0.066 (0.040)	0.065 (0.042)	0.051 (0.035)	0.064* (0.024)	0.063* (0.028)	0.055* (0.024)
Medium political TV	0.118* (0.050)	0.111* (0.053)	0.102* (0.045)	0.123*** (0.027)	0.118*** (0.032)	0.111*** (0.028)
High political TV	0.137** (0.048)	0.125* (0.051)	0.121* (0.050)	0.133*** (0.029)	0.124*** (0.034)	0.119** (0.033)
Very high political TV	0.204* (0.077)	0.194* (0.079)	0.183* (0.075)	0.169*** (0.037)	0.161*** (0.043)	0.152** (0.042)
Low political TV × media freedom	-0.033 (0.050)	-0.041 (0.053)	-0.024 (0.043)	-0.007 (0.029)	-0.018 (0.036)	-0.009 (0.030)
Medium political TV × media freedom	-0.087 (0.062)	-0.091 (0.066)	-0.080 (0.057)	-0.063+ (0.033)	-0.073+ (0.040)	-0.065+ (0.035)
High political TV × Media freedom	-0.109+ (0.060)	-0.110 (0.065)	-0.104 (0.063)	-0.069+ (0.036)	-0.073+ (0.042)	-0.068 (0.041)
Very high political TV × media freedom	-0.198* (0.095)	-0.199+ (0.099)	-0.183+ (0.093)	-0.116* (0.047)	-0.121* (0.054)	-0.109* (0.053)
Individual controls	No	Yes	Yes	No	Yes	Yes
Country controls	No	No	Yes	No	No	Yes
R ²	0.099	0.111	0.139	0.132	0.148	0.159
Observations	250,468	250,468	250,468	250,468	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. The reference category for political TV consumption is “No political TV”. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

consumption steadily increases up to 2.6 h a day and decreases again for very old respondents. A similar difference between young and old respondents is found with regard to political TV consumption: There is a significant increase in political TV consumption by about 0.5 h per workday if 20-year-old and 70-year-old respondents are compared. Total and political TV consumption have a systematic different age-pattern for very young and very old individuals in our sample. Whereas for 20–40-year-old respondents total TV consumption is more or less the same, we observe a steady increase in political TV consumption. TV consumption is declining with age for very old people in general, but age is not correlated with watching political content for those at age 60 or higher.

Tables 7 and 8 show the results of instrumental variables regressions using age as an instrument for TV consumption. The interaction term of age and the lag of media freedom instrument for the interaction term of TV consumption and the lag of media freedom. This approach must assume that age has no direct impact on trust and satisfaction with national governments. Although past research has shown that older individuals regularly declare

Table 7 IV, Instrument: age – Impact of media freedom on satisfaction with national government

	(1) All	(2) Age > 40	(3) Age 40–70	(4) 2nd order polynomial	(5) 3rd order polynomial
Lag media freedom × TV consumption	−0.182** (0.062)	−0.192*** (0.051)	−0.019 (0.070)	−0.163*** (0.043)	−0.136* (0.056)
TV consumption	0.187*** (0.051)	0.261*** (0.043)	0.065 (0.056)	0.200*** (0.036)	0.180*** (0.047)
Lag media freedom	0.072 (0.458)	0.091 (0.302)	−0.396 (0.453)	0.041 (0.370)	−0.029 (0.410)
Individual controls	Yes	Yes	Yes	Yes	Yes
Country controls	Yes	Yes	Yes	Yes	Yes
R ²	0.084		0.079	0.016	0.012
Observations	250,468	168,938	133,295	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: ⁺ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 8 IV, Instrument: age—impact of media freedom on trust in politicians

	(1) All	(2) Age > 40	(3) Age 40–70	(4) 2nd order polynomial	(5) 3rd order polynomial
Lag media freedom × TV consumption	−0.430*** (0.042)	−0.487*** (0.096)	−0.237* (0.094)	−0.425*** (0.055)	−0.400*** (0.059)
TV consumption	0.392*** (0.034)	0.495*** (0.080)	0.251** (0.077)	0.413*** (0.044)	0.396*** (0.048)
Lag media freedom	0.796** (0.245)	0.937*** (0.225)	0.220 (0.398)	0.801*** (0.199)	0.737** (0.230)
Individual controls	Yes	Yes	Yes	Yes	Yes
Country controls	Yes	Yes	Yes	Yes	Yes
R ²	0.016		0.033		
Observations	250,468	168,938	133,295	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: ⁺ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

higher trust in government (e.g. Christensen & Læg Reid, 2005), it is unclear at present whether this is really an individual life-cycle effect comparable to that of TV consumption, or rather driven by different cohorts with varying experiences of their interactions with government. The first stage regressions in the appendix (Tables 9 and 10 in the Appendix) indicate that the instruments are relevant in explaining TV consumption patterns.

Specification 1 in Table 7 uses the same sample and control variables as Table 4. The only difference is the definition of TV consumption. Table 7 treats TV consumption as a continuous regressor. We recode our measure for TV consumption according to the midpoints of the intervals of the original categories: Respondents who consume TV but less than half an hour per workday are assumed to consume 0.25 h. 0.5–1.0 h are recoded to 0.75 h, 1.0–1.5 h are recoded to 1.25, Those who report media consumption above 3 h are assumed to watch TV for 4 h per workday. Specifications (2)–(4) restrict the sample or allow for higher order polynomials of age to account for the potentially non-linear relationship of age and TV consumption. Except for specification (3) the general pattern of the results holds in these robustness checks. Table 8 shows the same set of specifications using trust in government as dependent variable which allows us to compare the OLS-regression in Table 4, column (6) with these IV-results.

In general, the results of the IV-regressions show a similar pattern as the baseline regressions based on OLS in Table 6. Media freedom has no significant impact for those who do not watch TV at all. TV consumption, however, has a strong positive impact on satisfaction with national governments in the absence of media freedom. The IV results also confirm that this positive impact gets smaller with media freedom in a country. Again, the results are similar and show a positive effect of TV exposure for extremely low levels of media freedom that is reduced if media freedom gets higher. Instrumenting for TV consumption has a large impact on the main effect of media freedom: In OLS-regressions, the impact of media freedom for non-TV watchers was insignificant. To the contrary, the IV-specifications in Table 8 indicate a strong positive impact.

6 Conclusion

This paper empirically analyzes if trust in politicians and subjective evaluations of national governments are influenced by restrictions of media freedom. From a theoretical point of view, media freedom could have a positive or negative impact on political trust: On the one hand, media freedom reduces the opportunities of the government to provide citizens with biased information. Individuals are more likely to receive critical information on governments and politicians, that may cause dissatisfaction with the government and reduce trust in politicians. On the other hand, knowledge about the state of media freedom in the country may be considered as a signal for the trustworthiness of governments in general. In this case, high media freedom is expected to raise reported political trust levels, even if the news content itself is considered as “negative” by consumers on some occasions.

Results for 25 European countries show, that higher media freedom has no impact on trust in politicians and satisfaction with national governments, on average. However, this changes significantly with the intensity of media consumption. The negative impact of a media freedom on political trust is larger for individuals who consume TV intensively, indicating that an unfree media is partially effective in manipulating individual perceptions of political trust, whereas there is no effect for perceptions of government performance.

Our results suggest that both media consumption patterns and media freedom jointly determine political trust. Government strategies aimed at an increased control over the media are therefore partially effective, probably most benefitting public trust perceptions of individual chief executives. This would explain the popularity of this strategy among populist leaders in government, especially in the institutionally weaker states of Eastern Europe. The high degree of personalization over the policy process that these politicians try to

establish in public discourse (cf. Rode & Revuelta, 2015), creates an important incentive to portray oneself in a positive light to the public eye via enhanced media content control.

Ever since Silvio Berlusconi successfully established this combination of political populism and TV station patrimony in the late 1990's and early 2000's (Ginsborg, 2005), others have taken note and have tried to establish a similar influence over the media for their personalized political benefit. Given that this strategy seems to be especially effective in influencing the political opinions of individuals with a high TV consumption (Durante et al., 2019), it might also shed further light on the puzzle of who votes for populist parties, where recent research has highlighted that the socioeconomic communalities are weak (Rooduijn, 2018), while media consumption patterns might actually play a much more significant role (Enli & Rosenberg, 2018).

Appendix

See Tables 9 and 10.

Table 9 IV, First stage: media freedom \times TV total

	(1) All	(2) Age > 40	(3) Age 40–70	(4) 2nd order polynomial	(5) 3rd order polynomial
Lag media freedom \times age	0.026*** (0.004)	0.042*** (0.005)	0.037*** (0.005)	− 0.035*** (0.007)	− 0.067* (0.031)
Age	− 0.011*** (0.002)	− 0.021*** (0.003)	− 0.015*** (0.004)	0.024*** (0.006)	0.018 (0.022)
Lag media freedom \times age ²				0.001*** (0.000)	0.001+ (0.001)
Age ²				− 0.000*** (0.000)	− 0.000 (0.000)
Lag media freedom \times age ³					− 0.000 (0.000)
Age ³					− 0.000 (0.000)
Individual controls	Yes	Yes	Yes	Yes	Yes
Country controls	Yes	Yes	Yes	Yes	Yes
R ²	0.175	0.189	0.168	0.177	0.177
Observations	250,468	168,938	133,295	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: + $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 10 IV, First stage: TV total

	(1)	(2)	(3)	(4)	(5)
	All	Age > 40	Age 40–70	2nd order polynomial	3rd order polynomial
Lag media freedom × age	0.022*** (0.005)	0.037*** (0.007)	0.027** (0.008)	−0.038*** (0.009)	−0.030 (0.047)
Age	−0.005 (0.004)	−0.014* (0.005)	−0.004 (0.006)	0.025** (0.008)	−0.020 (0.037)
Lag media free- dom × age ²				0.001*** (0.000)	0.000 (0.001)
Age ²				−0.000** (0.000)	0.001 (0.001)
Lag media free- dom × age ³					0.000 (0.000)
Age ³					−0.000 (0.000)
Individual controls	Yes	Yes	Yes	Yes	Yes
Country controls	Yes	Yes	Yes	Yes	Yes
R ²	0.133	0.139	0.127	0.135	0.136
Observations	250,468	168,938	133,295	250,468	250,468

Indicators for media freedom are normalized on a scale from 0 to 1. Individual control variables include age, sex, number of household members, partner, years of education, dummy variables for citizens with many and no social contact to others, citizenship, born in the country and self-employment. Country controls include GDP per capita, the unemployment rate and the inflation rate. Standard errors in parentheses

Significance levels: [†] $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Funding Open Access funding enabled and organized by Projekt DEAL.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Allcott, H. & Gentzkow, M. 2017. Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives*, 31 (2): 211–236. <https://doi.org/10.1257/jep.31.2.211>
- Ansolabehere, S., Behr, R., & Iyengar, S. (1991). Mass media and elections: An overview. *American Politics Quarterly*, 19(1), 109–139. <https://doi.org/10.1177/1532673X9101900107>
- Avery, J. M. (2009). Videomalaise or virtuous circle? The influence of the news media on political trust. *The International Journal of Press/politics*, 14(4), 410–433. <https://doi.org/10.1177/1940161209336224>

- Beck, P. A., Dalton, R. J., Greene, S., & Huckfeldt, R. (2002). The social calculus of voting: Interpersonal, media, and organizational influences on presidential choices. *American Political Science Review*, 96(1), 57–73. <https://doi.org/10.1017/S0003055402004239>
- Benesch, C., Loretz, S., Stadelmann, D., & Thomas, T. (2019). Media coverage and immigration worries: Econometric evidence. *Journal of Economic Behavior & Organization*, 160, 52–67. <https://doi.org/10.1016/j.jebo.2019.02.011>
- Bernhardt, D., Krassa, S., & Polborn, M. (2008). Political polarization and the electoral effects of media bias. *Journal of Public Economics*, 92(5–6), 1092–1104. <https://doi.org/10.1016/j.jpubeco.2008.01.006>
- Besley, T., & Prat, A. (2006). Handcuffs for the grabbing hand? Media capture and government accountability. *American Economic Review*, 96(3), 720–736. <https://doi.org/10.1257/aer.96.3.720>
- Bhattacharyya, S., & Hodler, R. (2015). Media freedom and democracy in the fight against corruption. *European Journal of Political Economy*, 39, 13–24. <https://doi.org/10.1016/j.ejpoleco.2015.03.004>
- Bouckaert, G., & Van de Walle, S. (2003). Comparing measures of citizen trust and user satisfaction as indicators of 'good governance': Difficulties in linking trust and satisfaction indicators. *International Review of Administrative Sciences*, 69(3), 329–343. <https://doi.org/10.1177/0020852303693003>
- Brunetti, A. & Weder, B. 2003. A free press is bad news for corruption. *Journal of Public Economics*, 87(7–8), 1801–1824. [https://doi.org/10.1016/S0047-2727\(01\)00186-4](https://doi.org/10.1016/S0047-2727(01)00186-4)
- Camaj, L. (2013). The media's role in fighting corruption: Media effects on governmental accountability. *The International Journal of Press/Politics*, 18(1), 21–42. <https://doi.org/10.1177/1940161212462741>
- Ceron, A., & Memoli, V. (2016). Flames and debates: Do social media affect satisfaction with democracy? *Social Indicators Research*, 126(1), 225–240. <https://doi.org/10.1007/s11205-015-0893-x>
- Chan, J., & Suen, W. (2009). Media as watchdogs: The role of news media in electoral competition. *European Economic Review*, 53(7), 799–814. <https://doi.org/10.1016/j.euroecorev.2009.01.002>
- Christensen, T., & Lægrend, P. (2005). Trust in government: The relative importance of service satisfaction, political factors, and demography. *Public Performance & Management Review*, 28(4), 487–511. <https://doi.org/10.1080/15309576.2005.11051848>
- Di Guilmi, C., & Galanis, G. (2021). Convergence and divergence in dynamic voting with inequality. *Journal of Economic Behavior & Organization*, 187, 137–158. <https://doi.org/10.1016/j.jebo.2021.04.013>
- Durante, R., Pinotti, P., & Tesei, A. (2019). The political legacy of entertainment tv. *American Economic Review*, 109(7), 2497–2530. <https://doi.org/10.1257/aer.20150958>
- Enli, G., & Rosenberg, L. T. (2018). Trust in the age of social media: Populist politicians seem more authentic. *Social Media + Society*. <https://doi.org/10.1177/2056305118764430>
- Färdigh, M. A. (2013). Free, accessible media and quality of government. QoG Working Paper Series, 2013(17), University of Gothenburg.
- García-Sánchez, I. M., Cuadrado-Ballesteros, B., & Frías-Aceituno, J. V. (2016). Does media freedom improve government effectiveness? A comparative cross-country analysis. *European Journal of Law and Economics*, 42(3), 515–537. <https://doi.org/10.1007/s10657-014-9462-z>
- Gerber, A. S., Karlan, D., & Bergan, D. (2009). Does the media matter? A field experiment measuring the effect of newspapers on voting behavior and political opinions. *American Economic Journal: Applied Economics*, 1(2), 35–52. <https://doi.org/10.1257/app.1.2.35>
- Gimpelson, V., & Treisman, D. (2018). Misperceiving inequality. *Economics & Politics*, 30(1), 27–54. <https://doi.org/10.1111/ecpo.12103>
- Ginsborg, P. (2005). *Silvio Berlusconi: Television, power and patrimony*. Verso.
- Hanitzsch, T., & Berganza, R. (2012). Explaining journalists' trust in public institutions across 20 countries: Media freedom, corruption, and ownership matter most. *Journal of Communication*, 62(5), 794–814. <https://doi.org/10.1111/j.1460-2466.2012.01663.x>
- Hetherington, M. J. (1996). The media's role in forming voters' national economic evaluations in 1992. *American Journal of Political Science*, 40(2), 372.
- Leeson, P. T. (2008). Media freedom, political knowledge, and participation. *Journal of Economic Perspectives*, 22(2), 155–169. <https://doi.org/10.1257/jep.22.2.155>
- Leeson, P. T., & Coyne, C. J. (2005). Manipulating the media. *Institutions and Economic Development*, 1(2), 67–92.
- Maas, C. J., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology*, 1(3), 86–92. <https://doi.org/10.1027/1614-2241.1.3.86>
- Mair, P. (2006). *Polity scepticism, party failings, and the challenge to European democracy*. NIAS.
- Meulemann, H. (2012). Information and entertainment in European mass media systems: Preferences for and uses of television and newspapers. *European Sociological Review*, 28(2), 186–202. <https://doi.org/10.1093/esr/jcq058>

- Moy, P., Pfau, M., & Kahlor, L. A. (1999). Media use and public confidence in democratic institutions. *Journal of Broadcasting & Electronic Media*, 43, 137–158. <https://doi.org/10.1080/08838159909364481>
- Newman, N. (2011). *Mainstream media and the distribution of news in the age of social discovery* (p. 6). University of Oxford.
- Norris, P. (2011). *Democratic deficits. Rising aspirations, negative news, or failing performance?* Cambridge University Press.
- Pepper, J. V. (2002). Robust inferences from random clustered samples: An application using data from the panel study of income dynamics. *Economics Letters*, 75(3), 341–345. [https://doi.org/10.1016/S0165-1765\(02\)00010-1](https://doi.org/10.1016/S0165-1765(02)00010-1)
- Prior, M. (2005). News vs. entertainment: How increasing media choice widens gaps in political knowledge and turnout. *American Journal of Political Science*, 49(3), 577–592. <https://doi.org/10.1111/j.1540-5907.2005.00143.x>
- Robinson, N. W., Zeng, C., & Holbert, R. L. (2018). The stubborn pervasiveness of television news in the digital age and the field's attention to the medium, 2010–2014. *Journal of Broadcasting & Electronic Media*, 62(2), 287–301. <https://doi.org/10.1080/08838151.2018.1451857>
- Rode, M., & Revuelta, J. (2015). The wild bunch! An empirical note on populism and economic institutions. *Economics of Governance*, 16(1), 73–96.
- Rooduijn, M. (2018). What unites the voter bases of populist parties? Comparing the electorates of 15 populist parties. *European Political Science Review*, 10(3), 351–368. <https://doi.org/10.1017/S1755773917000145>
- Strömbäck, J., & Shehata, A. (2010). Media malaise or a virtuous circle? Exploring the causal relationships between news media exposure, political news attention and political interest. *European Journal of Political Research*, 49(5), 575–597. <https://doi.org/10.1111/j.1475-6765.2009.01913.x>
- Van de Walle, S., Van Roosbroek, S., & Bouckaert, G. (2008). Trust in the public sector: Is there any evidence for a long-term decline? *International Review of Administrative Sciences*, 74(1), 47–64. <https://doi.org/10.1177/0020852307085733>
- Williams, B. A., & Delli Carpini, M. X. (2011). *After broadcast news: Media regimes, democracy, and the new information environment*. Cambridge University Press.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.