UvA-DARE (Digital Academic Repository)

How News Type Matters

Indirect Effects of Media Use on Political Participation Through Knowledge and Efficacy

Andersen, K.; Bjarnøe, C.; Albæk, E.; De Vreese, C.H.

DOI

[10.1027/1864-1105/a000201](https://doi.org/10.1027/1864-1105/a000201)

Publication date

2016

Document Version

Final published version

Published in

Journal of Media Psychology

[Link to publication](#)

Citation for published version (APA):

Andersen, K., Bjarnøe, C., Albæk, E., & De Vreese, C. H. (2016). How News Type Matters: Indirect Effects of Media Use on Political Participation Through Knowledge and Efficacy. *Journal of Media Psychology*, 28(3), 111-122. <https://doi.org/10.1027/1864-1105/a000201>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

How News Type Matters

Indirect Effects of Media Use on Political Participation Through Knowledge and Efficacy

Kim Andersen,¹ Camilla Bjarnøe,¹ Erik Albæk,¹ and Claes H. De Vreese²

¹Centre for Journalism, University of Southern Denmark, Odense, Denmark,

²ASCoR, University of Amsterdam, The Netherlands

Abstract. Today, citizens have the possibility to use many different types of news media and participate politically in various ways. This study examines how use of different news types (hard and soft TV news as well as printed and online versions of broadsheet and tabloid newspapers) indirectly affects changes in offline and online political participation through current affairs knowledge and internal efficacy during nonelection and election time. We use a four-wave national panel survey from Denmark ($N = 2,649$) and show that use of hard TV news and broadsheets as well as online tabloids positively affects changes in both offline and online political participation through current affairs knowledge and internal efficacy. Use of soft TV news and printed tabloids has a negative indirect effect. These results are more pronounced for online political participation and during election time. However, use of soft TV news also has a positive direct effect on changes in political participation, which suggests a positive impact via other processes.

Keywords: news types, indirect media effects, political participation, political knowledge, political efficacy

Active political participation is one of the keys to a healthy democracy, especially within the frameworks of participatory and deliberative democracy (e.g., Strömbäck, 2005). Knowledge and efficacy are assumed to be important steps on the way to political participation. Ideally, a citizen is able to form opinions based on a sufficient level of knowledge about political issues in order to act politically (Delli Carpini & Keeter, 1996). In addition, for participation to be meaningful, citizens need to view themselves as capable of acting upon their beliefs and the political system as responsive to their demands (Finkel, 1985). The media play a central role in this relationship as the citizens' primary source of information about political issues (Zaller, 2003). Thus, the media can in general be expected to have an indirect effect on political participation through knowledge and efficacy, with knowledge preconditioning efficacy. An examination of such underlying psychological processes is important if we want a deeper understanding of media and politics in our age of information (e.g., Kinder, 2003).

Both media use and political participation have undergone fundamental changes in recent decades. The availability of media outlets has proliferated, and citizens now create their own personal media diets based on individual preferences (e.g., Williams & Delli Carpini, 2011). Some people read broadsheet newspapers or watch so-called hard TV news, while others turn to more entertaining news types, such as soft TV news and tabloid newspapers, or access news online. Likewise, political participation no

longer only includes traditional activities such as voting or attending public demonstrations but has broadened in scope (e.g., Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006) and now takes place both offline and online, for example, on social media sites (Gibson & Cantijoch, 2013).

Although the changes in media use and political participation have been acknowledged in the literature, the underlying processes between the two concepts have not been taken fully into account. This study contributes to our knowledge about the recent developments in the media environment and different forms of political participation by examining how use of different news types affects changes in offline and online political participation indirectly through knowledge and efficacy during nonelection and election time. We differentiate between using hard and soft TV news as well as using broadsheets and tabloids (in the printed and online versions). The analyses rely on a Danish four-wave panel survey ($N = 2,649$). The first and second survey waves were conducted during nonelection time, and the third and fourth waves were conducted in connection with the Danish national election in 2015.

An Indirect Relationship

Effects of media use on political participation can be negative, for example, when people are left inactive in front

of the TV screen (e.g., Putnam, 2000), or they can be positive, for example, when media use helps “to improve our understanding of public affairs, to increase our capacity and motivation to become active in the political process, and thereby strengthen civic engagement” (Norris, 2000, p. 317). Either way, an indirect effect through knowledge and efficacy on political participation seems to be assumed. Past research has shown that knowledge and efficacy function as mediators between media use and political participation (e.g., Cho et al., 2009; Corrigan-Brown & Wilkes, 2014; Kenski & Stroud 2006; McLeod, Scheufele, & Moy, 1999; Moeller, De Vreese, Esser, & Kunz, 2014), and that knowledge preconditions efficacy in this process (Jung, Kim, & de Zúñiga, 2011). However, these studies have some important limitations in regard to their examination of these indirect effects. Some of the studies are limited by their cross-sectional design, which makes it difficult to draw causal inferences (e.g., Cho et al., 2009; Jung et al., 2011; McLeod et al., 1999). Using longitudinal data, Corrigan-Brown and Wilkes (2014) found a causal effect through knowledge on voting, but no causal effect on protesting, while Moeller et al. (2014) found that adolescents’ news media use affects their internal efficacy, which in turn affects their voting behavior. What we lack is a consistent test of the indirect effect of media use on political participation through knowledge and efficacy.

In this study we focus on current affairs knowledge and internal efficacy as mediating variables between news media use and political participation. Current affairs knowledge is defined as knowledge about recent happenings in politics and society covered by the media (Barabas, Jerit, Pollock, & Rainey, 2014). This approach is appropriate when we study the process leading to changes in political participation, since it taps current political developments and on-going learning acquired from the media (Barabas & Jerit, 2009). Efficacy is often divided into an internal and an external dimension. Internal efficacy is defined as: “individuals’ self-perceptions that they are capable of understanding politics and competent enough to participate in political acts,” while external efficacy is defined as: “the feeling that an individual and the public can have an impact on the political process because government institutions will respond to their needs” (Miller, Goldenberg, & Erbring, 1979, p. 253). Our analysis focuses on *internal* efficacy, since the feeling of political self-confidence is more closely related to participation than external efficacy (Berry, Portney, & Thomson, 1993). Thus, news media use is expected to affect political participation by affecting knowledge about current political affairs, which then affects beliefs in one’s capability to act on this knowledge. Both current affairs knowledge and internal efficacy are also likely to have a mediating function independently of each other, but this is not the main focus in this study.

Hypothesis 1 (H1): The effect of news media use on changes in political participation is mediated through current affairs knowledge and internal efficacy.

Different Effects of Different News Types?

Since most people do not have a high preference for political news and information (Prior, 2007), the news media are increasingly mixing entertainment and politics to attract attention (Williams & Delli Carpini, 2011). Scholars have used concepts such as infotainment (Brants & Neijens, 1998), tabloidization (Esser, 1999), and soft TV news (Reinemann, Stanyer, Scherr, & Legnante, 2012) to describe this phenomenon. The more entertainment features are included in a news item, the more soft or tabloid it is (Baum, 2003; Brants, 1998). In comparison, hard TV news and broadsheet newspapers contain less entertainment features. In this study, we argue that it is highly important to keep different news types separate in order to understand the potential differential indirect effects.

It is unclear how use of more entertaining news types affects political participation through current affairs knowledge and internal efficacy compared with less entertaining news types. Some studies have shown that news media with high levels of political content affect knowledge and turnout positively, whereas news media with low levels of political content have no effect (e.g., De Vreese and Boomgaarden, 2006). Other studies have contested that news media diets based on entertainment necessarily constitute a problem for democracy, since entertaining presentations of political information can lower the cost associated with paying attention (Baum, 2002, 2003; Baum & Jamison, 2006; Brants, 1998).

In line with the positive approach to the effects of more entertaining news types, the elaboration likelihood model (Petty & Cacioppo, 1986) suggests that media use can affect attitudes via two distinct psychological processes. In the central, high-motivation route, people carefully and thoughtfully consider the presented information. In the peripheral, low-motivation route, media effects are more likely to occur as a consequence of simple cues without too much consideration. However, both psychological processes can importantly result in attitude change. Even though attitudes and behavior are not necessarily equal in this regard, we argue that the same processes may account for how different news types indirectly affect political participation. In this way, use of hard TV news and broadsheet newspapers should be more likely to affect changes in participation via the central route, through mediators such as current affairs knowledge and internal efficacy, since these sources contain a larger amount of political information, which people are more likely to seek actively. Use of soft TV news and tabloid newspapers should be more likely to affect changes in political participation via the peripheral route owing to their more entertaining and emotional style (Reinemann et al., 2012) and therefore have less effect on current affairs knowledge and internal efficacy. Thus we expect that:

Hypothesis 2a (H2a): Use of hard TV news has a more positive indirect effect through knowledge and efficacy on changes in political participation than use of soft TV news.

Hypothesis 2b (H2b): Use of printed broadsheets has a more positive indirect effect through knowledge and efficacy on changes in political participation than use of printed tabloids.

Hypothesis 2c (H2c): Use of online broadsheets has a more positive indirect effect through knowledge and efficacy on changes in political participation than use of online tabloids.

New Avenues for Political Participation

Just like the media environment has changed, so have forms of political participation. These changes have mainly pushed citizens' political engagement in two directions: toward less formal types of participation (Ekman & Amnå, 2012) and toward online forms of participation (Hosch-Dayican, 2014). In this study we distinguish between traditional offline participation and online participation. For both participation forms we include acts such as attending political discussions and contacting politicians and the media to express one's political opinion. It seems reasonable to focus on these types of political participation when studying the potential indirect effect through knowledge and efficacy, since especially the latter mediator addresses citizens' belief in their own capabilities of active participation.

Although active online political activities have been found to resemble offline activities (Gibson & Cantijoch, 2013), the costs of online activities can be expected to be lower than for offline activities (Bimber, 1999). To participate offline, you often need to go to a political event, while online participation is independent of physical location and therefore less demanding and time-consuming. In other words, people face fewer obstacles online than offline when they feel ready to participate. Thus we expect more generally that:

Hypothesis 3 (H3): Use of news media indirectly affects changes in online political participation more than changes in offline political participation.

The Context

Election campaigns provide an extraordinary setting for news media use and political participation, which may affect the psychological processes that link these two behaviors. Van Aelst and de Swert (2009) point to three important reasons why election time is different from nonelection time. First, politicians become more active in order to increase their share of the media attention. Second, the media increase their coverage of politics (see also Drew & Weaver, 2006). Third, citizens become more interested in politics during election campaigns (see also Togeby, 2004).

Thus, nonelection time and election time create two different contexts. In both settings news media use can be expected to influence participation through current affairs knowledge and internal efficacy, but this indirect effect might vary owing to the changing behavior of politicians, journalists, and citizens. Thus, citizens might have different motivations to seek information and most likely face a different media environment during election time compared with nonelection time. However, it is not clear exactly how this changing context might affect the indirect relationship. Thus we finally ask the following research question:

Research Question 1 (RQ1): How do the indirect effects of news media use on changes in political participation differ between nonelection and election time?

Method

The study relies on a four-wave panel survey based on a sample of the general Danish population above 18 years. The first wave was conducted from November 21, 2014, to January 5, 2015, and the second wave approximately 4 months later from April 10 to April 22, 2015. The third wave was conducted during the 3-week national election campaign, from May 27 to June 15, and the fourth wave immediately after election day, from June 19 to June 29, 2015. As a corporative media system with public service broadcasting, Denmark has a high level of news consumption (Albæk, van Dalen, De Vreese, & Jebril, 2014; Hallin & Mancini, 2004) and is therefore a good case for examining the effects of using different news types.

Sample

The survey was conducted through self-administrated web questionnaires (Internet access in Denmark is nearly universal; worldbank.org: 96% in 2014) managed by the research agency Epinion. The sample was drawn from a population representative database with a quota sample technique on gender, age, and geography. In all, 10,315 people were invited via e-mail to participate in the first wave, with 4,641 respondents completing it (response rate: 45%); 3,419 respondents completed two waves (attrition rate: 26.3%), 2,951 respondents completed three waves (attrition rate: 13.7%), and 2,680 respondents completed all four waves (attrition rate: 9%). All analyses in this study are based on respondents who participated in all four waves and answered all relevant questions ($N = 2,649$). The attrition led to a small increase in the average age and educational level. However, these increases are not the main concern in our study, as we focus on the underlying psychological processes and not on drawing a precise inference to the greater population.

Measures

The study's *independent* variables are use of different news types including hard and soft TV news as well as printed and online versions of broadsheet and tabloid newspapers (see Table A1 in the Appendix for descriptives for all variables). Use of the specific media sources was measured on a scale from 0 to 7 reflecting usage in the past week (see Andersen, De Vreese, & Albæk, 2016) and combined in indexes reflecting use of the different news types. This exposure was measured in the first wave for nonelection time and in the third wave for election time. Hard TV news includes two regular evening news shows (*TV-Avisen* on DR1 and *Nyhederne* on TV 2), three in-depth news programs (*DR2 Morgen*, *DR2 Dagen*, and *Deadline* on DR2), and one 24-hr news channel (*TV 2 News*). Soft TV news includes one morning (*Go' morgen Danmark* on TV 2) and two evening shows (*Go' aften Danmark* on TV 2 and *Aftenshowet* on DR1) similar to the American program *Good Morning America*. The measures for printed as well as online broadsheets and tabloids include the three largest national broadsheets (*Berlingske*, *Jyllands-Posten*, and *Politiken*) and the two largest national tabloids (*BT* and *Ekstra Bladet*).

In terms of the *mediating* variables, current affairs knowledge was measured by the number of correct answers to four questions about on-going national and foreign politics. Each question had four answer categories as well as a "don't know" category and participants had 20 s to respond. "Don't know" responses and missing values were coded as incorrect answers.¹ In order to tap the current dimension, the questions varied between nonelection and election time. The questions were constructed based on recent news coverage and were again measured in the first and third waves of the survey.²

In line with prior research (e.g., Hansen & Pedersen, 2014), internal efficacy was measured by the respondents' answers to five items about their own political abilities:

1. "Sometimes politics is so complicated that a person like me cannot really understand what is going on";
2. "Generally speaking, I do not find it difficult to take a stand on political issues" (reversed);
3. "When politicians debate economic policy, I only understand a small part of what they are talking about";
4. "Citizens like me are qualified to participate in political discussions" (reversed); and
5. "Citizens like me have opinions on politics that are worth listening to" (reversed).

Once again, the questions were asked in the first and third waves of the survey. The answers, ranging from *totally agree* to *totally disagree* on a 5-point Likert scale, were combined into reflective indexes for nonelection time and election time.

The study's *dependent* variables are offline and online political participation measured during nonelection and election time. Even though the measures of political participation as mentioned vary in these two contexts by nature, they were constructed to tap the same types of activities. Further, the time frames of these measures vary between the waves in order to tap context-dependent differences in these activities. The answers were measured on a 5-point scale from *not at all* to *four times or more* during the last 12 months in the first wave and the last 4 months in the second wave, which corresponds to the time period since the first wave. In the third wave, the respondents were asked how likely it was that they would do the activities during the election campaign on an 11-point scale from *not likely at all* to *very likely*. In the fourth wave, the respondents were asked which of the activities they actually had done during the election campaign (for a similar approach, see Schuck, Vliegenthart, & De Vreese, 2016a). Despite these differences, the measures from each of the four waves clearly load on the same factor for, respectively, offline participation (eigenvalue: 2.03; factor loadings: wave 1 = .75, wave 2 = .74, wave 3 = .73, wave 4 = .63) and online participation (eigenvalue: 2.46; factor loadings: wave 1 = .79, wave 2 = .82, wave 3 = .77, wave 4 = .75). Further, the measures for offline and online participation correlate very consistently across the four waves (Pearson's *r*: wave 1 = .47, wave 2 = .48, wave 3 = .60, wave 4 = .49).

Offline political participation was measured by the respondents' answers to, respectively, four (nonelection time) and three (election time) items regarding this type of behavior. In nonelection time the items were:

1. Attended a public political discussion, debate, or lecture;
2. Contacted or visited a politician in person;
3. Sent letters or wrote articles to newspapers, magazines, or the like to comment on a political matter; and
4. Called in to a radio or television program to express your opinion on a political issue, even if you did not get on the air.

In order to secure a high comparability with the measure for offline political participation in election time, which only includes one item for media contact (see below),

¹ Alternatively one might base the analysis on perceived knowledge, measured as number of correct and incorrect answers provided and only "don't know" and missing values coded as zero. We find similar patterns in our results and reach the same conclusions when using this approach (results are available from the authors upon request). We thank one of the anonymous reviewers for this suggestion.

² Nonelection time (Wave 1) questions were: (1) Which post has Margrethe Vestager been appointed to in the European Commission? (Commissioner for Competition); (2) In what country is there currently war against IS (Islamic State)? (Iraq); (3) Who is the Conservative People's Party's spokesperson on politics? (Mai Mercado); (4) Who is Minister of Employment in Denmark? (Henrik Dam Kristensen). Election time (Wave 3) questions were: (1) Which party is Søren Gade running for at the upcoming national election? (Venstre); (2) Who was recently elected as Prime Minister in Great Britain? (David Cameron); (3) Which politician from the Red-Green Alliance is not running again in the national election? (Frank Aaen); (4) Which minister was recently criticized for his/her role in the sale of Dong? (Bjarne Corydon).

the last two items were combined into one. The three items were then combined in an index for the first and second wave. In election time the included items were:

1. Attend(ed) public meetings, discussions, debates, and lectures on the election;
2. Contact(ed) a politician personally to discuss the election; and
3. Contact(ed) the media to express your opinion about the election (e.g., by calling or writing to radio, television, or newspaper).

These three items were again combined in an index for the third and fourth wave.

Both during nonelection and election time, the measure for *online political participation* was measured by the respondents' answers to four items regarding this type of behavior. In nonelection time the included items were:

1. Initiated a political discussion or supported a political issue online, for example, by creating a group or donating money to a political project or event;
2. Expressed your opinion in a post on Facebook or similar social media sites about a political or societal issue;
3. Contacted a politician via e-mail or social media to express your opinion; and
4. Changed personal information or pictures on your social media profile because of a political or societal issue.

These four items were combined in an index for the first and second wave. In election time, the included items were:

1. On social media or elsewhere on the Internet, take(n) the initiative to discuss the election (e.g., by creating a group);
2. Express(ed) your support for a party or candidate on Facebook or other social media (e.g., by writing or commenting on posts or changing profile information);
3. Via e-mail or social media contact(ed) a politician to express your opinion about elections; and
4. Change(d) your personal information or picture on Facebook or other social media due to the election.

These four items were again combined in an index for the third and fourth wave.

In addition to the variables described here, the analyses include controls for gender, age, and education with a 7-point scale ranging from *primary school* to *long higher education*. All variables except current affairs knowledge were pretested on a sample of 200 respondents in October 2014. The pretest showed good distributions for all variables, which were therefore left unchanged.

Analytic Approach

Since political participation varies by nature between nonelection and election time, the analysis was divided between

these two settings. The first two waves were used to examine the indirect media effects during nonelection time, and the last two waves were used to examine these effects during election time. In order to test the mediation through current affairs knowledge and internal efficacy, the size and significance levels of the indirect effects were calculated using PROCESS modeling with a bootstrap resampling technique (Hayes, 2013). Media use, current affairs knowledge, and internal efficacy were all measured in the first wave for nonelection time and in the third wave for election time. In order to examine how the levels of media use indirectly affect changes in political participation, we measured the dependent variable in the second and fourth wave and included a lagged dependent variable from the first and third wave in the analysis. This approach makes it possible to rule out long-term influences and assess individual deviations from prior political participation (Markus, 1979).

Based on four ordinary least squares (OLS) models – $IV \rightarrow M_1$, $IV \rightarrow M_2$ (controlling for M_1), $IV \rightarrow DV$, and $IV \rightarrow DV$ (controlling for M_1 and M_2) – the method described provides us with the three indirect effects, the direct effect, and the total effect on changes in political participation for use of each media type, as illustrated in Figure 1. The indirect effect goes either through current affairs knowledge only ($a_1 \times b_1$), through internal efficacy only ($a_2 \times b_2$), or through current affairs knowledge and internal efficacy sequentially ($a_1 \times d_{21} \times b_2$). All the indirect effects and the direct effect (c') sum up to the total effect (c). As this method is applied for offline and online political participation during nonelection as well as election time, the analysis relies on a total of 16 OLS regression models (available from the authors upon request).

Results

Tables 1 and 2 present the results for the effects on changes in *offline* political participation during nonelection and election time. The indirect effect through current affairs knowledge and internal efficacy can be seen in the first column. Although the directions of the estimates resemble those found in other settings, we find no significant indirect effects during nonelection time. During election time we find a positive indirect effect of using hard TV news as well as online broadsheets and online tabloids, while we find a negative indirect effect of using printed tabloids. Use of soft TV news and printed broadsheets does not have a significant indirect effect, but the estimates point in the expected directions. Further, use of hard TV news has a significantly more positive indirect effect than use of soft TV news (diff. = .0093, $z = 1.75$, $p < .05$, one-tailed). The differences between using both the printed and online versions of broadsheet and tabloid newspapers also point in the expected direction, but are not significant.

Tables 3 and 4 present the results for the effects on changes in *online* political participation. During nonelection time we find a positive indirect effect of using hard TV news and broadsheets, both in the printed and online versions,

Figure 1. Direct and indirect effects of using different news types on political participation Indirect effect through knowledge (M_1) and efficacy (M_2) = $a_1 \times d_{21} \times b_2$; indirect effect through knowledge (M_1) = $a_1 \times b_1$; indirect effect through efficacy (M_2) = $a_2 \times b_2$; direct effect = c' ; total effect = c .

Table 1. Effects on changes in offline political participation during nonelection time

	Indirect $M_1 + M_2$ $a_1 \times d_{21} \times b_2$	Indirect M_1 $a_1 \times b_1$	Indirect M_2 $a_2 \times b_2$	Direct c'	Total c
Television					
Hard news	.0080 (.0068)	.0194 (.0480)	.0240 (.0211)	.0840 (.2176)	.1354 (.2124)
Soft news	-.0025 (.0024)	-.0061 (.0157)	-.0144 (.0132)	.0359 (.2013)	.0128 (.2004)
Printed newspapers					
Broadsheets	.0016 (.0017)	.0038 (.0111)	.0101 (.0106)	.1147 (.2209)	.1302 (.2205)
Tabloids	-.0011 (.0012)	-.0027 (.0080)	-.0057 (.0065)	-.0942 (.1684)	-.1038 (.1682)
Online newspapers					
Broadsheets	.0048 (.0042)	.0116 (.0287)	.0178 (.0158)	.2263 (.2070)	.2606 (.2048)
Tabloids	.0009 (.0010)	.0021 (.0061)	-.0053 (.0063)	.1092 (.1458)	.1068 (.1457)

Notes. Mediation test with bootstrap (1,000 resamples), unstandardized regression coefficients, standard errors in parentheses. M_1 = current affairs knowledge; M_2 = internal efficacy. Controlling for initial offline political participation (W1), gender, age, education, and use of additional news types. Original OLS models available upon request. No significant effects. $N = 2,649$.

while we find a negative indirect effect of using soft TV news and printed tabloids. Although use of online tabloids does not have a significant indirect effect, the estimate again points in a positive direction. During election time we see the same pattern, but the indirect effects for use of soft TV news and printed broadsheets are not significant, while use of online tabloids is. Further, use of hard TV news has a significantly more positive indirect effect than use of soft TV news, both during nonelection (diff. = .0503, $z = 4.59$, $p < .01$,

one-tailed) and election (diff. = .0309, $z = 3.51$, $p < .01$, one-tailed) time, and use of printed broadsheets has a significantly more positive indirect effect than printed tabloids, also both during nonelection (diff. = .0133, $z = 2.55$, $p < .01$, one-tailed) and election (diff. = .0134, $z = 2.74$, $p < .01$, one-tailed) time. Use of online broadsheets has a significantly more positive indirect effect than use of online tabloids during nonelection time (diff. = .0177, $z = 2.73$, $p < .01$, one-tailed), while there is no significant difference

Table 2. Effects on changes in *offline* political participation during *election* time

	Indirect $M_1 + M_2$ $a_1 \times d_{21} \times b_2$	Indirect M_1 $a_1 \times b_1$	Indirect M_2 $a_2 \times b_2$	Direct c'	Total c
Television					
Hard news	.0087* (.0052)	-.0363 (.0318)	.0411* (.0247)	-.1562 (.2296)	-.1427 (.2250)
Soft news	-.0006 (.0011)	.0025 (.0056)	-.0327* (.0201)	.2506 (.2175)	.2198 (.2166)
Printed newspapers					
Broadsheets	.0011 (.0013)	-.0045 (.0068)	.0128* (.0107)	.1283 (.2412)	.1377 (.2411)
Tabloids	-.0029** (.0019)	.0121 (.0116)	.0040 (.0066)	-.1949 (.1842)	-.1818 (.1838)
Online newspapers					
Broadsheets	.0043** (.0027)	-.0179 (.0160)	.0278** (.0171)	.3949* (.2126)	.4090* (.2111)
Tabloids	.0027** (.0018)	-.0115 (.0107)	-.0163** (.0106)	.3475** (.1527)	.3225** (.1519)

Notes. Mediation test with bootstrap (1,000 resamples), unstandardized regression coefficients, standard errors in parentheses. M_1 = current affairs knowledge; M_2 = internal efficacy. Controlling for initial (intention of) offline political participation (W3), gender, age, education, and use of additional news types. Original OLS models available upon request. * $p < .1$. ** $p < .5$. $N = 2,649$.

Table 3. Effects on changes in *online* political participation during *nonelection* time

	Indirect $M_1 + M_2$ $a_1 \times d_{21} \times b_2$	Indirect M_1 $a_1 \times b_1$	Indirect M_2 $a_2 \times b_2$	Direct c'	Total c
Television					
Hard news	.0379*** (.0099)	.0291 (.0459)	.1128*** (.0308)	-.3678 (.2264)	-.1880 (.2217)
Soft news	-.0124*** (.0047)	-.0095 (.0157)	-.0741*** (.0243)	.4626** (.2099)	.3666* (.2098)
Printed newspapers					
Broadsheets	.0080** (.0042)	.0062 (.0113)	.0592*** (.0250)	.1055 (.2305)	.1789 (.2310)
Tabloids	-.0053** (.0031)	-.0041 (.0076)	-.0296* (.0176)	-.0724 (.1759)	-.1114 (.1765)
Online newspapers					
Broadsheets	.0215*** (.0059)	.0165 (.0265)	.0592*** (.0230)	.0434 (.2171)	.1406 (.2163)
Tabloids	.0038 (.0027)	.0029 (.0058)	-.0258** (.0152)	.3692** (.1523)	.3502** (.1528)

Notes. Mediation test with bootstrap (1,000 resamples), unstandardized regression coefficients, standard errors in parentheses. M_1 = current affairs knowledge; M_2 = internal efficacy. Controlling for initial online political participation (W1), gender, age, education, and use of additional news types. Original OLS models available upon request. * $p < .1$. ** $p < .5$. *** $p < .01$. $N = 2,649$.

during election time, even though this difference also points in the expected direction.

Taken together, these results support our expectations. The effect of news media use on changes in political participation is indeed mediated through current affairs knowledge and internal efficacy (H1). However, this indirect effect is dependent on news type. Use of hard TV news, printed and online broadsheets, as well as online tabloids has a positive indirect effect, while use of soft TV news and printed tabloids has a negative indirect effect. Use of hard TV news has a more positive indirect effect than use of soft TV news in all settings (H2a). Use of printed

broadsheets has a more positive indirect effect than use of printed tabloids (H2b), but this difference is only significant for online political participation. Use of online broadsheets has a more positive indirect effect than use of online tabloids (H2c), but this difference is only significant for online political participation during nonelection time. As we only find significant indirect effects on offline participation during election time, the results further indicate that the indirect effect is dependent on context and is more pronounced during election time (RQ1).

The results also partly confirm our last expectation that use of news media to a larger extent has an indirect effect

Table 4. Effects on changes in *online* political participation during *election* time

	Indirect $M_1 + M_2$ $a_1 \times d_{21} \times b_2$	Indirect M_1 $a_1 \times b_1$	Indirect M_2 $a_2 \times b_2$	Direct c'	Total c
Television					
Hard news	.0287*** (.0082)	-.0356 (.0408)	.1421*** (.0399)	.2835 (.2440)	.4187* (.2389)
Soft news	-.0022 (.0032)	.0027 (.0067)	-.1037*** (.0319)	.1059 (.2323)	.0028 (.2320)
Printed newspapers					
Broadsheets	.0041 (.0033)	-.0050 (.0082)	.0514** (.0247)	.1520 (.2572)	.2024 (.2578)
Tabloids	-.0093*** (.0036)	.0116 (.0139)	.0083 (.0168)	-.3721* (.1966)	-.3615* (.1967)
Online newspapers					
Broadsheets	.0139*** (.0045)	-.0173 (.0201)	.0855*** (.0273)	.2329 (.2273)	.3150 (.2264)
Tabloids	.0085*** (.0030)	-.0106 (.0127)	-.0527*** (.0184)	.3112* (.1630)	.2564 (.1626)

Notes. Mediation test with bootstrap (1,000 resamples), unstandardized regression coefficients, standard errors in parentheses. M_1 = current affairs knowledge; M_2 = internal efficacy. Controlling for initial (intention of) online political participation (W3), gender, age, education, and use of additional news types. Original OLS models available upon request. * $p < .1$. ** $p < .5$. *** $p < .01$. $N = 2,649$.

on changes in online political participation than changes in offline political participation (H3). During nonelection time, use of hard TV news (diff. = .0299, $z = 2.49$, $p < .01$, one-tailed), printed broadsheets (diff. = .0064, $z = 1.41$, $p < .1$, one-tailed), and online broadsheets (diff. = .0167, $z = 2.31$, $p < .05$, one-tailed) has a more positive indirect effect on online participation than on offline participation, while use of soft TV news (diff. = .0099, $z = 1.88$, $p < .05$, one-tailed) has a more negative indirect effect on online participation than on offline participation. The indirect effects of using printed and online tabloids do not differ significantly between offline and online participation during nonelection time, but again the differences point in the expected direction. During election time use of hard TV news (diff. = .0200, $z = 2.06$, $p < .05$, one-tailed), online broadsheets (diff. = .0096, $z = 1.83$, $p < .05$, one-tailed), and online tabloids (diff. = .0058, $z = 1.66$, $p < .05$, one-tailed) has a more positive indirect effect on online participation than on offline participation, while use of printed tabloids (diff. = .0064, $z = 1.57$, $p < .1$, one-tailed) has a more negative indirect effect on online participation than on offline participation. The indirect effects of using soft TV news and printed broadsheets do not differ significantly between offline and online participation during election time, but once again point in the expected direction.

Looking further into the results, we find no indirect effect through current affairs knowledge separately, which indicates that this variable mainly influences political participation through its effect on internal efficacy. Additionally we find that use of soft TV news, which has a negative indirect effect on changes in political participation, has a positive *direct* effect. Although this direct effect is only significant for online participation

during non-election time, this result indicates that use of this news type affects political participation positively though other processes.

Discussion

This study has examined how use of different news types indirectly affects offline and online political participation through current affairs knowledge and internal efficacy during nonelection and election time. Our results show that knowledge and efficacy are indeed important mediators between media use and political participation. However, this indirect effect is dependent on news type, participation form, and context. Using a four-wave panel survey, we have shown how use of hard TV news and broadsheet newspapers as well as online tabloids has a positive indirect effect, while use of offline tabloids and soft TV news has a negative indirect effect. Thus, people become more knowledgeable and feel more efficacious, which in turn causes them to participate, when they use hard TV news, broadsheets, and online tabloids. Use of soft TV news and printed tabloids has the opposite effect. News type is in other words a crucial factor for understanding the indirect effects between media use and political participation. Further, the indirect effects are more pronounced for online political participation and during election time. Thereby the results align with the idea that online participation is less demanding than offline participation and that the electoral context matters.

One of the main questions in the literature on effects of different news types has been whether entertaining dissemination of political information has any democratic potential (Williams & Delli Carpini, 2011). Our results

mostly point in a positive direction. Although use of soft TV news did not have a positive indirect effect through current affairs knowledge and internal efficacy, it did have a positive *direct* effect on political participation. This direct effect indicates that other unexplored psychological processes might be at stake. In accordance with the elaboration likelihood model (Petty & Cacioppo, 1986), this result suggests that especially use of soft TV news might influence participation positively through a peripheral, low-motivation route, while use of hard TV news, printed and online broadsheet newspapers, as well as online tabloids works through a central, high-motivation route. Since soft TV news often applies an episodic framing of political information with a focus on individual consequences (Reinemann et al., 2012), this peripheral process might be of a more emotional character.

Further, although use of printed tabloids in general had a negative effect on political participation, use of online tabloids had both a positive indirect and direct effect. A potential explanation of this difference could be that online tabloids currently are among the most visited news webpages in Denmark, while the circulation figures for printed tabloids are relatively low. In this way online tabloids attract a much larger and potentially different audience than the printed tabloids. Thus, a potential explanation of the differences between printed and online tabloids should perhaps be found in the motivations for seeking information, which is also central in the elaboration likelihood model (Petty & Cacioppo, 1986). If people seek political information with the motivation to learn, it is likely to affect the impact of media use (Elenbaas, De Vreese, Schuck, & Boomgaarden, 2014). We encourage future studies to examine the potential emotional indirect effect on political participation of using more entertaining news formats by including media content features as well as motivations more directly in the analyses.

The findings presented in this study also have their limitations. First, since we use longitudinal data our analyses are vulnerable to panel mortality, which can bias the sample. However, as mentioned earlier, this is not our biggest concern, since we study a psychological process and do not make claims about precise population estimates. Second, our analyses rely on what can be labeled an *empty exposure study*, as we only take account of the specific newspapers and TV programs to which people have been exposed, and not the actual content of these outlets (Schuck, Vliegenthart, & De Vreese, 2016b). Therefore, we cannot examine whether specific elements of soft TV news and tabloid newspapers have a mobilizing potential. Third, the operationalizations of both knowledge and political participation have a high threshold, which means that media use in general is less likely to have an effect. Thus, use of entertaining news types might have a more positive effect on other types of political knowledge (as shown by Baum, 2002; 2003) and more low-cost or passive political activities (Bakker & De Vreese, 2011). Finally, this study has not looked at moderating effects. For example, Moy, Xenos, and Hess (2005) found that watching late-night comedy increased the intention to vote and discuss politics, but more for political sophisticates than for others. Pointing in the other direction,

Jebril, De Vreese, Van Dalen, and Albæk (2013) found that political interest moderates the effect of human-interest framing on knowledge, having the largest effect on the *least* interested. Future studies should consider such moderating factors in regard to the psychological processes leading from media use to political participation.

Despite the aforementioned limitations, this study has enhanced our understanding of the underlying psychological processes between use of different news types and changes in online and offline political participation in both nonelection and election time. By doing so, the study has underlined the importance of including different news types and new forms of political participation when investigating news media effects as well as taking the context of these effects into account.

References

- Albæk, E., van Dalen, A., De Vreese, C. H., & Jebril, N. (2014). *Political journalism in comparative perspective*. New York, NY: Cambridge University Press.
- Andersen, K., De Vreese, C. H., & Albæk, E. (2016). Measuring media diet in a high-choice environment—testing the list-frequency technique. *Communication Methods and Measures*, 10(2–3), 81–98. doi: 10.1080/19312458.2016.1150973
- Bakker, T. P., & De Vreese, C. H. (2011). Good news for the future? Young people, Internet use, and political participation. *Communication Research*, 38(4), 451–470. doi: 10.1177/0093650210381738
- Barabas, J., & Jerit, J. (2009). Estimating the causal effects of media coverage on policy-specific knowledge. *American Journal of Political Science*, 53(1), 73–89. doi: 10.1111/j.1540-5907.2008.00358.x
- Barabas, J., Jerit, J., Pollock, W., & Rainey, C. (2014). The question(s) of political knowledge. *American Political Science Review*, 108(04), 840–855. doi: 10.1017/S0003055414000392
- Baum, M. A. (2002). Sex, lies, and war: How soft news brings foreign policy to the inattentive public. *American Political Science Review*, 96(01), 91–109. doi: 10.1017/S0003055402004252
- Baum, M. A. (2003). Soft news and political knowledge: Evidence of absence or absence of evidence? *Political Communication*, 20(2), 173–190. doi: 10.1080/10584600390211181
- Baum, M. A., & Jamison, A. S. (2006). The Oprah effect: How soft news helps inattentive citizens vote consistently. *Journal of Politics*, 68(4), 946–959. doi: 10.1111/j.1468-2508.2006.00480.x
- Berry, J. M., Portney, K. E., & Thomson, K. (1993). *The rebirth of urban democracy*. Washington, DC: Brookings Institution Press.
- Bimber, B. (1999). The Internet and citizen communication with government: Does the medium matter? *Political Communication*, 16, 409–428. doi: 10.1080/105846099198569
- Brants, K. (1998). Who's afraid of infotainment? *European Journal of Communication*, 13(3), 315–335. doi: 10.1177/0267323198013003002
- Brants, K., & Neijens, P. (1998). The infotainment of politics. *Political Communication*, 15(2), 149–164. doi: 10.1080/10584609809342363
- Cho, J., Shah, D. V., McLeod, J. M., McLeod, D. M., Scholl, R. M., & Gotlieb, M. R. (2009). Campaigns, reflection, and deliberation: Advancing an O-S-R-O-R model of communication effects. *Communication Theory*, 19(1), 66–88. doi: 10.1111/j.1468-2885.2008.01333.x

- Corrigan-Brown, C., & Wilkes, R. (2014). Media exposure and the engaged citizen: How the media shape political participation. *The Social Science Journal*, 51(3), 408–421. doi: 10.1016/j.soscij.2014.03.009
- Delli Carpini, M. X., & Keeter, S. (1996). *What Americans Know about politics and why it matters*. New Haven, CT: Yale University Press.
- De Vreese, C. H., & Boomgaarden, H. (2006). News, political knowledge and participation: The differential effects of news media exposure on political knowledge and participation. *Acta Politica*, 41(4), 317–341. doi: 10.1057/palgrave.ap.5500164
- Drew, D., & Weaver, D. (2006). Voter learning in the 2004 presidential Election: Did the media matter? *Journalism & Mass Communication Quarterly*, 83(1), 25–42. doi: 10.1177/107769900608300103
- Ekman, J., & Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. *Human Affairs*, 22(3), 283–300. doi: 10.2478/s13374-012-0024-1
- Elenbaas, M., De Vreese, C., Schuck, A., & Boomgaarden, H. (2014). Reconciling passive and motivated learning: The saturation-conditional impact of media coverage and motivation on political information. *Communication Research*, 41(4), 481–504. doi: 10.1177/0093650212467032
- Esser, F. (1999). ‘Tabloidization’ of news: A comparative analysis of Anglo-American and German press journalism. *European Journal of Communication*, 14(3), 291–324. doi: 10.1177/0267323199014003001
- Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29(4), 891–913. doi: 10.2307/2111186
- Gibson, R., & Cantijoch, M. (2013). Conceptualizing and Measuring participation in the age of the Internet: Is online political engagement really different to offline? *The Journal of Politics*, 75(3), 701–716. doi: 10.1017/S0022381613000431
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems: Three Models of media and politics*. Cambridge, UK: Cambridge University Press.
- Hansen, K. M., & Pedersen, R. T. (2014). Campaigns matter: How voters become knowledgeable and efficacious during election campaigns. *Political Communication*, 31(2), 303–324. doi: 10.1080/10584609.2013.815296
- Hayes, A. F. (2013). *Introduction to Mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
- Hosch-Dayican, B. (2014). Online political activities as emerging forms of political participation: How do they fit in the conceptual map? *Acta Politica*, 49(3), 342–346. doi: 10.1057/ap.2014.7
- Jebiril, N., De Vreese, C. H., van Dalen, A., & Albæk, E. (2013). The effects of human interest and conflict news frames on the dynamics of political knowledge gains: Evidence from a cross-national study. *Scandinavian Political Studies*, 36(3), 201–226. doi: 10.1111/1467-9477.12003
- Jung, N., Kim, Y., & de Zúñiga, H. G. (2011). The mediating role of knowledge and efficacy in the effects of communication on political participation. *Mass Communication and Society*, 14(4), 407–430. doi: 10.1080/15205436.2010.496135
- Kinder, D. R. (2003). Communication and politics in the age of information. In D. O. Sears, L. Huddy, & R. Jervis (Eds.), *Oxford handbook of political psychology* (pp. 357–393). Oxford, UK: Oxford University Press.
- Kenski, K., & Stroud, N. J. (2006). Connections between Internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media*, 50(2), 173–192. doi: 10.1207/s15506878jobem5002_1
- Markus, G. B. (1979). *Analyzing Panel Data*. Newbury Park, CA: Sage.
- McLeod, J. M., Scheufele, D. A., & Moy, P. (1999). Community, communication, and participation: The role of mass media and interpersonal discussion in local political participation. *Political Communication*, 16(3), 315–336. doi: 10.1080/105846099198659
- Miller, A. H., Goldenberg, E. N., & Erbring, L. (1979). Type-set politics: Impact of newspapers on public confidence. *American Political Science Review*, 73(1), 67–84. doi: 10.2307/1954731
- Moeller, J., De Vreese, C., Esser, F., & Kunz, R. (2014). Pathway to political participation: The influence of online and offline news media on internal efficacy and turnout of first-time voters. *American Behavioral Scientist*, 58(5), 689–700. doi: 10.1177/0002764213515220
- Moy, P., Xenos, M. A., & Hess, V. K. (2005). Communication and citizenship: Mapping the Political effects of infotainment. *Mass Communication and Society*, 8(2), 111–131. doi: 10.1207/s15327825mcs0802_3
- Norris, P. (2000). *A Virtuous Circle: Political Communications in Postindustrial Societies*. Cambridge, UK: Cambridge University Press.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York, NY: Springer.
- Prior, M. (2007). *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. New York, NY: Cambridge University Press.
- Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon & Schuster.
- Reinemann, C., Stanyer, J., Scherr, S., & Legnante, G. (2012). Hard and soft news: A review of concepts, operationalizations and key findings. *Journalism*, 13(2), 221–239. doi: 10.1177/1464884911427803
- Schuck, A. R. T., Vliegenthart, R., & De Vreese, C. H. (2016a). Who’s afraid of conflict? The mobilizing effect of conflict framing in campaign news. *British Journal of Political Science*, 46(01), 177–194. doi: 10.1017/S0007123413000525
- Schuck, A. R. T., Vliegenthart, R., & De Vreese, C. H. (2016b). Matching theory and data: Why combining media content with survey data matters. *British Journal of Political Science*, 46(1), 205–213. doi: 10.1017/S0007123415000228
- Strömbäck, J. (2005). In search of a standard: Four models of democracy and their normative implications for journalism. *Journalism Studies*, 6(3), 331–345. doi: 10.1080/14616700500131950
- Togeby, L. (2004). *Man har et standpunkt... om stabilitet og forandring i befolkningens holdninger* [One has a stand... about stability and change in public attitudes]. Aarhus, Denmark: Universitetsforlag.
- Van Aelst, P., & de Swert, K. (2009). Politics in the news: Do campaigns matter? *Communications*, 34(1), 149–68. doi: 10.1515/COMM.2009.011
- Williams, B. A., & Delli Carpini, M. X. (2011). *After broadcast news: Media regimes, democracy, and the new information environment*. Cambridge, UK: Cambridge University Press.
- Zaller, J. (2003). A new standard of news quality: Burglar alarms for the monitorial citizen. *Political Communication*, 20(2), 109–130. doi: 10.1080/10584600390211136
- Zukin, C., Keeter, S., Andolina, M., Jenkins, K., & Delli Carpini, M. X. (2006). *A new engagement? Political participation, civic life, and the changing American citizen*. Oxford, UK: Oxford University Press.

Date of acceptance: June 22, 2016
Published online: October 4, 2016

Kim Andersen is a PhD student at the Centre for Journalism, University of Southern Denmark. His research concerns when and how different characteristics of the news media influence political engagement.

Erik Albæk is Professor of Journalism and Political Science and Research Director at the Centre for Journalism, University of Southern Denmark. He is former chairman of the Danish Social Science Research Council and winner of the 2016 Goldsmith Book Prize.

Kim Andersen
Centre for Journalism
University of Southern Denmark
Campusvej 55
5230 Odense M
Denmark
E-mail kand@journalism.sdu.dk

Claes H. De Vreese is Professor and Chair of Political Communication in the Amsterdam School of Communication Research, ASCoR, at the University of Amsterdam, The Netherlands. Information about his research can be found at www.claesdevreese.wordpress.com.

Camilla Bjarnøe is Research Assistant at the Centre for Journalism, University of Southern Denmark. Her PhD dissertation about framing and reframing of policy questions over time is currently under assessment.

Appendix

Table A1. Description of variables

	<i>M</i>	<i>SD</i>	Min.	Max.	α
Gender (female)	0.50	0.50	0	1	
Age	52.82	14.76	19	86	
Education	4.33	1.91	1	7	
Hard TV news					
Nonelection	1.64	1.26	0	7	.61
Election	1.66	1.28	0	7	.63
Soft TV news					
Nonelection	0.79	1.22	0	7	.59
Election	0.76	1.21	0	7	.63
Printed broadsheets					
Nonelection	0.93	1.34	0	7	.35
Election	0.89	1.31	0	7	.34
Printed tabloids					
Nonelection	0.88	1.81	0	7	.79*
Election	0.86	1.75	0	7	.77*
Online broadsheets					
Nonelection	0.93	1.48	0	7	.61
Election	0.93	1.51	0	7	.64
Online tabloids					
Nonelection	1.33	2.16	0	7	.78*
Election	1.34	2.15	0	7	.77*
Current affairs knowledge					
Nonelection	52.09	30.62	0	100	.57**
Election	72.57	29.07	0	100	.61**
Internal efficacy					
Nonelection	64.11	19.34	0	100	.74
Election	66.59	18.49	0	100	.76
Offline political participation					
Wave 1	8.27	17.05	0	100	.65
Wave 2	5.58	14.76	0	100	.72
Wave 3	13.79	19.93	0	100	.80
Wave 4	4.15	14.50	0	100	.55
Online political participation					
Wave 1	10.34	18.62	0	100	.68
Wave 2	8.67	17.12	0	100	.69
Wave 3	17.20	17.87	0	100	.79
Wave 4	6.58	17.06	0	100	.64

Note. *Pearson's *r* (only two items in index). **KR-20 (additive measure with binary items).