Staying Tuned or Tuning Out?  
A Longitudinal Analysis of News-Avoiders on the Micro and Macro-Level

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Abstract
European media landscapes have changed into high-choice environments. Additionally, research suggests an increasing number of people are staying away from the news (news-avoiders). In two studies, we approach the topic on the macro and micro-level. In Study 1, we analyze on the macro-level how news-avoiders in 18 EU countries have developed since the late 1980s and what role country variables play in this context. We use multilevel spline models to distinguish between two phases of technological advancement. Findings suggest an increase in news-avoiders in the phase when the Internet was available. The market share of public-service broadcasters is no discerning factor for the number of news-avoiders in different countries. Using German panel-data, Study 2 takes a closer look at the news-avoiders in the Internet phase. We also show the increase of news-avoiders on the micro-level, but do not identify an increasing impact of political interest on news avoidance over time.

Keywords
news use, political interest, longitudinal, micro and macro-level, multilevel spline models

In 2019, over 4,600 TV channels were available in the EU (Ene, 2020), 90% of EU households had Internet access (Eurostat, 2021a), and in 2018, 75% of EU citizens used a smartphone (Eurostat, 2021b). In this high-choice media environment, citizens have every chance to individualize their media use behavior. So-called news-avoiders use these opportunities to stay away from political information without having to

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forgo media consumption (e.g., Strömbäck et al., 2013). Several studies address the issue of individual motivation interfering with an evenly informed public, raising fears of an increasing participation gap (Prior, 2005), with the disengaged leaning toward populism (Spruyt et al., 2016), and societies disintegrating (Blekesaune et al., 2012). While such individual-level characteristics like political motivation play an important part in shaping citizens’ media diet (Lecheler & de Vreese, 2017), media systems can make news avoidance easy or guide users toward (occasional) news consumption (Iyengar et al., 2010; see also Toff & Kalogeropoulos, 2020). If and to what extent news avoidance has become an increasing issue across Europe is still debated (e.g., Blekesaune et al., 2012; Karlsen et al., 2020; Wonneberger et al., 2012). Especially, the question of whether technological advancements like the Internet have been driving forces needs to be resolved to strengthen the field’s theoretical understanding of changes and related processes in the media environment.

This study helps understand the extent of news avoidance as well as mechanisms that shape and have shaped news avoidance over time. This is achieved by analyzing news-avoiders from different comparative angles; this study (a) combines a macro and micro view on news-avoiders, (b) includes several EU countries, (c) views news-avoiders from a longitudinal perspective that distinguishes between phases of technological advancements, and (d) compares two forms of news-avoiders common in literature, but different in their implications for democracy. The findings of this study can help identify interventions and solutions that limit the impacts of news avoidance on the democratic process.

**Opportunity Structures in Changing Media Environments**

Environmental factors, like technological developments or the media system, restrict our behavior. Such external factors, shaping the space in which we can act, are defined as opportunity structures (e.g., McAdam, 1996). In the context of media use, opportunity refers to the availability of media choice (Luskin, 1990; Prior, 2007). In recent history, two technological advancements impacting opportunity structures stand out, namely, the implementation of private TV in the 1980s and 1990s in most of Europe and the widespread Internet access starting in the early 1990s but leading far into the new century, with the later addition of mobile Internet. In this paper, we will examine these two phases closer.

Private television had been introduced shortly before the first phase for most countries and gradually brought more electronic media options. Aalberg et al. (2013) offer first insight that the presence of more (or fewer) channels impact the ratio between time spent watching TV and watching the news. Given the expansion of TV channels throughout the phase, people were less likely exposed to the same (news) programs as they had been previously. Nonetheless, “by-product learning” (Prior, 2007, p. 4) was still relevant, especially for generalist channels, which are said to be the most watched (Esser et al., 2012). There, the news is a crucial part of the programming; thus, audiences would stumble upon political information unintentionally. Unintentional news exposure is not exclusive to public channels. Introducing private television can have a
positive effect on the available news supply. But whether a private channel contributes to a dense information environment is dependent on its programming strategy (Esser et al., 2012).

In the second phase, the Internet was available to a majority in the country. A further increase in options, interactivity, and mobility mark the Internet phase. News is now available at any time, place, and of any length, loosening the more rigid news-programming schedules people were bound to before, Hermida (2010) labeled this type of environment as “ambient news” (para. 9). Scholars argue that users can come across news unintentionally on the Internet, especially on social media (Fletcher & Nielsen, 2018). People can also be specifically targeted (e.g., political micro-targeting, Jamieson, 2013). In contrast, algorithms personalizing content recommendations can interfere with unintended news viewing (Thorson et al., 2021). Some more modern entertainment forms, like streaming platforms, usually do not incorporate news at all in their portfolio. In the same sense, the increasing number of specialized TV channels usually do not incorporate news into their thematically focused program (Esser et al., 2012)

These changes in opportunity structures, that is supply-side changes, made more options available for all citizens at around the time they were introduced or reached a certain threshold of dissemination. This does not entail citizens’ adaption to these changes at the same time because technological developments and social adaption move at their own speed (Livingstone, 1999). In this sense, ongoing changes throughout a phase are expected as people become familiar with new media forms or, as Pan and McLeod (1991) put it: “[. . .] the processes of inducing individuals to adopt innovations may result in social change” (p. 151). In such a situation, effects are only expected when a certain threshold is reached (e.g., Park, 2017). We, thus, differentiate the phases not by the mere introduction of a medium. The second phase begins when more than half of households have Internet access, in other words they have the opportunity to use the medium. We base this threshold on the diffusion of innovations by Rogers (2003), which explains the process of the dissemination of innovations in society. In the beginning, the innovation is only disseminated between a few people in society and is slowly gaining ground in other early segments. When the 50% boundary is reached, the dissemination starts to spread to the wider public. This discussion leads us to the need to include Internet use (as opposed to Internet access) as a control variable in the macro analysis.

Selection Processes and Their Consequences

In a high-choice environment, selection processes must take place, or as Tsfati and Cappella (2003) put it, “we must select, because we are not physically capable of paying continuous attention to information, political or otherwise” (p. 508). Most people favor content that is in line with their prior attitudes (Goldman & Mutz, 2011; but see Brenes Peralta et al., 2017 for the suggestion of a mixed media diet) or fits their preferences (Prior, 2005). Recipients are anticipated to choose between news and entertainment, with those having higher political interest being more inclined to select political
information than those with lower political interest (Strömbäck et al., 2013), which can result in overall avoidance of news. Skovsgaard and Andersen (2020) define news avoidance as “low news consumption over a continuous period of time caused either by a dislike for news (intentional) or a higher preference for other content (unintentional)” (p. 463; italics in original). Consequently, news-avoiders are people with infrequent news usage, who can be further divided by their motivation for the avoidance. Several studies have shown the increase in news-avoiders over time (Blekesaune et al., 2012; Elvestad et al., 2014; Karlsen et al., 2020; Strömbäck et al., 2013). In contrast, Wonneberger et al. (2012) show that the share of avoiders fluctuates around a baseline in the Netherlands. These differences may have originated from different definitions of what low news exposure is. For some, news-avoiders must never have consumed news in a specific time period (Blekesaune et al., 2012; see Toff & Nielsen, 2018 for a similar approach), others include citizens with news usage up to several days a week (Papathanassopoulos et al., 2013) or relative to other news user groups (Strömbäck, 2017). While these differences appear to be mainly operational, they have consequences on the theoretical level as well. Starting from a normative view on democracy, the number of active and informed citizens is key, as they need to monitor politicians and make informed choices (e.g., Aalberg & Curran, 2012). The extent to which citizens inform themselves about current events impacts their level of political knowledge and participation (e.g., de Vreese & Boomgaarden, 2006). The consequences of complete news avoidance for democracy can, therefore, be more severe than infrequent news use.

In this paper, we want to illustrate the differences between common thresholds of news exposure in the news avoidance literature as a basis for further theoretical discussions. Therefore, we will run our models for two common operationalizations of news-avoiders. These operationalizations are (a) news-avoiders defined by an absolute cut-off, which includes people who never or very seldom consume news, and (b) news-avoiders defined relative to other citizens, specifically people consuming relatively less news than any other news user group (e.g., Blekesaune et al., 2012; Skovsgaard & Andersen, 2020; Strömbäck, 2017). In the following, we will refer to these two measurements as total and relative news-avoiders. The total news-avoiders represent the potentially more problematic group for democracy mentioned above. Relative news-avoiders make up a larger segment of the public and could—depending on the average frequency of news usage in a country—even use substantial amounts of news in a given time period or, put differently, they might be well informed about current affairs.

Both phases show means that can lead to unintentional news viewing (Schoenbach, 2008). However, especially mechanisms in the second phase, particularly personalized recommendations, specialized channels, and streaming services, make it easier for media users to avoid political information. Therefore, we expect the following:

H1: There has been no increase in (a) total and (b) relative news-avoiders per country in the first phase.
H2: There has been an increase in (a) total and (b) relative news-avoiders per country in the second phase.
In Study 2, we focus on the second phase and the individual-level in a one-country panel study. We are interested in whether we can identify the same dynamics on the micro-level.

H3: There is an increase in (a) total and (b) relative news-avoiders on the individual-level.

**Media System Characteristics**

Blekesaune et al. (2012) found that the number of citizens avoiding the news varies noticeably in European countries, identifying a strong difference between Nordic and Southern countries. This indicates that the incentives for news use vary with the media system or as Aalberg and Curran (2012) argue “the organization and structure of the media influences what information is available to national publics, and that national differences of media systems give rise to different national information diets.” (p. 6).

One main difference between media systems is the role public service broadcasting (PSB) plays (Hallin & Mancini, 2004). Research has identified positive effects of PSB on the individual-level, for example concerning cross-cutting exposure (Castro-Herrero et al., 2018), political interest (reciprocal relationship; Strömbäck & Shehata, 2010), or political knowledge (Fraile & Iyengar, 2014; Park & Gil de Zúñiga, 2020). Also, trust in PSB outlets is higher than in private channels (although we see differences between countries; Matsa, 2018). These positive relationships are (among others) related to several characteristics of public service-oriented media systems. First, in less commercialized or public service-oriented systems, the news supply, and the frequency with which news is broadcasted during prime-time, are higher than in more commercialized ones (Aalberg et al., 2010; Curren et al., 2009; Iyengar et al., 2010). Second, PSB lays a stronger emphasis on hard news content than commercial providers or systems (Curran et al., 2009; Iyengar et al., 2010; Reinemann et al., 2017).

Based on the same arguments that legitimize publicly funded broadcasting, PSB systems can impose legal requirements for private broadcasters, or (as role models) set standards for reporting. Reinemann et al. (2017) indicate that the standards of a strong PSB tend to be mimicked by commercial channels. This is underpinned by Aalberg et al. (2010) who show that the availability of news for both public-service and private broadcasters is higher in PSB systems compared to more market-oriented ones (see also Esser et al., 2012).

Overall, countries with strong PSB make it easier for uninterested citizens to become inadvertent news audiences by providing a dense information environment and rendering motivation less important (Castro-Herrero et al., 2018; Iyengar et al., 2010). That means the news supply in a system influences the size of news user groups (Elvestad et al., 2014). But as Newton (2016) stresses, PSB systems vary between countries, as do their effects on the public (e.g., de Vreese & Boomgaard, 2006), especially when broadcasters hold large audience shares and the pressure to adhere to commercial standards decreases.
H4: Having a strong PSB has a negative effect on the percentage of (a) total and (b) relative news-avoiders per country.

We control for other media system-related influences in Study 1 that focus on the social and political inclusiveness of the media system (see Measures) to ensure that we do not overestimate possible influences of PSB strength.

**Motivation in a Changing Media Environment**

Following the opportunity, ability, and motivation (OAM) framework, externally set opportunities and individual-level factors are entangled. Ability and motivation shape behavior in the context of political information acquisition on the individual-level. Ability describes the skills of understanding offered content. Motivation represents the inner drive to engage with certain media (Delli Carpini & Keeter, 1996; Luskin, 1990; Strömbäck et al., 2013). Prior (2005) finds that “motivation, not ability, is the main obstacle that stands between an abundance of political information and a well- and evenly informed public” (p. 589; but see Karlsen et al., 2020 for important insights on the increasing relevance of education for news avoidance). Thus, on the individual-level (Study 2), we focus on motivation while controlling for ability. On the macro-level (Study 1) we control for both. Luskin (1990) defines motivation in the context of information acquisition as political interest. Prior research has established a positive link between political interest and political knowledge with news use (Lecheler & de Vreese, 2017; Strömbäck & Shehata, 2010).

As suggested by Prior (2007) for the US-American context, the impact of motivation, here political interest, on news use should increase over time. While some studies find evidence for the increased importance of political interest on news use in European countries (Hopmann et al., 2016; Strömbäck et al., 2013; Wonneberger et al., 2012), other studies show opposing results (Aalberg et al., 2013; Elvestad et al., 2014). One explanation can be the different media systems. As argued before, there is variance in the ease with which a person can access news, depending on, for instance the frequency of news programming (e.g., Aalberg et al., 2010). When political information is always present all the time, avoiding it can take up more effort than consuming it, particularly for frequent media users. Schoenbach (2008) indicates that programming strategies can lead media users to consume news if they are not sufficiently motivated to change channels. This finding is in line with research about lead-in and lead-out effects that contribute to unintended news consumption (e.g., Wonneberger et al., 2012). Citizens might also have the “news-finds-me perception” (Gil de Zúñiga et al., 2017, p. 105). Here, they assume that relevant information will reach them through social media or informal contacts without additional effort. These aspects might counter an increasing relevance of political interest on news consumption. In light of these considerations, we ask:

RQ1: Has the impact of political interest on news avoidance increased over time on the micro-level?
Lastly, prior research has suggested that news-avoiders tend to be younger, female, less educated, unemployed, living without a partner, less interested in politics, and show lower political efficacy (Blekesaune et al., 2012). We will control for these aspects in the micro-level analysis (Study 2) to avoid overestimating the impact of political interest.

**Study 1: Method**

**Data**

The analysis of Study 1 is based on the data of the Voter study, a national representative survey included in the European Election Study (EES²). This survey is conducted in EU member states subsequent to the European Parliament (EP) elections. Therefore, it takes place in all EU member states, starting from the year of the first EP election after their accession. With a few exceptions, such as Luxembourg, around 1,000 participants were questioned per country per wave. Our sample comprises six waves in total, wherein the first wave took place in 1989 and the last in 2014.³ We considered all countries, which fulfilled two criteria: (a) the country took part in at least one wave before and one wave after the Internet was available to a majority in said country, and (b) the measures for news use were comparable. Therefore, the analysis includes the following 18 countries: Austria, Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Poland, Portugal, Spain, the Netherlands, and the United Kingdom (for more information, see chapter Analysis and Table 1). From a macro perspective, the data is hierarchically structured, which means that repeated measures are nested within countries. Thus, in Study 1 we focus on the macro-level.

**Measures**

**News use.** Although the question wordings and answer alternatives vary slightly throughout the years, they always ask *how often* people consume the news in the available outlets (see Supplemental Appendix A for question wording). News use on different platforms was condensed into one variable (overall news use) by assigning it the highest usage of any platform reported by an individual. Therefore, one variable holds the information about a person’s news use in the specific wave. Next, the news use scales of all waves were recoded into a 4-point scale to make it consistent over the six measuring points: 1 indicates once a month or less often, 2 indicates once or twice a week, 3 indicates several times a week, and 4 indicates (almost) every day. For the analysis, we condensed this measure into one value per year and country. The percentage of those falling into the category “once a month or less often” were coded as total news-avoiders. We classified relative news-avoiders by calculating one standard deviation below the mean for each country and wave. People falling on or below this value were identified as relative news-avoiders and aggregated by percentage (see Table 1).
Independent variables. Table 2 lists the independent variables (including control variables) used in Study 1. Due to different scales across predictors, we rescaled all independent variables ranging from 1 to 5. Political bias was taken from an expert survey, the European media systems survey (see Table 2 for sources), and is susceptible to variations in measurement, therefore, it was not possible to include it as time-variant. We used a mean of the two available waves. For Luxembourg, we assigned the overall political bias mean as Luxembourg was not part of the survey. When data was not available in a specific year for newspaper circulation, it was supplemented with the closest available data point.

Study 1: Analysis

To investigate the development of news-avoiders over time, we rely on spline (or piecewise) regression analysis using multilevel modeling (e.g., Marsh & Cormier, 2002; Raudenbush & Bryk, 2002; Tilling et al., 2014). These models show several advantages when applied to longitudinal data. First, multilevel models consider the nested structure of the macro data. Thus, we can span a country-specific growth trajectory over repeated measures of the number of news-avoiders. The growth rate of avoiders over time is represented by a slope coefficient. Additionally, we can estimate differences between countries in their growth rates of the number of news-avoiders over time. Second, the
Table 2. List of Independent Variables (Including Control Variables).

| Indicator          | Measure                                               | Original scale | Mean  | SD   | Source                                           |
|--------------------|-------------------------------------------------------|----------------|-------|------|--------------------------------------------------|
| Political interest | Mean of political interest per country                | 1–4            | 3.41  | 0.86 | EES                                              |
| Education          | Leaving school before the age of 15                   | %              | 2.29  | 0.85 | EES                                              |
| PSB strength       | PSB market share                                      | %              | 2.86  | 0.94 | EAO (1995, 2001, 2006, 2014)                    |
| Newspaper circulation | Newspaper circulation per 1,000 inhabitants       |                | 2.63  | 0.94 | Hendriks (1999), Kleinsteuber et al. (1995), The Bertelsmann Stiftung (n.d.), UNESCO Institute for Statistics (2016), WAN-IFRA (2010, 2015). |
| Political bias     | Country mean of “Medium X coverage is influenced by a political party” | 0–10           | 2.90  | 1.41 | Popescu et al. (2010, 2013)                      |
| Internet use       | Internet use in last 3 months                         | %              | 2.72  | 1.38 | The World Bank Group (2018)                      |

Note. Mean and SD are based on the rescaled variable values of 1–5. EAO = European Audiovisual Observatory; WAN-IFRA = The World Association of News Publishers.

The growth trajectory for the number of news-avoiders can be split into two sequences by setting a knot point. In this study, the knot point is the transition from the period with newspapers, radio, and TV only to the period with additional Internet access (see Table 3). However, the pre-knot and post-knot slopes do not represent the same time frames (e.g., the time interval from 2004 to 2014) for each country because the appearance of the Internet as an additional mass medium—described as 50% + 1—varies between each country, depending on when exactly the 50% + 1 boundary is achieved. The two slopes represent the phase without the Internet as an additional mass medium (spline 1) and the following phase including the Internet (spline 2), respectively. When the 50% + 1 boundary was not achieved in the specific year in which data was collected, we used the previous measurement occasion as the knot point to ensure that the post-knot slope merely captures the time with the Internet as a mass medium. Because we used unbalanced data and placed the knot points at different locations for each country, the growth trajectories vary in length. The following equation describes the full multilevel spline model, including all covariates:
Table 3. Included and Excluded Countries and their Knot-Points.

| Country          | Year | 1989 | 1994 | 1999 | 2004 | 2009 | 2014 |
|------------------|------|------|------|------|------|------|------|
| Included         |      |      |      |      |      |      |      |
| Austria          | 2006 | O    | O    | O    | O    | O    | O    |
| Belgium          | 2005 | O    | O    | O    | O    | O    | O    |
| Cyprus           | 2009 | O    | O    | O    | O    | O    | O    |
| Czech Republic   | 2009 | O    | O    | O    | O    | O    | O    |
| Denmark          | 2002 | O    | O    | O    | O    | O    | O    |
| Finland          | 2005 | O    | O    | O    | O    | O    | O    |
| France           | 2007 | O    | O    | O    | O    | O    | O    |
| Germany          | 2003 | O    | O    | O    | O    | O    | O    |
| Greece           | 2011 | O    | O    | O    | O    | O    | O    |
| Hungary          | 2009 | O    | O    | O    | O    | O    | O    |
| Ireland          | 2006 | O    | O    | O    | O    | O    | O    |
| Italy            | 2009 | O    | O    | O    | O    | O    | O    |
| Luxembourg       | 2001 | O    | O    | O    | O    | O    | O    |
| The Netherlands  | 2001 | O    | O    | O    | O    | O    | O    |
| Poland           | 2009 | O    | O    | O    | O    | O    | O    |
| Portugal         | 2010 | O    | O    | O    | O    | O    | O    |
| Spain            | 2009 | O    | O    | O    | O    | O    | O    |
| United Kingdom   | 2004 | O    | O    | O    | O    | O    | O    |
| Excluded         |      |      |      |      |      |      |      |
| Bulgaria         | 2012 | O    | O    | O    | O    | O    | O    |
| Croatia          | 2009 | O    | O    | O    | O    | O    | O    |
| Estonia          | 2007 | O    | O    | O    | O    | O    | O    |
| Latvia           | 2007 | O    | O    | O    | O    | O    | O    |
| Lithuania        | 2008 | O    | O    | O    | O    | O    | O    |
| Malta            | 2007 | O    | O    | O    | O    | O    | O    |
| Romania          | 2012 | O    | O    | O    | O    | O    | O    |
| Slovakia         | 2008 | O    | O    | O    | O    | O    | O    |
| Slovenia         | 2006 | O    | O    | O    | O    | O    | O    |
| Sweden           | 2001 | O    | O    | O    | O    | O    | O    |

Note. O = participated; Highlighted = knot point in analysis; Year = knot point (empirical).

\[ y_{it} = (\gamma_{00} + u_{it}) + \sum_{k=1}^{c+1} \left( (\gamma_{10} + u_{it}) (\text{time}_i) \right) + \gamma_{20} \left( \text{pol.int}_i \right) + \gamma_{30} \left( \text{prop.loweduc}_i \right) \]

\[ + \gamma_{40} \left( \text{Internet use}_i \right) + \gamma_{50} \left( \text{m.shareTV}_i \right) + \gamma_{60} \left( \text{newsp.circ}_i \right) + \gamma_{01} \left( \text{bias}_i \right) + r_{it}, \]
where $y_{ti}$ represents the number of news-avoiders for country $i$ at time $t$. Further, $\gamma_{00}$ and $u_{0i}$ represent the random intercept and the corresponding deviation, respectively. The Sigma sign indicates a minimum spline number of 1 and a maximum spline number of $c + 1$. Here, the number of knots equals one ($c=1$), which leads to two splines in our model. $\gamma_{10k}$ and $u_{ik}$ represent the random slopes for the time variable and the corresponding deviation for spline $k$, respectively. Fixed effects of time-variant covariates (level-1 variables) are represented by $\gamma_{20}$ to $\gamma_{60}$ while the fixed effect of the time-invariant covariate (level-2 variable) is represented by $\gamma_{01}$. Residual $r_{ti}$ is a time-specific random disturbance for outcome $y$.

We calculated the models separately for each outcome variable, that is, the proportion of relative and total news-avoiders. Further, we compared models with random slopes to models with fixed slopes and modeled the random slopes only if the model fit improved. This was only the case for the second slope (spline 2) in the total news-avoiders model, $\chi^2(2)=21.69$, $p<.001$, indicating differences between countries in their growth rates of total news-avoiders during the second phase, while the relative news-avoiders model was built with a random intercept and fixed slopes for both splines. All models were calculated with the R package lme4 (Bates et al., 2015); we used lmerTest (Kuznetsova et al., 2017) to determine p-values and MuMIn (Barton, 2018) to determine $R^2$. Variables at level 1 were group-mean centered and those at level 2 were grand-mean centered.5

### Study 1: Results and Discussion

As shown in Table 4, we found an increase in the number of total news-avoiders during the phase with the Internet as an additional mass medium represented by spline 2 (coefficient $\gamma_{102}$), supporting H2a. In contrast, we did not find a development in the number of total news-avoiders for the phase in which the Internet was not used by more than 50% + 1 people (coefficient $\gamma_{101}$), supporting H1a. Further, we found a negative effect of aggregated political interest on the number of total news-avoiders indicating that higher levels of aggregated political interest are related to a lower number of total news-avoiders (coefficient $\gamma_{20}$). Market share of PSB did not affect the number of total news-avoiders (coefficient $\gamma_{50}$), thus, we reject H4a. In contrast, we found a negative effect on the number of total news-avoiders from newspaper circulation (coefficient $\gamma_{60}$) indicating that higher circulation led to lower-than-usual levels in the number of total news-avoiders and a positive effect from political bias (coefficient $\gamma_{01}$), which means that higher political bias in news coverage led to a higher number in total news-avoiders. For the model with relative news-avoiders as the dependent variable, we did not find a statistically significant development in the number of news-avoiders, nor did we find an effect of any of the predictors (see Appendix A). Thus, we accept H1b but reject H2b and H4b.

These results show that, together with the Internet, news avoidance has become of increasing relevance. In the first phase, the mechanisms causing unintended news exposure might have been strong enough to counter an increase in news-avoiders. However, with people getting accustomed to the ever-increasing number of outlets,
more digital natives coming of age, and news and entertainment becoming increasingly mobile, citizens make use of their chances to individualize media exposure, helping them navigate the abundance of choices. The missing effect of the PSB market share could indicate that private channels assume the role of PSB in terms of information dissemination in countries with weaker PSB and/or that they complement public-service channels rather than having negative impacts on the availability of news, as has been indicated by Reinemann et al. (2017).

### Study 2: Method

#### Data

Building upon the findings from Study 1, in Study 2 we take a closer look at the micro-level developments in phase two. We rely on individual panel data collected during the German federal elections in 2009, 2013, and 2017 (Rattinger et al., 2015, 2016; Roßteutscher et al., 2019). The German media system is marked by high newspaper circulation and low political bias. As the control variables in Study 1 indicate (see coefficients $\gamma_{60}$ and $\gamma_{01}$ in Table 4), this should lead to fewer news-avoiders among the public. Thus, by focusing on Germany, we choose a cautious approach, decreasing the chance of overestimating results. Additionally, in Study 1, Germany shows the typical increase in total news avoidance that we see over most of the countries between 2009 and 2014.

Overall, 592 individuals participated in all 3 years. In each year, the datasets include several repeated measures for each individual, capturing their news use during the weeks before the election. Since individuals’ news use changes over the course of German election campaigns (Gorski & Thomas, 2019) and our main interest is to show developments over longer periods, we averaged news use and corresponding predictors to get single values for each year representing individuals’ news use during German campaigns.

#### Table 4. Fixed Effects on Number of Total News-Avoiders.

| Predictor                      | Coef. | Est. | $SE$ | $t$  | $p$  |
|--------------------------------|-------|------|------|------|------|
| Intercept                      | $\gamma_{00}$ | 1.90 | 0.62 | 3.06 | .004 |
| Spline 1                       | $\gamma_{101}$ | 0.14 | 0.22 | 0.62 | .539 |
| Spline 2                       | $\gamma_{102}$ | 2.16 | 0.69 | 3.13 | .004 |
| Political interest             | $\gamma_{20}$ | -0.92 | 0.35 | -2.60 | .012 |
| Prop. low. education           | $\gamma_{30}$ | -0.13 | 0.47 | -0.28 | .784 |
| Internet use                   | $\gamma_{40}$ | 0.14 | 0.29 | 0.49 | .629 |
| Market share TV                | $\gamma_{50}$ | 0.60 | 0.36 | 1.66 | .102 |
| Newspaper circulation          | $\gamma_{60}$ | -1.73 | 0.51 | -3.40 | .001 |
| Political bias                 | $\gamma_{01}$ | 0.42 | 0.13 | 3.21 | .005 |
| $R^2$                          | .43   |      |      |      |      |

*Note. $N=18, 90$ observations. Dependent variable describes the percentage of news-avoiders in each country. Marginal $R^2$ describes variance explained by fixed factors.*
Measures

Within each year, news use was measured on five waves before the election, with questions asking on how many days during the last week individuals read or watched the news on several newspaper and TV outlets and a single question for the Internet. For each medium, we built a mean score and then built a combined score including newspaper, TV, and Internet news use for each wave. After that, we averaged the five combined scores within each year leading to three repeated measures for news use ranging from 2009 to 2017. Based on these three repeated measures (each representing overall news use during one election campaign), we built dummy variables for both relative and total news-avoiders for each year. Individuals with news use below one standard deviation from the mean were grouped as relative avoiders (=1). For the second dummy variable, we grouped all individuals that did not consume news or used it very rarely (values up to 0.02 which represent—except the value 0—the lowest value on the scale ranging from 0 to 7) as total avoiders (=1).

General Internet use, referring to non-campaign phases, was measured in a single wave within each year with an 8-point scale (0–7) and a single item asking on how many days individuals usually use the Internet for general usage ($M = 6.59$, $SD = 1.03$). In 2009, the item slightly differs, explicitly asking for private general Internet use.

Political interest was measured with a single item in five waves within each year for 2013 as well as 2017 and a single item in three waves within 2009 asking about individuals’ general interest in politics. These repeated measures were averaged within each year and were measured on a 5-point scale (1–5) ($M = 3.34$, $SD = 0.94$).

For internal political efficacy, we used two items that were asked in two waves within each year, measured on a 5-point scale (1–5). Again, we averaged the political efficacy scores across waves within each year ($M = 3.27$, $SD = 0.91$). Additionally, we used items asking for individuals’ employment status (4.4% of all occasions indicated no employment), whether they live in a relationship (30% of all occasions indicated no partner), and their age ($M = 43.16$, $SD = 12.09$), education (42.6% highly educated), as well as gender (50.2% female) reported in 2009.

Study 2: Analysis

In order to analyze predictors and the development of news avoidance on an individual-level over time, we rely—similar to Study 1—on multilevel modeling. In contrast to Study 1, however, we (a) use the advantages of individual-level panel data with repeated measures nested in individuals, and (b) use multilevel logistic models (e.g., Sommet & Morselli, 2017) with a dichotomous dependent variable (news-avoiders = 1) to determine the predictors of being a news-avoider. Further, we do not rely on spline regression anymore but model the development for the dichotomous news-avoiders variable over the whole period representing the later Internet phase. In addition, we assess an extended model testing an interaction between political interest and time in order to examine whether the effect of political interest increased over time. We modeled the random effect for the growth parameter only if it significantly contributed to the model. Predictors at level 1 were group-mean centered; predictors at level 2 were...
Study 2: Results and Discussion

Descriptive results in Table 5 show that both relative and total news-avoiders increased over time, supporting H3a and H3b. We also see that they did not constantly stay news-avoiders. Since the number of total news-avoiders was very small and the model for this group did not converge, we ran the analysis only for relative news-avoiders. The same was true for a growth model with a random slope. Therefore, we ran the model with a random intercept and a fixed slope. The results presented in Table 6 strengthen H3b: The likelihood of being a relative news-avoider increased over time (coefficient $\gamma_{10}$). Moreover, the likelihood of being a relative news-avoider was lower if individuals showed higher levels in political interest (coefficient $\gamma_{20}$). Besides that, we found negative effects of age (coefficient $\gamma_{01}$) as well as education (coefficient $\gamma_{03}$) and a positive effect for females (coefficient $\gamma_{02}$). Furthermore, the interaction term between time and political interest was not significant (coefficient $\gamma_{70}$) indicating that the effect of political interest on being a news-avoider did not increase over time, answering RQ1.$^7$

The results are in line with most prior research that sees news avoidance as a growing phenomenon (Blekesaune et al., 2012; Elvestad et al., 2014; Strömbäck et al., 2013). Albeit increasing in number, the results stress that the group of total news-avoiders is relatively small, whereas relative news-avoiders make up a substantial portion of the public. Although the relationship is not increasing over time, political interest drives differences in news exposure. As prior research has indicated that political interest is a rather stable characteristic (Prior, 2010), solutions to decrease news avoidance might need to be long-term and focused on younger generations. This is further strengthened as Table 5 shows a core of over-time news-avoiders who are (probably) not susceptible to short-time changes.

General Discussion

At the core of this study lies the question of whether news avoidance has become an increasing issue in the EU over the past decades and what shaped the developments. By focusing on several comparative angles, we provide important insights to
contextualize news avoidance with research in the field of media use. There are three key findings: (a) news avoidance has become an increasing phenomenon in the Internet age, (b) the strength of PSB does not explain country differences in the number of avoiders, and (c) political interest is an important predictor for news avoidance but does not increase its impact over time.

First, we found that news avoidance has not increased, when a gradual expanse of television channels, mainly commercially-oriented, marked the main change in people’s media environment. Private broadcasters brought a wider selection of channels, but the modus operandi stayed largely the same: TV viewers subjected themselves to a set programming schedule, which often interjected news between entertainment programs (see generalist channels, as discussed above). Even when viewing alternatives are frequent, people choose to restrain their channel repertoire, which can help navigate high-choice media environments (e.g., Yuan & Webster, 2006). In contrast, together with the expansion of opportunities based on wide-ranging Internet access, the number of news-avoiders increased. This is true for our macro and micro-level study, and thus for the earlier and later developments of the Internet phase. While studies have shown that, for example, through social media people can be incidentally exposed to news (Bergström & Belfrage, 2018), news avoidance still increases. Fletcher and Nielsen (2018) find that incidental exposure to news on social media can have a positive effect on the number of online sources used, especially for the less

Table 6. Fixed Effects on Relative News-Avoiders.

| Predictor                  | Coef. | Est. | SE  | z    | p    |
|----------------------------|-------|------|-----|------|------|
| Model 1                    |       |      |     |      |      |
| Intercept                  | $\gamma_{00}$ | -7.57 | 0.92 | -8.26 | <.001 |
| Time                       | $\gamma_{10}$ | 0.76  | 0.20 | 3.77  | <.001 |
| Political interest         | $\gamma_{20}$ | -2.71 | 0.48 | -5.67 | <.001 |
| Political efficacy         | $\gamma_{30}$ | -0.58 | 0.40 | -1.46 | .145 |
| No partner (=1)            | $\gamma_{40}$ | -0.40 | 0.66 | -0.61 | .544 |
| Not employed (=1)          | $\gamma_{50}$ | 0.58  | 1.09 | 0.53  | .594 |
| Internet use               | $\gamma_{60}$ | -0.18 | 0.24 | -0.75 | .453 |
| Age                        | $\gamma_{01}$ | -0.11 | 0.03 | 4.04  | <.001 |
| Female (=1)                | $\gamma_{02}$ | 1.70  | 0.58 | 2.95  | .003 |
| Highly educated (=1)       | $\gamma_{03}$ | -1.35 | 0.60 | -2.27 | .023 |
| $R^2$                      |       |      |     | .09  |      |
| Model 2                    |       |      |     |      |      |
| Time X political interest  | $\gamma_{70}$ | -0.65 | 0.62 | -1.05 | .294 |
| $R^2$                      |       |      |     | .10  |      |

Note. N=592, 1,485 observations. Model 2 shows only the main effects of the interaction term; other variables are not depicted but were included in the model. Marginal $R^2$ describes variance explained by fixed factors.
politically interested. However, as our study shows, it is not a sufficient counter-mechanism for news avoidance. One reason might lie in the repelling effect unwanted news exposure can have on news-avoiders. As Marcinkowski and Došenović (2021) underline, we must differentiate between “unexpected and generally unwanted exposure to political online communication” (p. 457). This is related to the call to differentiate between intentional and unintentional news-avoiders (Skovsgaard & Andersen, 2020). We infer that an additional temporal dimension is appropriate to differentiate news-avoiders, as our data shows that only some individuals stay away from the news over a longer time period.

Second, while we find that the dissemination of a new medium coincides with behavioral changes, the question remains which mechanisms are the leading cause for country differences. Several studies have pointed out how public-service systems offer a media environment in which the cost of acquiring political information is low even for the politically uninterested (e.g., Aalberg et al., 2010). However, Toff & Kalogeropoulos (2020) suggests that behind positive effects of a strong PSB might be underlying assumptions about the actual character of such institutions, specifically aspects of press freedom. Hence, what the missing effect of PSB market share in our study shows, is that providing an environment in which people can easily encounter news is not enough to engage the unwilling. Moreover, knowledge about specific features that lead to incidental news exposure on different media could lead individuals to expect to encounter political information without having to seek news out (Gil de Zúñiga et al., 2017). As prior research has shown, if people expect news to find them without additional effort on their side, news usage on traditional and online media decreases. This relationship is strengthened the more frequently people encounter news unintentionally (Park & Kaye, 2020). As social media usage becomes more frequent and political interest remains an important indicator for news use, a further increase in people not actively seeking out news seems probable. The question then is, does incidental exposure on social media provide enough information to prevent a widening of the knowledge and participation gap? Recent research suggests that this is not the case (Heiss & Matthes, 2019). As such, interventions should identify what characteristics of news repel the politically unengaged and how to make it more interesting for the wider public.

Third, the impact of political interest on news avoidance does not increase over time. Mixed results concerning this question might be rooted in the focus on either exposure or avoidance in prior research. An increasing relevance of political interest for searching out political information (e.g., Hopmann et al., 2016), does not necessarily entail the same for the avoidance of news (see also selective exposure and avoidance, e.g., Schmuck et al., 2020). Further, our paper highlights the relevance of a common theoretical understanding of news-avoiders and comparable measures in the field, by demonstrating that changes in operationalization can lead to dissimilar results. While different measures are appropriate for different data and research questions, as Skovsgaard and Andersen (2020) discuss, it ultimately leads to constrained comparability of findings. We, therefore, should be careful with overgeneralizations of findings and consider the complex nature of news avoidance.

Some important limitations concerning the data analyzed need to be discussed. Prior (2009) finds that self-report measures of news use can strongly overestimate
actual news use. This might be a reason why both samples include only a small number of news-avoiders (but, see, Elvestad et al., 2014; Strömbäck et al., 2013 for similar numbers). This could mask the effects for casual news users who would otherwise fall into the news-avoiders category. Moreover, data collection took place close to elections, which are highly salient events and might intensify any upwards bias or even actual news use compared to non-election times.

We must also discuss the construction of the news use measure. The explicit naming of the Internet in the question wording of Study 1 only took place in 2014. While the self-report measure might have underestimated the number of news-avoiders per country, this could have the inverse effect, possibly overestimating the increase in news avoidance between 2009 and 2014 instead of a constant smaller increase over time or even no clear trend. This issue cannot be bypassed, as there is a lack of secondary data, but there are some indications that the trend is, nonetheless, in the upward direction. First, the last measuring point of Study 1 (2014) shows an increase in avoiders, while including the Internet in the question wording. Second, in Study 2, we see the increase of news-avoiders over time as well, although just for one country. Third, this is in line with the findings of prior research (Blekesaune et al., 2012; Elvestad et al., 2014; Strömbäck et al., 2013). This hints at an overall increase in news avoidance in recent history, while possibly underestimating the increase of news avoidance earlier in the second phase.

While not spared of limitations, the current study has enhanced our understanding of the developments of news avoidance in the light of important technological advancements. It is part of a growing body of literature that sees news avoidance as an increasing phenomenon as opportunity structures in the media environment change, thereby emphasizing that it is important and valuable to look more closely at this group.

### Appendix A.

**Fixed Effects on Number of Relative News-Avoiders.**

| Predictor                  | Coef. | Est. | SE  | t    | p     |
|----------------------------|-------|------|-----|------|-------|
| Intercept                  | $\gamma_{00}$ | 12.37 | 2.71 | 4.57 | <.001 |
| Spline 1                   | $\gamma_{10}$ | 0.31 | 0.94 | 0.33 | .743  |
| Spline 2                   | $\gamma_{10}$ | -1.04 | 1.70 | -0.61 | .543  |
| Political interest         | $\gamma_{20}$ | 0.12 | 1.64 | 0.07 | .942  |
| Prop. low. education       | $\gamma_{30}$ | -4.43 | 2.28 | -1.94 | .056  |
| Internet use               | $\gamma_{40}$ | 1.40 | 1.35 | 1.04 | .301  |
| Market share TV            | $\gamma_{50}$ | -1.08 | 1.67 | -0.65 | .519  |
| Newspaper circulation     | $\gamma_{60}$ | 2.73 | 2.37 | 1.15 | .254  |
| Political bias             | $\gamma_{01}$ | -0.26 | 0.56 | -0.47 | .644  |

$R^2$ .28

*Note. N = 18, 90 observations. Dependent variable describes the percentage of news-avoiders in each country. Marginal $R^2$ describes variance explained by fixed factors.*
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Supplemental Material

Supplemental material for this article is available online.

Notes

1. In the context of new opportunities, generational differences can play a role. Specifically, older generations spend more time watching TV; hence, they are more likely to become inadvertent news viewers (Depp et al., 2010). For a thorough analysis of generational differences in political media use, see, Andersen et al., 2021.

2. We rely on multiple datasets. For the years 1989 to 2004, a trend as well as a combined file are available. Trend/combined file (Marsh & Mikhaylov, 2008); 2009 single file (Van Egmond et al., 2017); 2014 single file (Schmitt et al., 2016).

3. The EES also took place in 2019, but the news use variables were not included anymore.

4. We rely on the data from Eurostat (2021a, retrieved 2018) and the Organisation for Economic Co-operation and Development (OECD, 2005). Data for the Netherlands is partly missing, but the data from 2000 (41%) and 2002 (58%) indicate either the year 2001 or 2002. In either case, the knot-point stays the same.

5. In Supplemental Appendix B, we present a brief summary of residual diagnostics and related issues.

6. Means and standard deviations reported in the measures section are averaged over all occasions and individuals for variables that varied across years (pooled data).

7. The handling and interpretation of interactions in logistic regressions are debated in the scientific literature. However, as Sommet and Morselli (2017) note, there is currently no appropriate statistical software available for multilevel models. Therefore, we adhere to their recommendation and “rely on the simple significance-of-the-product-term approach” (p. 214).

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