

Exploring digital divides in older adults' news consumption

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Abstract

Media structure is rapidly steering towards digital formats and distribution. Meanwhile, many Western societies have ageing populations, where older adults are less digitally active than the population at large. This, combined with the fact that the news media are crucial in providing information and fostering engagement and cohesion, means that the news consumption of older adults deserves scholarly attention. Based on national representative surveys, this article analyses the use of traditional and digital news among people aged 66 to 85 between 2014 and 2018. The findings show that the overall reading of newspapers is decreasing among pensioners of all ages, whereas radio and television news both have rather stable audience shares. Despite the overall decline of newspaper reading, the reading of digital newspapers is becoming more common, and digital newspapers seem, to some extent, to have replaced printed newspapers. Concerning factors explaining digital news consumption among the 65+ group, general Internet habits, sex, and political interest are shown to be the most important.

Keywords: news consumption, older adults, representative survey, replacement, complementarity

Introduction

One key function of the news media is to provide people with the information they need to be free and self-governing, and news media consumption is therefore considered essential for citizens' democratic practices (Aalberg et al., 2013; Ksiazek et al., 2010; Lauf, 2001; Ostertag, 2010). News media, particularly local news, is also associated with the feeling of connectedness to one's community (Elvestad, 2009), and consumption of news creates a sense of identification with society (Skogerbø & Winsvold, 2011). Against this background, the ongoing digitalisation of democratic infrastructure means that ageing Western societies may face severe challenges; not least since large groups of older adults do not use ICTs (information and communications technologies) for their news consumption (Bergström, 2017).

On the Swedish news market, there is a long and strong tradition of newspapers and public service broadcasting. Today, they have all – to various degrees – “gone digital”.

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On the local newspaper market, editions have been cut and high-street offices have closed. Parallel to this is declining newspaper circulation, decreasing advertisement revenues, and closing regional and local newsrooms in broadcast media (see Nygren et al., 2018 for an overview). Considering older Swedish citizens, the development could, indeed, raise concerns.

Thus far, research has mainly treated the group of 65+ as homogenous, although one can assume that there are large differences in both news consumption and digital orientation within the group (Hargittai & Dobransky, 2017; Quan-Haase et al., 2018; Schreurs et al., 2017). Today's digital divide, for instance, is not primarily between pensioners and others, but between younger and older pensioners (Bergström, 2017). Consequently, in order to be better equipped to discuss older citizens' potential for democratic involvement and engagement, thorough analyses of the news consumption of *different* groups of older people are required.

Theoretical perspectives on the digital turn

When studying news consumption, and the turn from analogue to digital, one needs to consider the importance of habits as well as how the digital uptake generally takes place. Within the framework of uses and gratifications, the levels of society, media structure, and individual characteristics are all considered important (McQuail, 2010; Rosengren, 1974; Weibull, 1985; Yuan, 2011). Society provides a framework for the preconditions for media organisations and their news production. The media structure then sets concrete limits, such as content available on different platforms and channels (Becker & Schönbach, 1989; Prior, 2007).

The focus of this study, however, is the individual level, and having the point of departure in the uses and gratification framework, the audience is considered to be active and choosing among different news media in the contemporary media landscape (Katz et al., 1974). The concept of habit can be understood as one of several gratifications of media use, something to rely on to cope with an increasing number of choices (Rosenstein & Grant, 1997). News media use, in this way, contributes to the structuring of everyday life (Konig et al., 1998; Peters, 2015; Schnauber-Stockmann & Mangold, 2020).

Age, life cycle, and family formation are important explanatory factors for news consumption habits (Elvestad & Blekesaune, 2008; Lauf, 2001; McQuail, 2010). Socio-economic status – for example, education and social class – has also been shown to be strongly associated with news consumption (Dalton, 2017; Bergström et al., 2019), as has personal engagement and interest in society and politics (Prior, 2007; Mitchell et al., 2015; Strömbäck et al., 2013).

When turning to digital transformation of news habits, patterns of diffusion of digital technologies are essential (Venkatesh et al., 2012). From the perspective of the individual user, the theories of diffusion of innovations (Rogers, 2003) and the technology acceptance model (TAM) (Davis, 1989) have proven to be particularly appropriate.

Innovators and early adopters – to use the concepts of Rogers (2003) – are generally young, well-educated, and belonging to groups of higher social status in the community. With regard to the Internet, previous research has shown that the diffusion of different technologies has been strongly related to socioeconomic factors (e.g., Bergström, 2015). Especially in the late 1990s, family class had a significant impact on the degree

to which the Internet was adopted. Formal education also proved to be important, not least in the mid-2000s. After age, education was the second most important factor explaining Internet use, both in the population at large (Bergström, 2015) and in groups of older adults (Bergström, 2017; Friemel, 2016). Furthermore, highly educated senior Internet users were more likely to be involved in “knowledge enhancing activities of information and news” (van Deursen & Helsper, 2015: 183). Among older adults, Internet use was found to be a male-dominated activity (van Deursen & Helsper, 2015), but when controlling for age, education, and income, the impact of sex became less significant (Friemel, 2016).

Older adults' online news habits are part of a larger context of use, including several areas and platforms. As already mentioned, older adults are slower to adopt digital media technology than younger ones. Early research pointed out an age gap in access to technology – a gap growing with age. From this so-called first-level inequality, focus shifted to skills and use, also providing evidence for the age gap (van Deursen & Helsper, 2015; van Deursen & van Dijk, 2019). Over time, age is the single most important factor explaining Internet use (Bergström, 2015), also for uses such as e-mail, information search, online banking, use of social network sites, and use of news (Bergström, 2017). A presumptive shift to digital news use among groups of older adults is therefore assumed to appear late in the digitalisation process and to be slower than in the average public.

One central question I pose in this article is how use of digital news media interacts with use of traditional news media. The discussion on complementarity or replacement effects has been going on for quite some time now (Lasswell, 1948), and scholars do not entirely agree on whether complementarity or replacement is the rule (Dutta-Bergman, 2004; Kang & Atkin, 1999).

The complementarity perspective emphasises that new media are incorporated in people's everyday media habits in a complementary way. One might, for instance, use several platforms to be able to consume news in different situations, or complement traditional sources with new ones to access more content of interest. Regardless of how – and what – the complementarity perspective argues that use of new media is added to the use of traditional media (Chan & Leung, 2005).

From the replacement perspective, on the other hand, people are expected to decrease their use of a traditional medium, or even abandon it, when a new one is available (Dimmick, 2003). It is argued that existing habits of using, for instance, news media are transferred to new media or platforms (Chan & Leung, 2005).

The relationship between use of traditionally and digitally distributed news should not be considered in terms of a dichotomous distinction between complementary and replacement features – the relationship is fluid and dynamic (Yuan, 2011). The audience may abandon a traditional medium and replace it if the new medium is considered to be more functional – or in other respects more desirable – than the old medium (Carey & Elton, 2010; De Waal & Schoenbach, 2010; Dimmick et al., 2004). In this way, a new medium can be perceived as more suitable in one situation, whereas an old medium is perceived to be better in another situation; old and new media are finding niches in specific contexts (Dimmick, 2003).

With regard to digital and traditional news distribution, the findings on complementarity or replacement are diverse. It seems that the contribution of online platforms to traditional platforms has been rather modest, according to users' self-reports (Wadbring

& Bergström, 2017). Earlier research has shown, with regard to newspapers, that online and print audiences to some extent prefer different genres, and that the distribution forms are perceived differently when status is measured (Skogerbø & Winsvold, 2011). In a study from 2010, the audience's perception also differed on dimensions such as credibility and usefulness, favouring traditional media compared with online equivalents (Chyi et al., 2010). Studies that are more recent have found differences related to media type, in that news *readers* have been more attracted in following their newspapers online, whereas news *watchers* seem to prefer traditional broadcasting (Mitchell et al., 2016). More generally, newspapers seem to have a stronger position than broadcast news in the digital news media landscape (Newman et al., 2019).

There is also research on the digital shift in different groups. Edgerly (2015) found, for instance, that younger and male respondents are more eager to use online news, whereas other groups of users tend to turn to television and print news. The same tendencies were found in a study of newspaper reading: the younger generations abandon print newspapers without necessarily turning to their digital equivalents (Wadbring & Bergström, 2017). Compared to newspapers, television news has a more stable audience for their traditional outlet. Overall, especially younger people tend to replace traditional news outlets with the Internet (Papathanassopoulos et al., 2013).

Media routines are well-developed and more markedly displayed among older adults (Konig et al., 1998). Socialised in a broadcast age, and with established habits and routines, members of this group most likely bring traditional media practices to the digital age (Taneja et al., 2018). An in-depth interview study of older adults show that newspapers are consumed in both print and digital formats, and that some use both formats depending on context and purpose (Quan-Haase et al., 2016).

The overarching aim of this study is to determine how older adults orient themselves in the contemporary news media landscape and how habits of news consumption are now evolving. As outlined in the introduction, studies of older adults' digital turn are rare, especially studies of different groups of older adults and focusing on news. Based on the literature review, one could assume that in the older population, the use of digital news is comparably low, and any transformation from traditional to digital outlets would be rather slow. The following research questions guides the analysis:

RQ1. How has the frequent use of traditional and digital news media developed in groups of 65+ persons in the 2010s?

RQ2. Is use of digital news replacing use of traditional outlets, or do they complement reading, watching, and viewing among older adults?

RQ3. What factors contributes to explain digital news media use among 65+ persons 2014–2018?

Method

To investigate whether there has been a digital turn in older adults' news consumption practices, a national, representative survey was used. The SOM Institute at the University of Gothenburg conducts annual population surveys on society, opinions, and media. From 1986, every year, a random sample of the Swedish population aged 16–85

years has received the survey. During the period 1986–2018, the average response rate is 63 per cent. This study uses data from the 2014–2018 surveys, mainly because fully comparable dependent and independent variables are available for these years. 20,400 persons were included in the sample each year, and the net response rate varied between 51 per cent (2015, 2016) and 55 per cent (2017). Analyses of respondents show that they are largely representative for the Swedish population in terms of sex, social class, and educational level, although with some overrepresentation of older, and underrepresentation of younger, people (Tippel & Weissenbilder, 2019).¹

Categories were constructed based on single-item questions about use of different news media and channels. Use of national and regional news in public service television were merged into a television variable, and the same was done for radio news. Newspaper reading was constructed from a question where the respondents were asked to type the title of the morning papers they read; the questionnaire allowed for two titles. For the digital news outlets, public service television and radio news were single-item questions, as was news in social media. Online newspapers was constructed from three variables: two national titles and “local newspaper”. Altogether, seven variables are used as dependent variables: morning papers in print and online, public service radio news in broadcast and online, public service television news in broadcast and online,² and news in social media. All variables were measured on a six-point scale: never (1); more seldom (2); 1–2 days a week (3); 3–4 days a week (4); 5–6 days a week (5); and daily (6). The term frequent is used to describe 5–6 days a week or daily – the measure chosen for the analysis. These rather high requirements for frequent use mirror the everyday routines of news consumption practices and capture habits in everyday life.

The independent variables used are age, sex, level of education, political interest, and general Internet habits. Age (year of birth) and sex were integrated with the dataset from public registers. Education was measured in eight fixed categories, then divided into four groups: low, middle-low, middle-high, and high educational levels. Political interest was measured on a four-point scale: very interested, fairly interested, not very interested, and not at all interested. Internet use was measured on a seven-point scale: never; once during the last 12 months; once during the last 6 months; once a month; once a week; several times a week; and daily.

Findings

During the studied period 2014–2018, the number of Internet users increased among the 65+ group in Sweden. In 2014, 69 per cent of the 66–70-year-olds were frequent users (daily or several times a week), compared to 81 per cent in 2018. Among the 81–85-year-olds, the figures are 25 per cent and 44 per cent, respectively. The group of potential users of digital news has thus grown substantially among both younger and older pensioners between 2014 and 2018. Assumedly, the growth is a consequence of both digital users growing older and older adults going digital.

To answer the first research question – How has the frequent use of traditional and digital news media developed in groups of 65+ persons in the 2010s? – a description of frequent use of different news outlets is presented. Different age groups of 65+ people are compared, and the measure of association is tested with Kendall's Tau-c. The news media studied were morning papers, radio news, and television news. Both traditional

and digital channels are analysed, and to further deepen the understanding of digital news consumption among older adults – and widen the scope of digital news somewhat – news use via social network sites is included.

While there are significant differences within the 65+ group, the differences are generally small; the persons above 65 years of age are *all* to a large extent frequent readers of printed morning papers (see Table 1). This is rather expected from what is known from previous research (Wadbring & Bergström, 2017). More noteworthy is the fact that the share of frequent readers of printed morning papers is also decreasing in this part of the Swedish population. The decrease is particularly evident among the 66–70-year-olds, but the same pattern is found over all the analysed age groups: over the five studied years, the share of frequent readers of printed morning papers has decreased 14 to 19 percentage points in the different age groups of older adults. In the average Swedish population, ages 16–85, frequent reading of printed morning papers has declined from 49 per cent in 2014 to 30 per cent in 2018.

Morning papers in their digital form do not attract older adults to the same extent as their printed equivalents. In 2018, about half as many older adults read online morning papers compared with print. People aged 66–75 show the same patterns of use as the average population, whereas the 76–85-year-olds as a group have fewer frequent online users. There is, however, an increase of frequent use of online morning papers in all the analysed age groups between 2014 and 2018. Age differences in the older population are similar for online newspapers and printed, and the gaps are significantly increasing over time. From the bivariate analysis, it is evident that digital morning papers are attracting older adults in society and that there is a positive development over time. Assumedly, digitally published newspapers to some extent compensate for the decline in reading in print also in the older age group. This will be further explored below.

Radio news in broadcast is frequently consumed by between 56 and 66 per cent of the 65+ group. Radio news via the web reaches between 5 and 13 per cent of the pensioners of different ages on a frequent basis. The figures for frequent radio news consumption are much more stable than for morning papers over time, although there is an increase for web use between 2014 and 2018. The overall shares of frequent users – both broadcast and web – are similar in all groups of older adults, and the patterns of decline and increase noted for printed and digital morning papers, respectively, are not as clearly visible for radio news.

Broadcast television news is more frequently used than broadcast radio news in the older population. Between 77 and 90 per cent of the 65+ group are frequent television news watchers. Just as for radio, no significant differences are found between the age groups in the analysis. The figures for television news on the web are slightly higher than for digital radio news: between 9 and 23 per cent in the different groups of older adults. The share of users of digitally distributed television news has almost doubled between 2014 and 2018 in all age groups among those aged 65+.

In the 2010s, news distribution on social network sites has become increasingly common. This distribution form is not fully comparable to the previously presented news outlets, since sharing in social media includes all of them and many more, and the control of distribution is in the hands of users and algorithms. In an analysis of digital transformation in the older news audience, it is, however, interesting to see how people orient themselves to news in social media in comparison with news sites from established distributors.

Table 1. News use of different sources, 2014–2018 (per cent, Kendall's Tau-c)

	2014	2015	2016	2017	2018
Morning paper, print					
Average (16–85 yrs)	49	43	39	33	30
66–70 yrs	70	66	60	53	52
71–75 yrs	74	67	68	62	60
76–80 yrs	78	72	68	68	64
81–85 yrs	73	72	67	67	58
Kendall's Tau-c	0.05	0.05*	0.07***	0.12***	0.07***
Morning paper, web					
Average (16–85 yrs)	18	20	23	23	24
66–70 yrs	16	18	23	23	27
71–75 yrs	10	16	19	20	24
76–80 yrs	12	11	12	14	16
81–85 yrs	8	12	13	13	14
Kendall's Tau-c	-0.06***	-0.06***	-0.10***	-0.09***	-0.11***
Radio news, broadcast					
Average (16–85 yrs)	41	44	43	42	42
66–70 yrs	60	63	63	62	63
71–75 yrs	60	65	65	66	64
76–80 yrs	64	65	64	62	66
81–85 yrs	58	56	66	60	62
Kendall's Tau-c	0.00	-0.02	0.02	-0.01	0.01
Radio news, web					
Average (16–85 yrs)	6	7	8	9	11
66–70 yrs	6	7	8	11	13
71–75 yrs	5	9	9	11	12
76–80 yrs	7	6	8	10	9
81–85 yrs	7	8	7	9	11
Kendall's Tau-c	0.01	0.00	-0.01	-0.01	-0.03*
Television news, broadcast					
Average (16–85 yrs)	53	52	52	48	52
66–70 yrs	83	82	79	90	77
71–75 yrs	87	88	86	85	85
76–80 yrs	90	86	85	87	86
81–85 yrs	84	84	85	88	88
Kendall's Tau-c	0.04*	0.02	0.06***	0.07***	0.09***
Television news, web					
Average (16–85 yrs)	9	11	12	15	18
66–70 yrs	10	13	16	19	22
71–75 yrs	9	14	14	20	23
76–80 yrs	12	10	13	19	19
81–85 yrs	10	14	13	16	21
Kendall's Tau-c	0.01	-0.00	-0.03*	-0.01	-0.02
News on social network sites					
Average (16–85 yrs)	22	25	32	33	32
66–70 yrs	6	9	15	15	16
71–75 yrs	4	5	9	12	12
76–80 yrs	1	4	6	6	7
81–85 yrs	1	1	2	3	4
Kendall's Tau-c	-0.04***	-0.06***	-0.10***	-0.09***	-0.10***

Comments: *** $p < .001$, ** $p < .01$, * $p < .05$. For measure of association in the 66–85 group, Kendall's Tau-c is used. The figures show the percentages using a news source at least 5 days a week.

When analysing use of news via social network sites, it is evident that this has not yet attracted large groups in the older population. 65+ people are to a much lesser extent frequent users than the average population. Here, we find significant differences between the younger and older pensioners, in that news use on social network sites is four times as common among the 66–70-year-olds compared with the 81–85-year-olds (16% and 4%, respectively, in 2018). There is an increase of frequent users in all analysed groups of older adults between 2014 and 2018, and the age differences between younger and older pensioners also increase significantly over time.

The findings clearly show that digital news outlets attract a modest share of older adults, just as suggested in previous findings (Edgerly, 2015; Papathanassopoulos et al., 2013; Wadbring & Bergström, 2017). However, over the period 2014–2018, use of digital news has increased in all 65+ age groups analysed, and the growth is particularly significant among the youngest of the older groups. It is also evident that digital newspapers attract larger groups of older users than digital broadcast news do, following patterns reported previously (Mitchell et al., 2016; Newman et al., 2019).

To investigate the second research question – Is use of digital news replacing use of traditional outlets, or do they complement reading, watching, and viewing among older adults? – use of digital newspapers and online broadcast news is analysed in relation to traditional news media habits. The *n*-values for non-users and sporadic users are too low for annual analysis, which is why all measure points in the study were merged. The impression from the bivariate analysis presented above, that online use might contribute to the overall use of traditional news media, is partly confirmed (see Table 2).

Table 2. *Use of web version among frequent, sporadic, and non-users of print and broadcast news, 2014–2018 (per cent)*

	66–70 yrs	71–75 yrs	76–80 yrs	81–85 yrs
Morning papers in print				
frequent users	19 (2,868)	17 (2,904)	13 (1,877)	13 (1,096)
sporadic users	23 (597)	18 (474)	12 (243)	11 (151)
non-users	28 (1,324)	24 (1,051)	15 (607)	10 (410)
Radio broadcast news				
frequent users	13 (2,991)	14 (2,834)	11 (1,750)	12 (1,007)
sporadic users	3 (1,044)	3 (794)	2 (430)	4 (246)
non-users	3 (737)	2 (777)	4 (541)	2 (404)
Television broadcast news				
frequent users	18 (3,827)	18 (3,788)	16 (2,357)	16 (1,425)
sporadic users	10 (641)	7 (349)	9 (148)	10 (63)
non-users	10 (321)	8 (270)	9 (222)	9 (169)

Comments: *n* in parentheses. The figures show the share of frequent use (at least 5 days a week) of digital newspapers, digital radio, and online television news among frequent users (at least 5 days a week), sporadic users (1–4 days a week), and non-users of printed morning papers, broadcast radio, and broadcast television news.

The use of online morning papers is relatively widespread in all age groups, regardless of print reading habits. Interesting, though, is that among older adults in the age groups 66–70 and 71–75, online reading is more common among non-readers of print (28% and 24%, respectively) than among frequent print readers (19% and 17%, respectively). In the two 76+ groups, no such differences related to print reading habits was noted. This indicates complementarity among the latter, whereas the younger groups between 66 and 75 year old lean towards replacement behaviour.

For broadcast news, the opposite pattern occurs. The use of digital radio and television news is more common in groups of frequent broadcast users, and the pattern persists – and even intensifies – with increasing age. It seems that online outlets are not a common option for older adults not using broadcast radio or television news – they are only a relatively small complement to broadcast. This is particularly evident for radio news, whereas online television news attracts a somewhat larger share of sporadic and non-users of the traditional outlet.

A small digital shift – although increasing over the years in the mid-2010s – takes us to the next research question: What factors contribute to explain digital news media use among 65+ persons 2014–2018? An ordinary least square (OLS) regression analysis of digital news use was conducted, where age is tested under control for sex, formal education, political interest, use of traditional news, and Internet habits.

Use of digital morning papers is positively associated with being male and with general Internet habits (see Table 3). Education and political interest significantly contribute to the understanding of online newspaper reading. All these factors have increased in explanatory power over time. Reading printed newspapers has a weak but significant negative impact on online reading, whereas television – and to some extent radio news habits – correlate positively. The negative impact of printed newspapers on online habits strengthens the previously presented shift towards digital newspapers as an act of replacement in different groups of older adults.

Use of online radio news correlates significantly with sex and political interest. There is an overweight of male listeners. General Internet habits correlate with online radio news, but not as strongly as with online newspapers. Radio broadcast habits, on the other hand, has become a stronger explanatory factor to online radio news over time. Just as for online newspapers, reading in print has a weak negative impact on online radio news habits.

Use of online television news is best understood by general Internet habits – a correlation that increases in strength over time – and political interest. Sex matters, and just as for online radio news, there is a male bias among the users. Broadcast television draws some of its audience online, whereas printed newspapers has the opposite effect on television news on the web. Much of the explanatory model for online television news resembles that of online radio news.

Turning to news in social media, somewhat different patterns occur. Internet habits is still a main explanatory factor, and political interest has some explanatory power also in this context. But opposite to the other online news habits analysed, age is of significant importance for news use in social media. The younger the user, the more likely a frequent habit of use. Sex has a small effect, but while the other online sources have a male-biased audience, social media draw more female news users. News in social media follow the habits of a more general use of such conversation networks, which, not surprisingly, points to the impact of a larger online context when exploring online news.

Table 3. Regression analysis, digital news use, 2014–2018 (OLS, beta coefficients)

	2014	2015	2016	2017	2018
Morning paper, web					
age 66–85	-0.006	-0.005	-0.005	-0.013*	-0.018***
sex	0.188**	0.053	0.278***	0.214***	0.204**
education	0.101**	0.098**	0.113***	0.197***	0.187***
political interest	0.107*	0.185***	0.186***	0.193***	0.217***
newspaper reading	-0.081***	-0.059***	-0.085***	-0.057***	-0.029**
radio news	0.051**	0.051**	0.047**	0.055***	0.076***
television news	0.018	0.014	0.062**	0.049*	0.064**
Internet habits	0.185***	0.197***	0.236***	0.207***	0.245***
R^2	0.14	0.14	0.18	0.16	0.19
Radio news, web					
age 66–85	-0.007	0.003	-0.001	0.006	-0.004
sex	0.167**	0.076	0.132**	0.011	0.224***
education	0.075*	0.018	0.082***	0.084***	0.086***
political interest	0.122**	0.161***	0.129***	0.154***	0.189***
newspaper reading	-0.078***	-0.034**	-0.065***	-0.049***	-0.064***
radio news	0.014	0.100***	0.134***	0.131***	0.169***
television news	0.055*	0.005	-0.011	0.044*	0.023
Internet habits	0.099***	0.070***	0.079***	0.115	0.120***
R^2	0.06	0.07	0.10	0.11	0.13
Television news, web					
age 66–85	-0.007	0.012	0.003	0.014*	0.014*
sex	0.167*	0.057	0.163**	0.181***	0.168**
education	0.075*	0.028	0.121***	0.113***	0.090**
political interest	0.122**	0.172***	0.089*	0.174***	0.212***
newspaper reading	-0.078***	-0.063***	-0.108***	-0.094***	-0.109***
radio news	0.014	0.027	0.056***	0.006	0.034*
television news	0.055*	0.073**	0.085***	0.170***	0.130***
Internet habits	0.099***	0.134***	0.137***	0.194***	0.225***
R^2	0.06	0.07	0.09	0.12	0.13
News in social media					
age 66–85	-0.016***	-0.020***	-0.028***	-0.036***	-0.371***
sex	-0.083	-0.158***	-0.131*	-0.257***	-0.038***
education	0.054*	0.055*	0.087***	0.024	0.070***
political interest	0.160***	0.136***	0.154***	0.146***	0.170**
newspaper reading	-0.043***	-0.039***	-0.080***	-0.034**	-0.046***
radio news	0.009	0.020	0.021	0.019	0.030*
television news	-0.011	0.021	0.010	0.042*	0.049*
Internet habits	0.073***	0.094	0.146***	–	0.154***
R^2	0.09	0.10	0.13	0.12	0.13
n	2,004	2,474	2,914	3,136	3,211

Comments: *** $p < .001$, ** $p < .01$, * $p < .05$.

The explanatory power of Internet habits becomes stronger for all studied news outlets over time. Online news becomes more and more integrated in older adults' everyday life on the Internet. The impact of political interest increases, but more for online newspapers and online television news than for online radio news and news in social media. Broadcast news tend to correlate relatively strongly with its respective online outcome over time, meaning that the senior radio and television news audience becomes more likely to add the online version. For online newspapers, the situation tends to be the opposite: print readers avoid digital newspapers – the choice tends to be either-or.

Conclusions and discussion

Based on a national, representative survey, this study has shed light on news media use among older adults in the Swedish population. Morning paper reading is declining among older Swedes, whereas the broadcast news audience, on the other hand, is stable in different age groups of older adults in the 2010s, both for radio and television. Digital news from established news media reach smaller groups than their traditional equivalents, and news via social media has rather small audience shares in different 65+ groups. Altogether, however, digital news media is growing over time among older adults of various ages – this is particularly evident for online morning papers.

Changes in news consumption practices are not only driven by a changing media landscape, but also by societal and lifestyle changes (Ogan, 2009). Availability alone is not enough for turning the older part of the population digital, which is evident also with regard to news consumption. Internet use matters, and the uptake of online news in the older population follows well-known patterns of Internet diffusion (Bergström, 2015; Friemel, 2016; van Deursen & Helsper, 2015). Patterns of appropriation of different areas of use (Bergström, 2017) clearly indicate that online news is embedded in everyday habits in the online context.

Although older adults often belong to the late majority – or laggards (Rogers, 2003) – when it comes to Internet adoption, the presented study clearly shows that there are large differences within the group, not least with regard to age. As already pointed out in the introduction, researching older adults necessarily requires age diversification. But the findings have clearly shown that factors other than age demonstrably matter for the uptake of digital news in different forms and from different sources – sex, political interest, and general Internet habits being most significant. Altogether, it is of great importance to emphasise the heterogeneity within the group of older adults as a whole when trying to understand their news habits and how they develop and change (Hargittai & Dobransky, 2017; Quan-Haase et al., 2018; Schreurs et al., 2017).

The role of the web in relation to traditional formats obviously differs for different news media and in different age groups. Although an ongoing switch of platforms can be traced for newspapers – that older adults to some extent replace the traditional with the digital (Chan & Leung, 2005; Dimmick, 2003) – online broadcast news rather function as complementarity (Dutta-Bergman, 2004; Flavián & Gurrea, 2009). Online news consumption will most likely continue to grow with the overall digitalisation among older adults and thereby keep the news consumption level intact – one can discuss whether the findings reflect a digitalised older population, or a digitalised population growing

old. Given that the empirical findings show growth of news use online among both the youngest and the oldest groups of older adults, it is likely that both forces drive the development.

The newsroom cutbacks and shift to digital distribution per se does not seem to diminish news consumption among older adults. From a societal perspective, people of different ages in the older population are still news-consuming citizens. There are no signs of older adults being left out or voluntarily stepping away from frequent news use. The concerns raised in the introduction about news media cutbacks and the process of digitalisation reinforcing news media habits negatively in the older population – and in turn harming identification with society and social inclusion (Skogerbø & Winsvold, 2011), connectedness (Elvestad, 2009), or the opportunity to practice democracy (Aalberg et al., 2013; Ksiazek et al., 2010; Lauf, 2001; Ostertag, 2010) – are *not* met by the empirical findings of this study.

Limitations

The results of this study cannot indicate whether a shift from traditional to online news has had qualitative implications on older adults' local engagement or on social cohesion. It would be of significant interest to the research field to study more closely the role of different news media and sources in older adults' everyday lives. Following up on that, qualitatively conducted studies could also capture the role of platform for interpretation of news, and how different distribution modes relate to societal engagement, connectedness, and social identification. Although digital news evidently becomes part of older adults' daily routines, it is still an open question how different sources fit in to various routines and what this means to the user.

Limited to established news media in traditional and digital formats, this study did not include alternative sources like local Facebook groups and non-journalistic news sites. Given the results presented here – and given the relatively slow and narrow uptake of digital applications and online news in older age groups (Bergström, 2017; Friemel, 2016; van Deursen & Helsper, 2015) – it is not likely that we would find large shares of older adults frequently using these kind of news sources. Future research of older adults' news consumption could preferably include news deriving from non-established news providers.

This study is based on cross-sectional data, and can only show patterns of news habits on an aggregate level. To reveal individual repertoires, and how these develop in different groups of older adults, panel data is required. In the 2010s, it is evident that older adults turn to digital news to some extent. It is also evident that their digital turn comes later than among younger people, for news as for many other areas (Bergström, 2017). Patterns are repeating themselves, and it will continuously be of great importance to monitor older adults' digital behaviour to ensure they will be able to live their rights in society.

Notes

1. For more information about methodology, see <https://www.gu.se/en/som-institute/the-som-surveys/metod>
2. Radio online news and television online news include both streamed audio and video and published text.

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