

Article

Types of Information Orientation and Information Levels Among Young and Old News Audiences

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Abstract

Studies on audiences' information behavior paint a mixed picture of young and old people's interests, their involvement with news and information, and the effects news consumption has on their learning. By adapting Giddens's structuration approach, this study aims to assess audience behavior and its relationship with journalism by comparing the use behavior and attitudes of three age groups—adolescents, young adults, and adults—as characterized by distinct media socialization and use patterns. We identify types of information orientation—that is, a typology of behavior and attitudes towards news and information—for the examination of news audiences. Based on a representative face-to-face survey (N = 1,508) with German adolescents (14–17 years old), young adults (18–24 years old), and adults (40–53 years old), we identify four types that can be characterized by a certain pattern of news-related attitudes, the use of sources, and their relevance to opinion formation, as well as the perceived information level of participants. We examine how these types of information orientation differ between and among the three age groups and explore their relationship with audiences' socio-political knowledge. The findings show that not all young people are necessarily less interested and engaged with news and journalism than older people. Moreover, it is a combination of interest with the use and perceived relevance of journalistic sources that is relevant for positive effects on information levels.

Keywords

adolescents; audience behavior; hybrid media system; information orientation; journalism; news use; young adults

Issue

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1. Introduction

Despite a growing body of audience-focused research, mainly driven by the “audience turn” in journalism studies (Meijer, 2016), a lack of clarity remains in analyses of what drives audiences' consumption and engagement with news (Peters et al., 2021, p. 1) and the effects it has on how informed they are. Previous studies reveal “generational gaps” (Andersen et al., 2021) between young and old people's media use and indicate that there are similar informational gaps within younger generations (Edgerly et al., 2018; Geers, 2020). Here, partic-

ular concerns are often expressed in regard to young audiences, as they are characterized by a lower level of interest in news, a tendency of incidental consumption, (Boczkowski et al., 2018), and an inclination to avoid news more than older people (Karlsen et al., 2020). In contrast, other scholars paint a more optimistic picture of young audiences, arguing that they use a wider range of channels—mainly social media platforms—for their information needs than older people do, while continuing to perceive news engagement, whether it be through social media or otherwise, as part of being an active citizen (Sveningsson, 2015) and benefit from news

exposure on social media as it pertains to political participation (Andersen et al., 2021).

Consequently, a clearer idea of news audiences' behavior in today's digital media landscape—attitudinally and in practice—is necessary to guide journalism scholars in clarifying stereotypical assumptions about young people's interest and involvement with news and aiding practitioners in the development of strategies and products that better address young audiences and positively affect the way they consume and interact with the news. It is also helpful to focus attention on the intrinsic role journalism plays in young audiences' news consumption habits as well as in comparison to that of older audiences. Since news content is consumed from an ever-increasing variety of journalistic and non-journalistic providers and content creators, across a variety of online platforms (Newman et al., 2021), it is important to consider audiences' relationship with journalism and how they interact along this cross-platform dynamic. In what follows, we will adapt Giddens's (1984) structuration theory to consider the relationship between news audiences' practices and their news-related attitudes at the level of the individual and at the macro-level of media institutions that act as news providers. By understanding media use as the consequence of a process in which audiences and institutions influence one another, audiences' practices and attitudes that constitute types of information orientation can be considered as a result of engaging with the structures that encompass the news media environment. The main question of our manuscript explores how far generational differences in news audiences can be explained by these overarching consumption patterns, patterns that encompass the totality of attitudes and practices with which news audiences relate to socially relevant matters in interaction with news media institutions. In addition, we examine whether or not differences exist in the way subgroups of news audiences benefit from their patterns of information orientation—that is, practices and attitudes towards news and information—in terms of objective sociopolitical knowledge.

Drawing on a quantitative, face-to-face survey with German teenagers, young adults, and adults ($N = 1,508$), all of whom can be characterized by distinct media socialization and usage patterns, we first identify four distinct types of information orientation that can be classified according to certain patterns of news-related attitudes, the use of sources (as opposed to the use of discrete media artifacts and technologies), how relevant (non-)journalistic sources may or may not be for the processes of opinion forming, as well as subjective feelings of being informed. By considering the concept of information orientation as it occurs in the relationship between news audiences and journalistic practice, we aim to enlighten mixed findings on age as the most deterministic factor behind different news consumption patterns as well as mixed findings regarding the relationship between (social) media use and knowledge.

2. Transformations and Challenges in Today's Hybrid Media Environment

To investigate the relationship between the public and journalism in today's media environment, we adapt Giddens's (1984) structuration theory as it allows for the integration of both individual-level (audiences dimension; their practices, and attitudes) and macro-level constructs (structural dimensions, the institutions that act as resources for audiences). In the context of audience studies, Webster (2011, p. 45) illustrates how individuals "repeatedly use or avoid media offerings" in the digital media environment while Yuan and Ksiazek (2011) adopt the structuration approach to research audience behavior in the context of China's television market.

Giddens's (1984) structuration theory is led by three major elements: agents, structures, and duality. Agents are the individuals who use digital media, or, in this context, the members of news media audiences. They rely on individual preferences and the consumption habits they build as they develop their own news repertoires (Webster, 2011, p. 46). In today's hybrid media system (Chadwick, 2017), more options for individual and personalized information consumption from different content providers emerge (Thorson & Wells, 2016) as users increasingly influence what kind of content they see in their social media feed by following or subscribing to certain sources (Merten, 2020). Audiences have limitless options when selecting news sources ranging from both traditional news outlets that have been produced along established journalistic norms and values as well as content from non-professional actors that is distributed based on economic, personal, or social interests (Shehata & Strömbäck, 2021). In the context of this study, the most relevant structures are media institutions, such as public broadcasters or commercial media that have different motives for providing and distributing content that audiences use for information purposes (Webster, 2011, p. 47). In today's hybrid media system, different types of media co-exist and form a system that evolves through "interactions among older and newer media" (Chadwick, 2017, p. xi). On social media platforms in particular, professional journalism is one source among many; alternative actors such as political social media influencers (Bause, 2021) have become increasingly important in the context of news consumption. These "new journalistic actors" (Banjac & Hanusch, 2020, p. 2) are doing the work of redefining traditional journalism (Loosen, 2015). Together, individuals and institutions mutually construct the media environment by influencing and shaping one another in a process that can be referred to as a "duality of structure" (Giddens, 1984). Audiences consequently rely on and interact with old and new media, institutionally and technologically, to keep informed and, in doing so, participate in their reconfiguration.

To better understand young and old news audiences' behavior and their relationships to journalism, we draw

on the concept of *information orientation* that helps illustrate patterns of both news-related attitudes (interest, motivation, and subjective information level) and behaviors (use of sources and their relevance to opinion formation). We distinguish between the use and the attributed relevance for opinion formation since use of a source does not necessarily mean that this source is also trusted or of personal relevance. Some sources seem to satisfy gratifications in which trust is not the relevant factor; for example, more than half (52%) of young adults in Germany use social media on a weekly basis to obtain information, but just 15% trust news on social media (Hölig et al., 2021). For this reason, it cannot be assumed that all used sources are equally relevant for opinion-forming, which is why we distinguish between use and relevance. In addition, for a more thorough picture, we take newer forms of news use such as the active curation and individualization of information feeds, especially on social media platforms, into account (Merten, 2020). News consumption is related to a number of other factors such as interest in news and politics (Boulianne, 2011; Strömbäck et al., 2013) and personal attitudes towards news and journalism (Fletcher & Park, 2017; Tsifti, 2010). However, we focus on the institutional role of journalism as a sender and not on used sources, as they are usually examined in repertoire studies. Conceptually, it is not about transmission channels, but about the distinction between journalistic and non-journalistic sources. In sum, we aim for a more comprehensive understanding of news audiences' behavior and its relationship to journalism and ask:

RQ1: What patterns of information orientation can be identified among news audience members based on their interests and motivation, their interaction with media sources, and subjective knowledge?

2.1. *The Age-Related Practices and Attitudes of News Use in Today's Hybrid Media Environment*

With the introduction of online and social media platforms, cohort-specific divergence in news consumption has become ever more discernible (Vara-Miguel, 2020). Differences between older generations, who grew up in a print and broadcast news environment and who are relatively late in adapting online sources to their lives, and younger generations, who have grown up in digital media environments, find expression in "generational gaps" (Andersen et al., 2021) in relation to media use. Younger cohorts consume less news and in more passive ways (Antunovic et al., 2018; Tamboer et al., 2020), mostly through online media and social networking platforms (Kümpel, 2020; Shearer & Gottfried, 2017). By contrast, older generations actively seek news and information and engage with journalistic content more intentionally through traditional channels such as television and newspapers (Andersen et al., 2021; Newman et al., 2021). However, contrary to this commonly assumed genera-

tional gap, Taneja et al. (2018, p. 1809) show that young adults (18–34 years old) and adults (55–64 years old) largely consume the same set of popular outlets, pointing to a smaller than commonly assumed generational gap in online news usage. On social media platforms, where "genres—once uniformly defined and enforced—are now murky and contested" (Edgerly & Vraga, 2020, p. 416), the juxtaposition of content leads to blurred boundaries between professional and non-professional content (Loosen, 2015) and, consequently, to diverge understandings of news and journalism (Edgerly & Vraga, 2020). For instance, while young adults turn to established news providers during breaking news events but use several online sources in their everyday consumption, older people generally rely on more traditional, legacy journalistic outlets with which they have established a sense of trust (Kalogeropoulos, 2019, p. 57). Young people do not tend to link the term "news" to professional journalism but, rather, they consider all kinds of new information as "news," which leads not only to a focus on news use but on information use.

Besides these inter-generational differences, news repertoire studies indicate that there are also informational gaps *within* generations. Thus far, the identification of news types or news repertoires is only based on the use of certain media genres (van Rees & van Eijck, 2003) or the use of different platforms (Lee & Yang, 2014). Here, authors distinguish between online and offline (social) media platforms, or, in more recent studies, between legacy and algorithmic media (Peters et al., 2021). Various methods are applied to the measurement of news exposure and in the subsequent construction of repertoires resulting in a growing number and a widening spectrum of repertoires and types of users. For example, Edgerly et al. (2018) incorporated social media as one platform for news consumption and identified four distinct types of news repertoires among US teenagers aged between 12 and 17 years of age: news avoiders, curated news only, traditional news only, and news omnivores. While news avoiders are characterized by low news use and represent about half (52%) of young respondents, news omnivores who seek out news content across all possible sources and platforms only represent 14% of adolescents. In addition, these platform-based news repertoires are related to preferences for specific news content. In general, news avoiders or "minimalists" (Geers, 2020) pay little attention to any type of news content whereas young news omnivores pay a moderate to an extensive amount of attention to *all* types of news content, while young online news users tend to be most attentive to news content about entertainment and celebrities (Geers, 2020).

As far as inter-generational differences in attitudes towards news and information are concerned, younger cohorts are shown to have less interest in news and politics than older people (Chyi & Lee, 2013). Besides, the use of social media platforms is positively associated with the news-find-me perception among young adults

(Boczkowski et al., 2018). Studies also find that young people are more likely to perceive information overload and negativity in their engagement with news content—attitudes that are related to intentional news avoidance (Skovsgaard & Andersen, 2020). In general, young people are more likely to avoid news than older people, an “age gap” (Karlsen et al., 2020, p. 808) that has slightly increased over time. Extremely low news consumption is related to a disinterest in politics, perceptions of the news lacking relevance, low news self-efficacy, and a lack of knowledge about news systems (Edgerly, 2021).

In sum, studies on young and old audiences’ information behaviors create a mixed picture. While most studies highlight a generational gap in news usage, other studies conclude that this gap is actually smaller than assumed (Taneja et al., 2018). With regard to inter-generational differences especially among young audiences, studies, on the one hand, present a pessimistic view of young news audiences by defining them as less interested, passive, and generally relating to news information with a “news-finds-me” mindset (Boczkowski et al., 2018). They are even more likely to avoid news completely than older people are. In this analysis, “emerging ‘replacement’ channels for journalism” (Peters et al., 2021, p. 2) are discussed as prevalent within younger cohorts’ media practices. On the other hand, a number of scholars adopt a more optimistic approach and suggest that young people use different channels, mainly social media platforms, for informational aims, while still grasping the importance of staying up to date with current affairs as it relates to their role as an active and informed citizen (Sveningsson, 2015). At the same time, younger cohorts tend to benefit from news exposure on social media in relation to their political participation (Andersen et al., 2021).

Against this background, we aim to investigate the extent to which generational differences in news use can be explained by overarching consumption patterns that encompass the totality of attitudes and practices—attitudes and practices that news audiences relate to socially relevant matters in their interactions with news media institutions. Since the identification of differences and similarities depends strongly on the level of detail, we would like to know which patterns appear when the more abstract and holistic level of information-oriented types are applied rather than carrying out a simple observation of particular sources. Additionally, by focusing attention on both traditional journalistic outlets and non-professional content creators we also hope to add to the low number of studies that deal with “de-centring and situating journalism by considering informational alternatives” (Peters et al., 2021, p. 17). In addition to age-related patterns of news consumption, education also has a role to play in digital literacy (van Deursen et al., 2011) and (online) news consumption patterns (van Deursen & van Dijk, 2014; van Dijk, 2006). On these terms, we expect types of information orientation to vary both between and within groups of teenagers, young adults, and adults, with education playing a crit-

ical role. This leads us to our second research question which asks:

RQ2: To what extent do types of information orientation differ between and within young and old groups of news audiences?

2.2. *Becoming Informed in Today’s Media Environment*

Previous research has not been particularly conclusive when addressing learning effects and knowledge acquisition from different types of online news media (Van Aelst et al., 2017, p. 18). For example, Anspach et al. (2019) show that reading information articles on Facebook can generate political knowledge but, at the same time, lead to an overestimation in the self-perception of knowledge. Bode (2016) found that social media (Facebook and Twitter) users do not know more than non-users but argues that the potential for users to educate themselves through the consumption of political information on social media exists even though it may not be generally realized. By contrast, other studies indicate a missing relationship between exposure to content about public affairs on Facebook and political knowledge (Wells & Thorson, 2017). People who use Facebook for news do not possess higher levels of objective knowledge than people who do not use Facebook at all (In der Au et al., 2017). Results from a panel survey even show that Facebook use can cause a decline in knowledge acquisition while Twitter use positively influences the acquisition of current affairs knowledge (Boukes, 2019).

Furthermore, studies indicate that being informed is conditional on the type of source. Results from a recent panel study demonstrate positive learning effects from using traditional news media and online news websites, but not from using social media: It was shown that “political social media use has no effect on learning—irrespective of how politically interested or knowledgeable citizens are” (Shehata & Strömbäck, 2021, p. 138). Exposure to hard news delivered by newspapers and public broadcasting also has a positive effect on political knowledge, while sources more likely to emphasize soft news (commercial broadcasters and tabloids) do not contribute to the acquisition of knowledge (Fraile & Iyengar, 2014).

Mixed findings on the relationship between media use and knowledge likely emerge from both methodological issues and the fact that knowledge acquisition is not only related to media use but is also entangled with other factors such as attitudes towards news. For instance, people who do not actively seek out news information are more likely to use social media for informational purposes and be less knowledgeable about politics over time (de Zúñiga et al., 2017, p. 117). As a result, incidental information consumption via social media might lead to overconfidence in one’s knowledge while, in real terms, not being overly knowledgeable at all. However, Boukes (2019, p. 48) argues that knowledge acquisition through

social media networks “cannot be generalized” but depends on specific platforms and their individual characteristics. These contradictory findings as well as the unspecified possibilities of social media use, once again, give reason to consider not only the influence of individual sources, but to choose the integrative approach of general information orientation. Media structures as well as individual information-related behaviors and attitudes influence audiences’ knowledge of current affairs. Against this background, our final research question asks whether differences exist in the way individuals benefit from their information-orientation patterns in terms of sociopolitical knowledge:

RQ3: To what extent are different patterns of news audiences’ information orientation related to sociopolitical knowledge?

3. Data and Method

To answer our questions, a quantitative survey (N = 1,508) administered in person was carried out along three age groups of 14–17-year-olds, 18–24-year-olds, and 40–50-year-olds (n ≈ 500 in each group). The groups were organized in this way to achieve maximum contrast between young and old audiences. While teenagers and young adults (14–24 years old), typically referred to as Gen Z, grew up in a digital media environment without memories of the pre-internet age (Kalogeropoulos, 2019) and are able to navigate social media platforms with relative ease (Andersen et al., 2021, p. 40), the older cohort of adults (40–50 years old) grew up in a print- and broadcast-dominated media environment and, although they may increasingly use the internet as a source of information, they primarily refer to traditional channels such as television and the press (Newman et al., 2021). The samples form a structurally identical representation of the German-speaking population in private households within the respective groupings regarding age, gender, and region. In terms of formal education, the sample was split 50% each way between high and low formally educated individuals, which corresponds to the distribution in the population in the two age groups of 14- to 17-year-olds and 18- to 24-year-olds. We defined formal education by the criterion of holding an “Abitur” (high school diploma). The fieldwork was conducted between October 12 and December 6, 2020, by the survey institute Gesellschaft für Innovative Marktforschung. To take different concepts and definitions of “news” into account, we avoided the word “news” in the questionnaire and used paraphrases such as “become informed about what is going on in Germany and the world” instead.

3.1. Measures

The questionnaire contained seven variables for the identification of “Types of Information Orientation”

which were: general interest in news, the importance of being informed, subjective informedness, the use of (non-)journalistic sources, and the relevance of (non-)journalistic sources for opinion formation. The questionnaire can be found as a supplementary file on the online page of this article.

Interest in news: Interest in news was measured by asking, “Generally speaking, how interested are you in information about current events in your city, in Germany, and in the rest of the world?” Responses were given on a scale ranging from *not interested at all* (1) to *very interested* (5).

Importance of being informed: The general importance of being informed was measured by asking the question, “People differ in how important they think it is to be up to date. To what extent do you agree with the following statement: ‘It’s important to stay informed about news and current events?’” Responses were given on a scale ranging from *I do not agree* (1) to *I agree* (5).

Use and importance of (non-)journalism: Respondents were asked how often they read, hear, or watch informative content from traditional journalistic sources. Importance of opinion formation was measured by the question, “If you want to form your own opinion, how important are journalistic news brands such as...for you?” Responses were given on a scale ranging from *never* (1) to *several times a day* (5) for use and *not important at all* (1) to *very important* (5) for the relevance of sources. The same two questions about the use and relevance of journalistic sources were asked for non-journalistic sources, such as influencers, celebrities, or politicians.

Subjective informedness: General subjective informedness was measured as followed, “How well informed would you say you are about current and political events in Germany?” Responses were given on a scale ranging from *not well informed at all* (1) to *very well informed* (5).

Objective knowledge: Based on the Hohenheim inventory of political knowledge (Trepte et al., 2017), six questions assessed respondents’ knowledge of three topical areas: “democracy and politics,” “journalism and media,” and “contemporary issues,” which were reported by major news outlets and discussed on social media platforms. Five response categories, including “does not occur to me just now,” were given for each question.

Sociodemographic variables: We asked for each respondent’s age, gender, and the region of Germany in which they lived.

In addition, we asked each participant to indicate several media outlets and platforms they used regularly and sources that they followed on social media.

3.2. Data Analysis

To identify the participants’ types of information orientation, an exploratory factor analysis was first conducted using SPSS statistics (chi-square (21) = 3294,577; $p < 0.001$; Kaiser-Meyer-Olkin criterion (KMO) = 0.850).

Employing principal component analysis and varimax rotation, the solution leads to two factors with an eigenvalue higher than 1.0, accounting for 72.3% of the variance. The first factor contains five variables and the second factor two variables.

4. Results

4.1. Types of Information Orientation Among News Audiences (RQ1)

The exploratory factor analysis revealed two principal components that operate as latent constructs behind news audiences' attitudes and behaviors. The first factor encompasses the journalistic dimension, which is associated with interest, relevance, and subjective informedness, whereas the second factor encompasses the non-journalism component, which is associated with the use and relevance of non-journalistic sources for information. After a reliability test (Cronbach's Alpha = 0.895 for the first component and 0.74 for the second component), the variables for each of the two factors were added and then divided by the number of respective variables. This was carried out to ensure that the scale values of the two factors had the same range of values as the underlying items. To determine the four types of information orientation, delimitation occurred at a value of more than three, which corresponds to a high or very high expression of the respective factor. For example, for the journalistically information-oriented type, the first factor was set as higher than three in combination with the second factor as less than or equal to three. By contrast, for the non-journalistically information-oriented type, the first factor was set as lower than or equal to three in combination with the second factor as higher than three and for the comprehensively information-oriented type, both the first and second factor was set as higher than

three. Thus, the four types of information orientation, as depicted in Figure 1, are each characterized by the combination of the respective high or low expression of the two factors.

Journalistically information-oriented people are generally very interested in information. For them, it is very important to be up to date on news and current events. They mainly use informative content by well-known journalistic news media, which are also highly relevant for forming their opinions. Non-journalistic sources, on the other hand, are hardly used for information and play only a minor role in opinion building. For news audience members of this type, professional journalism holds a unique position in their information repertoire, and they consider themselves as well-informed.

Non-journalistically information-oriented people have a comparatively low interest in news. However, being well informed remains important to a certain degree as they do not consider themselves as completely uninformed. Journalistic sources are hardly used for information and play only a minor role in forming their own opinion. Rather, news audience members of this type use content from non-journalistic sources such as influencers, celebrities, or politicians both for information and opinion formation.

In general, comprehensively information-oriented users have a high interest in news and think it is extremely important to be well informed. This subgroup of news audience frequently uses journalistic sources that also play a very important role in their opinion formation. The same applies to non-journalistic sources which are also widely used and considered as important sources. Consequently, news audience members who match the comprehensively information-oriented type consider themselves as well informed. For this type, journalistic and non-journalistic content are equally important for information gathering and opinion formation.

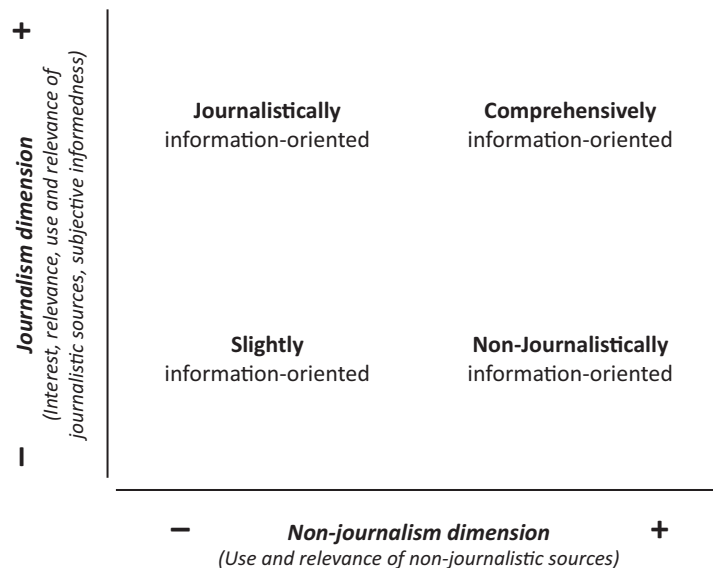


Figure 1. Types of information orientation among news audiences.

By contrast, news audience members who match the slightly information-oriented type demonstrate a low level of interest in news as well as placing little importance on being informed. Journalistic sources play no role in their information repertoire and are not relevant for forming an opinion. The same applies to non-journalistic sources, which are barely used for information and are, therefore, not important for opinion formation either. Since audience members in this group consider themselves as poorly informed, the low level of interest in news and their use behavior reflect their self-perception. Journalism as a source of information is perceived similarly to non-journalistic providers: Both are equally irrelevant because this group does not interact with either of them.

News audiences' types of information orientation differ to the combination of and interaction with different information sources as depicted in Table 1. Regarding information orientation between and within generations, two points should be highlighted. First, traditional sources such as television, radio, and the press play a major role for news audience members who are *journalistically* or *comprehensively information-oriented*, even in the two youngest age groups. Second, social media platforms play a major role across all four types, especially in the two younger age groups. It is particularly interesting to note that adolescents and young adults who are *journalistically* or *comprehensively information-oriented* combine social media with traditional sources, while people who are only *slightly* or *non-journalistically information-oriented* do not do so to the same degree. The fact that someone uses social media for information reveals little additional value about audience behavior in the first place. Rather, it is much more important which other sources people interact with and which actors they follow on social media platforms.

Depending on the type of information orientation, news audience members follow or subscribe to a wide range of (non-)journalistic actors on social media platforms, which are also considered more or less relevant for opinion formation on current affairs (see Table 2). Teenagers and young adults that match the types *comprehensively* and *non-journalistically information-oriented* largely use non-journalistic sources such as influencers and thematic groups on social media platforms which are just as relevant for opinion formation. By contrast, users that are *journalistically information-oriented* predominantly follow journalistic sources such as individual journalists and news media outlets that are also regarded as highly relevant in the processes of opinion formation across age groups. This suggests that news audiences who interact with traditional journalistic channels offline are more likely to subscribe to or follow certain journalists and journalistic outlets online as well. At the same time, for teenagers that correspond to the *slightly information-oriented* type, influencers and celebrities are the most likely source of information and important for opinion formation. Besides these interactions with new and old media institutions, personal contacts such as friends, acquaintances, and family are particularly relevant for information and opinion formation across all types of information orientation and age groups.

4.2. Types of Information Orientation Between and Within News Audience Generations (RQ2)

There are clear differences in the respective proportions of the four types of information orientation among news audiences with respect to age and education. As expected, in the oldest cohort the *journalistically information-oriented* type is most dominant (59%) whereas only 2% match with the *slightly*

Table 1. Types of information orientation and daily sources for information, in %.

Ages	Journalistically information-oriented			Non-journalistically information-oriented			Comprehensively information-oriented			Slightly information-oriented		
	14–17	18–24	40–50	14–17	18–24	40–50	14–17	18–24	40–50	14–17	18–24	40–50
Television	74	81	90	21	27	78	74	80	89	23	35	63
Radio	70	75	86	33	55	89	75	79	88	24	33	56
Newspaper	29	38	62	5	5	44	26	46	69	5	12	24
Magazine	14	13	27	4	0	11	20	24	45	3	3	6
Online newspaper	19	29	22	11	5	33	26	43	47	4	10	12
Online magazine	14	29	24	4	5	22	32	39	51	1	6	6
Online broadcast	26	28	23	5	9	33	42	44	54	7	13	15
Aggregators	32	42	37	37	41	56	52	70	58	19	22	15
Social media	71	72	47	100	100	100	94	95	77	74	69	45
Podcasts	23	22	8	35	45	22	35	46	25	13	10	5

Notes: 14- to 17-year-olds—n = 494; 18- to 24-year-olds—n = 500; 40- to 50-year-olds—n = 500.

Table 2. Sources that are followed or subscribed to on social media platforms by type of information orientation, in %.

Ages	Journalistically information-oriented			Non-journalistically information-oriented			Comprehensively information-oriented			Slightly information-oriented		
	14–17	18–24	40–50	14–17	18–24	40–50	14–17	18–24	40–50	14–17	18–24	40–50
Journalistic outlets	7	12	14	2	0	0	19	21	26	1	3	8
Certain journalists	4	4	3	2	5	22	11	10	17	1	3	4
Politicians/parties	3	5	3	0	9	11	9	14	15	1	1	1
Scientists	5	4	2	4	0	11	15	14	15	1	3	4
Influencers	21	22	3	60	55	33	60	41	15	30	27	5
Thematic groups	18	19	8	40	41	56	50	44	31	10	12	12
Stars (film, music)	20	17	6	49	50	33	58	30	15	34	27	6
Activists (e.g., Greta)	10	7	2	9	9	22	31	21	9	6	2	0
NGOs	9	5	2	2	5	0	24	23	10	1	1	0
Friends and family	46	48	31	68	64	67	75	67	56	53	52	35

Notes: 14- to 17-year-olds—n = 494; 18- to 24-year-olds—n = 500; 40- to 50-year-olds—n = 500.

information-oriented. By contrast, the largest proportion of teenagers (45%) demonstrates a low overall interest in news and the use of (non-)journalistic sources, corresponding with the slightly information-oriented type. Particularly interesting is the fact that the comprehensively information-oriented type, for which both journalistic and non-journalistic sources are important for information and opinion formation, is most strongly represented in the two young age groups. This implies that young people have not abandoned the interest in

news and the perceived importance of traditional journalism as held by their elders; they are, instead, similarly motivated to learn about the world around them. Here, young audiences make use of the endless options for news consumption in different ways, reflecting a diversity in their practice and attitudes towards information. Despite these differences between age groups, there are large differences within age groups as well, mainly related to the level of formal education. As depicted in Figure 2, more than half (52%) of the young people with

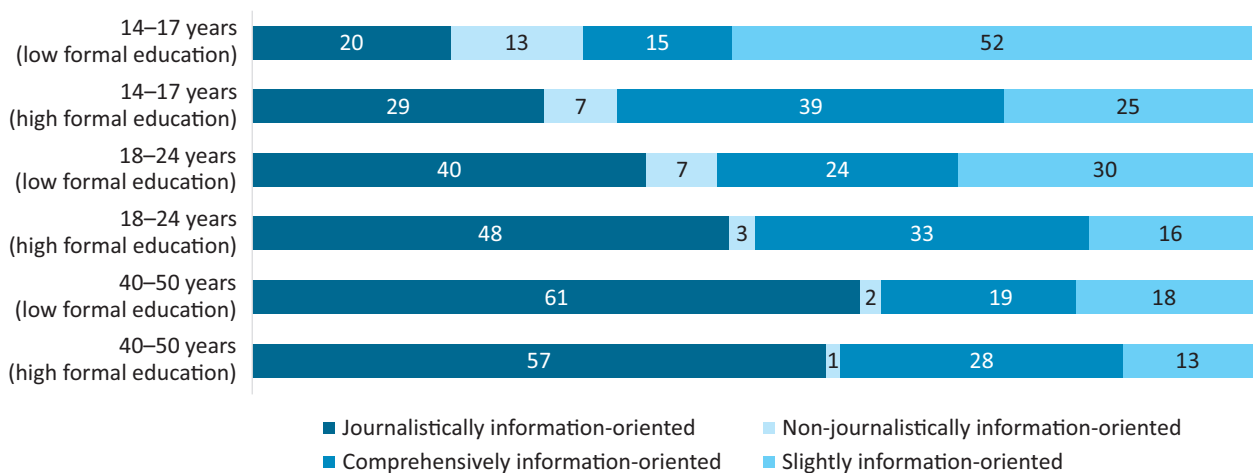


Figure 2. Distribution of types of information orientation by age group and educational level, in %. Notes: 14- to 17-year-olds—n = 494; 18- to 24-year-olds—n = 500; 40- to 50-year-olds—n = 500.

a low education level are slightly information-oriented whereas only a quarter of young people with a high level of education match this type. These differences can also be observed among young adults and adults, although the differences between educational groups are not that pronounced among the latter.

4.3. News Audiences' Patterns of Information Orientation and the Informational Level (RQ3)

The third research question asked about the relationship between news audiences' patterns of information orientation and informational level. Overall, there are considerable differences in the way individuals benefit from their news orientation patterns in terms of sociopolitical knowledge. Here, one pattern becomes clear since the proportion of those who answered the questions correctly in each case is always higher among the journalistically and comprehensively information-oriented than among the slightly and non-journalistically information-oriented types. That means the types in which journalism plays an important role both gave more correct answers than the two types in which journalism is not considered a relevant source. As depicted in Figure 3, the positive effects of higher education and age can be observed in the comparison of the four types.

To determine which aspects of information orientation influence news audiences' knowledge, we conducted a multiple linear regression with age, gender, and formal education as well as attitudes toward news, news use, and attributed relevance to opinion formation as independent variables (Table 3). We see that levels of education have a relatively large influence on the degree of objective informedness within all three age groups. This is consistent with previous findings on knowledge gaps between higher and lower education groups (Eveland & Scheufele, 2000). In comparison, the effects of age and gender are less pronounced; it is only for 14- to 17-year-olds where age plays a sig-

nificant role. However, a stepwise regression analysis that is not depicted in Table 3 shows that the influence of sociodemographic variables decreases when attitude, use, and relevance attribution are included, pointing to other factors that determine informational level. Here, we see that interest in news and the use of journalistic sources have the greatest effects on the informational level within all three age groups. Former studies showed the reciprocal relationship between news use and political knowledge (Moeller & de Vreese, 2015). Also of interest is the influence of sources considered relevant for opinion forming, which can be seen in two ways. On the one hand, the perceived relevance of journalistic sources positively influences (young) adults' informational level, while on the other hand, for teenagers, relying on non-journalistic sources for opinion formation has a negative effect on their knowledge level. This suggests that news audiences' level of interest in news about current events as well as their interactions with journalistic sources for information and opinion formation determine how much individuals know about socio-political topics. For young adults or teenagers, the use or relevance of non-journalistic sources even has a negative effect on their degree of informedness. This result underlines the role journalism plays in democratic systems and the need to strengthen that role in both journalistic practice and competence approaches. Overall, these variables explain between 28 and 34% of variance.

5. Conclusions

This study examined the extent to which generational differences in news use can be explained by overarching consumption patterns that encompass the totality of attitudes and practices with which news audiences relate to socially relevant matters in their interactions with news media institutions. With the concept of information orientation as introduced in this study we showed both the extent to which respective sub-aspects are present

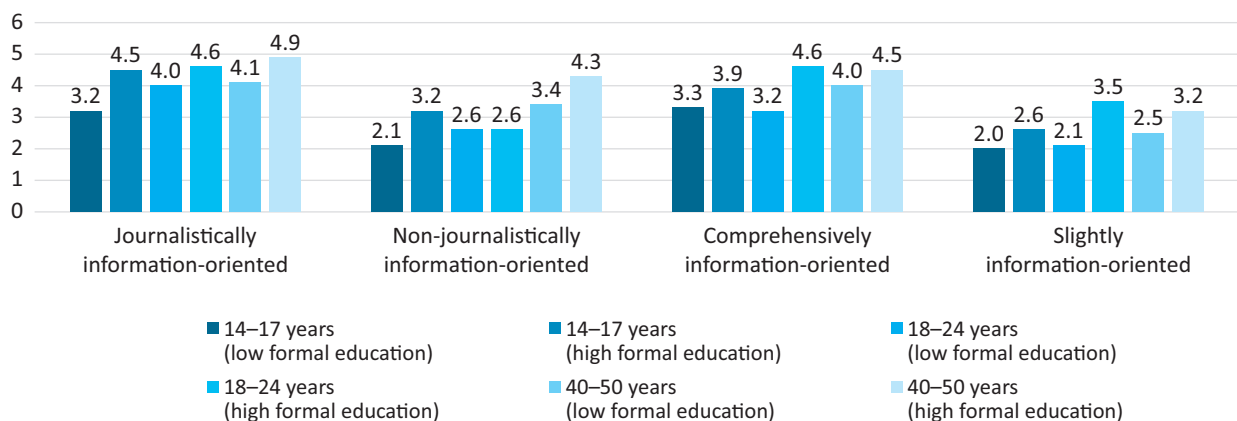


Figure 3. Socio-political knowledge by type of information orientation, age group, and education. Notes: Mean values of correct answers from six knowledge questions; 14- to 17-year-olds—n = 494; 18- to 24-year-olds—n = 500; 40- to 50-year-olds—n = 500.

Table 3. Regression analysis of the factors influencing news audiences' degrees of knowledge.

	Teenagers (14–17 years old)			Young adults (18–24 years old)			Adults (40–50 years old)		
	<i>B</i> (standardized)	<i>B</i>	<i>SE</i>	<i>B</i> (standardized)	<i>B</i>	<i>SE</i>	<i>B</i> (standardized)	<i>B</i>	<i>SE</i>
Intercept		3.435***	0.987		0.563	0.770		0.792	0.882
Sociodemographic									
Age	0.130***	0.212***	0.061	-0.017	-0.014	0.032	-0.002	-0.001	0.017
Gender	-0.045	-0.161	0.131	-0.102**	-0.333**	0.123	-0.108**	-0.335**	0.119
Education	0.227***	0.341***	0.060	0.306***	0.513***	0.067	0.214***	0.310***	0.058
Attitudes									
Interest	0.175**	0.313**	0.107	0.134*	0.252*	0.108	0.177**	0.329**	0.104
Importance	0.123*	0.203*	0.091	0.088	0.148	0.093	0.089	0.159	0.095
Use of sources									
Journalistic	0.173**	0.292**	0.094	0.157**	0.254**	0.091	0.109*	0.163*	0.080
Non-journalistic	0.006	0.009	0.076	-0.118*	-0.191*	0.078	-0.094	-0.14	0.072
Relevance for opinion formation									
Journalistic	0.054	0.091	0.087	0.119*	0.204*	0.089	0.137**	0.235**	0.085
Non-journalistic	-0.091*	-0.172*	0.085	-0.025	-0.044	0.080	-0.051	-0.074	0.069
R ²		0.351			0.321			0.295	
Adjusted R ²		0.339			0.309			0.282	

Notes: 14- to 17-year-olds—*n* = 494; 18- to 24-year-olds—*n* = 500; 40- to 50-year-olds—*n* = 514; * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001.

in adolescents, young adults, and adults, while providing insights into specific patterns of interplay between the individual aspects and their relation to sociopolitical knowledge.

Consistent with past research, the slightly information-oriented type is most dominant among teenagers (Edgerly et al., 2018; Geers, 2020). While concerns have been raised about today's youth being less interested in current affairs and turning away from traditional news channels (van Deursen & van Dijk, 2014), our study shows that across the three age groups users rely predominantly on traditional journalistic sources for information and opinion formation, especially those subgroups that are journalistically and comprehensively information-oriented. People who use traditional journalistic sources offline are also more likely to subscribe to journalists and journalistic outlets on social media platforms, regardless of age. This implies that social media should not be researched in isolation when trying to come to conclusions about information use, and in the event that they are, they would likely benefit from a more differentiated approach taking into account which actors and institutions are followed and engaged with on social media. However, growing up in this information landscape, the two younger age groups make use of a variety of (non-) journalistic sources and actors on social media platforms to stay informed; this suggests that future studies would benefit from a deeper understanding of these sources, especially in regard to

social media influencers as well as thematic groups and online fora.

By incorporating news-related attitudes alongside the use of platforms, this study reveals interesting information orientations across generations that can advance our understanding of news audiences while contributing insight into previously identified news media repertoires among users. The findings show that not all young people are necessarily less interested and engaged with news and journalism than older people. There are differences between young and old generations' consumption patterns, but these are less pronounced once we include the totality of attitudes and practices with which news audiences relate to socially relevant matters by interacting with new and old media institutions. Thus, age is less important for differences between audiences' consumption patterns than the institutions and structures that make up today's hybrid news media environment, and the structural elements that audiences turn to for their news and informational needs (Taneja et al., 2018).

These findings also show that sociodemographic characteristics, especially in regard to education, are positively related to objective informedness (Eveland & Scheufele, 2000). At first sight, these results confirm current arguments about the digital divide that exists in (online) media use related to educational attainment (van Deursen & van Dijk, 2014). However, it is notable that, despite the sociodemographic variables, orientation and attitudes toward journalism are powerful

determining factors that affect audiences' knowledge of sociopolitical issues. Which sources are considered relevant for opinion formation is influential in two ways: On the one hand, the perceived relevance of journalistic sources positively influences (young) adults' knowledgeability, while on the other, teenagers, relying as they do on non-journalistic sources for opinion formation, may find themselves left in the dark on local and global events that can affect them in all kinds of ways. These findings suggest that contradictory findings can be explained if it is not only the use of particular sources which is surveyed, but a more abstract and holistic perspective is taken. The types of information orientation integrate attitudes and user behavior.

The difficulty in reaching clear conclusions regarding the acquisition of knowledge and the learning effects of (social) media use possibly stems from the fact that, while traditional information channels such as the press and broadcast media are invariably associated with professional journalism, social media rarely are; the reasons why remain unexplored, but they may be found in an understanding that social media has a multiplicity of uses that are in no way related to news and informational needs. The majority of studies exploring news users' knowledgeability tend to neglect informational needs that are not related to politics and current affairs; while social media platforms occupy a significant informational space across all age groups, our findings reveal that it is crucial that we account for other sources that are used in combination with them to explain inconclusive findings on knowledge acquisition. The concept of types of information orientation focuses on the structural level of the source as sender and not on the source as transmission channel. In doing so, capturing the ambiguity of converging media environments can be overcome and at the same time integrated patterns of use and attitudes can be made fruitful.

Finally, there are several implications for journalistic practitioners which result from the study's insights on audiences' attitudes and interactions with (new) media sources. For instance, the finding that news audience members who use traditional journalistic channels offline are more likely to subscribe to or follow certain journalists and their outlets online reflects that an already disinterested audience has little reason to be more curious about current affairs just because it is now accessible on the internet. However, counterstrategies that specifically set out to reach young audiences could focus on producing content that is meaningful to them and is produced according to the structures of the platforms they embrace. Moreover, our findings can hopefully aid journalists in better understanding and addressing their audiences. There exist boundless opportunities for the development, in part through technological affordances, of innovative types of practice that transgress the popular myth that young people are disinterested in serious information that is relevant to their lives. There remains a tension between journalism's long-established

location firmly at the center of the democratic process and its dependence on an audience that is willing to pay for it. It is for this reason that explorations into the informational orientations of its many-faceted audiences are valuable both to the field itself and the social terrains in which it is situated.

Of course, this study is not without its limitations. First, we relied on self-reported media use and attitudes to identify types of information orientation. In particular, we did not provide a concrete definition of non-journalistic news sources such as "influencers," for example, for which there still remain unexplored and imprecise definitions. Second, we only used six knowledge-related questions to create an index of objectively measurable informedness and we do not claim any comprehensiveness or precision in our measurement of it. However, we drew on an already tested pool of questions designed to reliably quantify knowledgeability (Trepte et al., 2017) which led to a reliable knowledge indicator. Finally, this study is set against the context of the German media system and environment, one that is characterized by its public service obligations and high levels of trust among its audience (Hölig et al., 2021). In different media environments, the distribution and the expression of typified information orientations might operate differently in a news environment characterized by its public service obligations and state regulation leading to the possibility that the journalistically and comprehensively information-oriented type would possibly be less pronounced than the non-journalistically oriented type.

This study took a closer look at news audiences' information orientations in a contemporary hybrid news media environment and its implications for their knowledgeability of current affairs. While information orientation is heterogeneous both between and within different generations, these findings reveal how most young people are, indeed, motivated to engage with news content and acknowledge journalism as a reliable and vital source of information that plays an essential role in the democratic systems in which they live.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

References

- Andersen, K., Ohme, J., Bjarnøe, C., Bordacconi, M. J., Albæk, E., & de Vreese, C. (2021). *Generational gaps in political media use and civic engagement: From baby boomers to generation Z*. Routledge. <https://doi.org/10.4324/9781003111498>
- Anspach, N. M., Jennings, J. T., & Arceneaux, K. (2019). A little bit of knowledge: Facebook's news feed and self-perceptions of knowledge. *Research & Politics*, 6(1). <https://doi.org/10.1177/2053168018816189>
- Antunovic, D., Parsons, P., & Cooke, T. R. (2018). "Checking" and googling: Stages of news consumption among young adults. *Journalism*, 19(5), 632–648. <https://doi.org/10.1177/1464884916663625>
- Banjac, S., & Hanusch, F. (2020). A question of perspective: Exploring audience's view of journalistic boundaries. *New Media and Society*. Advance online publication. <https://doi.org/10.1177/1461444820963795>
- Bause, H. (2021). Politische Social-Media-Influencer als Meinungsführer? [Political social media influencers as opinion leaders?]. *Publizistik*, 66(2), 295–316. <https://doi.org/10.1007/s11616-021-00666-z>
- Boczkowski, P., Mitchelstein, E., & Matassi, M. (2018). "News comes across when I'm in a moment of leisure": Understanding the practices of incidental news consumption on social media. *New Media & Society*, 20(10), 3523–3539. <https://doi.org/10.1177/1461444817750396>
- Bode, L. (2016). Political news in the news feed: Learning politics from social media. *Mass Communication and Society*, 19, 24–48. <https://doi.org/10.1080/15205436.2015.1045149>
- Boukes, M. (2019). Social network sites and acquiring current affairs knowledge: The impact of Twitter and Facebook usage on learning about the news. *Journal of Information Technology & Politics*, 16(1), 36–51. <https://doi.org/10.1080/19331681.2019.1572568>
- Boulianne, S. (2011). Stimulating or reinforcing political interest: Using panel data to examine reciprocal effects between news media and political interest. *Political Communication*, 28(2), 147–162. <https://doi.org/10.1080/10584609.2010.540305>
- Chadwick, A. (2017). *The hybrid media system*. Oxford University Press.
- Chyi, H. I., & Lee, A. M. (2013). Online news consumption: A structural model linking preference, use, and paying intent. *Digital Journalism*, 1(2), 194–211. <https://doi.org/10.1080/21670811.2012.753299>
- de Zúñiga, H. G., Weeks, B., & Ardèvol-Abreu, A. (2017). Effects of the news-finds-me perception in communication: Social Media use implications for news seeking and learning about politics. *Journal of Computer-Mediated Communication*, 22(3), 105–123. <https://doi.org/10.1111/jcc4.12185>
- Edgerly, S. (2021). The head and heart of news avoidance: How attitudes about the news media relate to levels of news consumption. *Journalism*. Advance online publication. <https://doi.org/10.1177/14648849211012922>
- Edgerly, S., & Vraga, E. K. (2020). Deciding what's news: News-ness as an audience concept for the hybrid media environment. *Journalism & Mass Communication Quarterly*, 97(2), 416–434. <https://doi.org/10.1177/1077699020916808>
- Edgerly, S., Vraga, E. K., Bode, L., Thorson, K., & Thorson, E. (2018). New media, new relationship to participation? A closer look at youth news repertoires and political participation. *Journalism & Mass Communication Quarterly*, 95(1), 192–212. <https://doi.org/10.1177/1077699017706928>
- Eveland, W., & Scheufele, D. (2000). Connecting news media use with gaps in knowledge and participation. *Political Communication*, 17, 215–237. <https://doi.org/10.1080/105846000414250>
- Fletcher, R., & Park, S. (2017). The impact of trust in the news media on online news consumption and participation. *Digital Journalism*, 5(10), 1281–1299. <https://doi.org/10.1080/21670811.2017.1279979>
- Fraile, M., & Iyengar, S. (2014). Not all news sources are equally informative: A cross-national analysis of political knowledge in Europe. *The International Journal of Press/Politics*, 19(3), 275–294. <https://doi.org/10.1177/1940161214528993>
- Geers, S. (2020). News consumption across media platforms and content. *Public Opinion Quarterly*, 84(1), 332–354. <https://doi.org/10.1093/poq/nfaa010>
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. University of California Press.
- Hölig, S., Hasebrink, U., & Behre, J. (2021). *Reuters Institute digital news report 2021: Results for Germany* (Working Paper No. 58). Reuters Institute.
- In der Au, A.-M., Wieland, M., & Zeitler, A.-L. (2017). Zufällig gut informiert? Folgen gezielter und zufälliger Nachrichtenkontakte für politisches Wissen und subjektive Informiertheit [Coincidentally well informed? Consequences of targeted and incidental news contacts for political knowledge and subjective informedness]. *MedienJournal*, 41(2), 61–75.
- Kalogeropoulos, A. (2019). How younger generations consume news differently. In N. Newman, R. Fletcher, A. Kalogeropoulos, & R. K. Nielsen, *Digital news report 2019* (pp. 54–59). Reuters Institute. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/inline-files/DNR_2019_FINAL.pdf
- Karlsen, R., Beyer, A., & Steen-Johnsen, K. (2020). Do high-choice media environments facilitate news avoidance? A longitudinal study 1997–2016. *Journal of Broadcasting & Electronic Media*, 64(5), 794–814. <https://doi.org/10.1080/08838151.2020.1835428>
- Kümpel, A. S. (2020). Nebenbei, mobil und ohne Ziel? Eine Mehrmethodenstudie zu Nachrichtennutzung und -verständnis von jungen Erwachsenen [Incidental, mobile and without purpose? A multi-method study on news use and understanding of

- young adults]. *M&K Medien & Kommunikationswissenschaft*, 68(1/2), 11–31. <https://doi.org/10.5771/1615-634X-2020-1-2-11>
- Lee, H., & Yang, J. (2014). Political knowledge gaps among news consumers with different news media repertoires across multiple platforms. *International Journal of Communication*, 8, 597–617.
- Loosen, W. (2015). The notion of the “blurring boundaries.” *Digital Journalism*, 3(1), 68–84. <https://doi.org/10.1080/21670811.2014.928000>
- Meijer, C. I. (2016). Practicing audience-centred journalism research. In T. Witschge, C. W. Anderson, D. Domingo, & A. Hermida (Eds.), *The SAGE handbook of digital journalism* (pp. 546–561). SAGE.
- Merten, L. (2020). Block, hide or follow—Personal news curation practices on social media. *Digital Journalism*. Advance online publication. <https://doi.org/10.1080/21670811.2020.1829978>
- Moeller, J., & de Vreese, C. (2015). Spiral of political learning: The reciprocal relationship of news media use and political knowledge among adolescents. *Communication Research*, 46(8), 1078–1094. <https://doi.org/10.1177/0093650215605148>
- Newman, N., Fletcher, R., Schulz, A., Andi, S., Robertson, C. T., & Nielsen, R. K. (2021). *Digital news report 2021: 10th edition*. Reuters Institute. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf
- Peters, C., Schröder, K. C., Lehaff, J., & Vulpius, J. (2021). News as they know it: Young adults’ information repertoires in the digital media landscape. *Digital Journalism*. Advance online publication. <https://doi.org/10.1080/21670811.2021.1885986>
- Shearer, E., & Gottfried, J. (2017). News use across social media platforms 2017. *Pew Research Center*. <https://www.pewresearch.org/journalism/2017/09/07/news-use-across-social-media-platforms-2017>
- Shehata, A., & Strömbäck, J. (2021). Learning political news from social media: Network media logic and current affairs news learning in a high-choice media environment. *Communication Research*, 48(1), 125–147. <https://doi.org/10.1177/0093650217749354>
- Skovsgaard, M., & Andersen, K. (2020). Conceptualizing news avoidance: Towards a shared understanding of different causes and potential solutions. *Journalism Studies*, 21(4), 459–476. <https://doi.org/10.1080/1461670X.2019.1686410>
- Strömbäck, J., Djerf-Pierre, M., & Shehata, A. (2013). The dynamics of political interest and news media consumption: A longitudinal perspective. *International Journal of Public Opinion Research*, 25, 414–435. <https://doi.org/10.1093/ijpor/eds018>
- Sveningsson, M. (2015). “It’s only a pastime, really”: Young people’s experiences of social media as a source of news about public affairs. *Social Media+Society*, 1(2), 1–11. <https://doi.org/10.1177/2056305115604855>
- Tamboer, S. L., Kleemans, M., & Daalmans, S. (2020). “We are a neeeew generation”: Early adolescents’ views on news and news literacy. *Journalism*, 23(4), 806–822. <https://doi.org/10.1177/1464884920924527>
- Taneja, H., Wu, A. X., & Edgerly, S. (2018). Rethinking the generational gap in online news use: An infrastructural perspective. *New Media & Society*, 20(5), 1792–1812. <https://doi.org/10.1177/1461444817707348>
- Thorson, K., & Wells, C. (2016). Curated flows: A framework for mapping media exposure in the digital age. *Communication Theory*, 26(3), 309–328. <https://doi.org/10.1111/comt.12087>
- Trepte, S., Loy, L., Schmitt, J. B., & Otto, S. (2017). Hohenheimer Inventar zum Politikwissen (HIP) [Political knowledge inventory]. *Diagnostica*, 63(3), 206–218. <https://doi.org/10.1026/0012-1924/a000180>
- Tsfati, Y. (2010). Online news exposure and trust in the mainstream media: Exploring possible associations. *American Behavioral Scientist*, 54(1), 22–42. <https://doi.org/10.1177/0002764210376309>
- Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C., Matthes, J., Hopmann, D., Salgado, S., Hubé, N., Stępińska, A., Papathanassopoulos, S., Berganza, R., Legnante, G., Reinemann, C., Sheaffer, T., & Stanyer, J. (2017). Political communication in a high-choice media environment: A challenge for democracy? *Annals of the International Communication Association*, 41(1), 3–27. <https://doi.org/10.1080/23808985.2017.1288551>
- van Deursen, A. J. A. M., & van Dijk, J. A. G. M. (2014). The digital divide shifts to differences in usage. *New Media & Society*, 16(3), 507–526. <https://doi.org/10.1177/1461444813487959>
- van Deursen, A. J. A. M., van Dijk, J. A. G. M., & Peters, O. (2011). Rethinking internet skills: The contribution of gender, age, education, Internet experience, and hours online to medium- and content-related Internet skills. *Poetics*, 39(2), 125–144. <https://doi.org/10.1016/j.poetic.2011.02.001>
- van Dijk, J. A. G. M. (2006). Digital divide research, achievements and shortcomings. *Poetics*, 34, 221–235. <https://www.sciencedirect.com/science/article/pii/S0304422X06000167>
- van Rees, K., & van Eijck, K. (2003). Media repertoires of selective audiences: The impact of status, gender, and age on media use. *Poetics*, 31, 465–490.
- Vara-Miguel, A. (2020). Cross-national similarities and differences between legacy and digital-born news media audiences. *Media and Communication*, 8(2), 16–27. <https://doi.org/10.17645/mac.v8i2.2733>
- Webster, J. G. (2011). The duality of media: A structural theory of public attention. *Communication Theory*, 21(1), 43–66. <https://doi.org/10.1111/j.1468-2885.2010.01375.x>
- Wells, C., & Thorson, K. (2017). Combining big data and survey techniques to model effects of politi-

cal content flows in Facebook. *Social Science Computer Review*, 35(1), 33–52. <https://doi.org/10.1177/0894439315609528>

Yuan, E. J., & Ksiazek, T. B. (2011). The duality of structure

in China's national television market: A network analysis of audience behavior. *Journal of Broadcasting & Electronic Media*, 55(2), 180–197. <https://doi.org/10.1080/08838151.2011.570825>

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