Social inequalities in News Media Avoidance, 1986-2023. An Age-Period-Cohort Analysis

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Introduction

Despite the unprecedented accessibility of news available in our current high-choice media environment, a growing number of individuals are tuning out from news media or actively avoiding them (Blekesaune et al., 2012; Newman et al., 2023). These developments are somewhat troubling since news media consumption is positively related to behaviour generally thought to contribute to democratic self-governance and socially integrated communities (Strömbäck, 2005; Usher, 2021). Taking part of news media contributes to greater knowledge about political issues (Damstra et al., 2023), public engagement such as civic and political participation (Edgerly et al., 2018; Ksiazek et al., 2010) as well as electoral turnout (Prior, 2007). These developments have attracted scholarly attention in recent decades — assembled under the academic umbrella of news avoidance research (Skovsgaard & Andersen, 2020). Perhaps most concerning is the findings that the high-choice media environment might not only contribute to a greater number of news avoiders but also that the inequalities in news consumption will increase (Van Aelst et al., 2017). In previous research, two overarching trends are thought to contribute to this development.

The first contributing factor is the historical restructuring of our media environments from low- to high-choice environments (Prior, 2007; Strömbäck et al., 2013). This research argues that the increase in the media supply forces people to become more selective in their media choices, the results of which is that those interested in news and politics continue to consume news while the uninterested increasingly tune out in favour of content more aligned with their tastes (Prior, 2007; Strömbäck et al., 2013). In essence, this research tradition highlights the period effects in that our news media consumption and avoidance is impacted by the historical information environment we find ourselves in.

The second relates to age-based gaps in news consumption where younger individuals tend to consume less traditional media, relying instead to a greater degree on online media to get their news, with social media playing a prominent role in their news diets (Holt et al., 2013; Newman et al., 2023). These age gaps may on the one hand be explained by life-course effects, where younger people have yet to accumulate the resources and interests — e.g., education, social responsibilities, income — that are conductive to news consumption. Resources that they will acquire as they continue through their life trajectories (Quintelier, 2007). Other scholars have theorised that we are also dealing with greater generational changes rather than simply life-course effects. In this line of thought, scholars point to the fact that by growing up in post-industrial societies surrounded by new social and digital media technologies, younger birth cohorts have developed distinct values and habits compared to previous cohorts, leading to generational changes on the view of citizenship, political participation and news

consumption (Bennett, 2008; Edgerly et al., 2018; Thorson, 2015). In short, apart from the historical changes in the surrounding information environment, scholars have also identified both age and cohort effects contributing to low news media consumption.

What all these research strains essentially deal with is the interconnected and parallel over-time processes of socio-technological change in media systems and among audiences in post-industrial Western societies. Still, there are currently no studies simultaneously assessing these effects and, as a result, the relative importance of the age, period and cohort factors are unknown. Is the age gap in news avoidance mainly due to life-course effects — implying that we might expect youths to eventually come into the news fold — or are there greater generational shifts in news habits? Or is the main culprit the high-choice media environment, with some scholars arguing that "people have not necessarily changed; they have merely changed the channel" (Prior, 2007, p. 19). Untangling these effects are thus important for our understanding of news avoidance.

Lastly, while previous research has shown that less-affluent groups tend to be less engaged with news and that we are witnessing growing inequalities in news use (Bergström et al., 2019; Karlsen et al., 2020; Palmer & Toff, 2020; Toff et al., 2023; Van Aelst et al., 2017) there is a lack of a systematic investigation into whether socioeconomic status increase or decrease over the life-cycle, over time and across generations. This study addresses these limitations by using repeated cross-sectional data spanning nearly 40 years of media use in Sweden from the nationally representative society, opinion & media (SOM) institute while utilizing age-period-cohort analyses.

Theoretical review: news (media) avoidance

While research on news avoidance has garnered increasing scholarly and public interest in recent decades, the concept has historically encompassed a variety of definitions and operationalizations which have resulted in ambiguous findings on the scope, causes and potential remedies of news avoidance (Skovsgaard & Andersen, 2020). Recent efforts in the growing (sub)-field have tried to remedy this ambiguity by proposing a shared understanding of the concept (Skovsgaard & Andersen, 2020), and while some conceptual disagreements persist (cf., Palmer et al., 2023), on a general level news avoidance can be described as a multidimensional phenomenon consisting of both low news consumption as well as intentional news avoidance practices and intentions (Andersen et al., 2024).

The first dimension of news avoidance — that of low news use — can be both occasional and periodical as well as more habitual. However, given the concerns surrounding growing gaps in news consumption between groups (Van Aelst et al., 2017), most previous research on this dimension has focused on the characteristics of the societal groups who habitually seldom or never consume news (Edgerly, 2021; Ksiazek et al., 2010; Strömbäck et al., 2013; Trilling & Schoenbach, 2013). This perspective is therefore usually referred to as consistent news avoidance (Palmer et al., 2023; Skovsgaard & Andersen, 2022). Consequently, this perspective tends to focus on outcomes of news avoidance — i.e., low news use (see Skovsgaard & Andersen, 2020, for review).

The second dimension focuses more on the practice of news avoidance, defining it as individuals' deliberate actions or strategies to refrain from news (Park, 2019; Toff & Kalogeropoulos, 2020; Villi et al., 2022; Ytre-Arne & Moe, 2021). This "intentional" (Skovsgaard & Andersen, 2020) view of news avoidance usually does not focus on people's levels of news consumption but rather relies on self-reported measures of intentional news avoidance practices. While both dimensions of news avoidance can provide important insights into news consumption and avoidance in the high-choice media environment, this article will focus more on the first dimension — news avoidance as consistent low news use. This is because we consider habitual estrangement from the news is arguably the most concerning from a normative standpoint (Palmer et al., 2023). Especially if this estrangement from news is overrepresented among certain groups. As such the article follows Skovsgaard and Andersen (2020, p. 463) by defining news avoidance as "*low news consumption over a continuous period of time*".

Another source of conceptual ambiguity arises from previous research seldom specifying the specific types of news that individuals are avoiding. Studies tend to show larger gaps in consumption of traditional news media compared to more general measures of online or social media use (Gorski & Thomas, 2021; Karlsen et al., 2020; Strömbäck et al., 2013), leading some researchers to suggest that the latter may minimize gaps in news consumption (Boulianne, 2011; Holt et al., 2013). However, current research indicates that relying on these websites for news does not adequately replace using traditional media to stay informed about current events and politics (Amsalem & Zoizner, 2023; Shehata & Strömbäck, 2021). Therefore, researchers need to be precise regarding which types of news avoidance their investigations focus on.

As for this study, we will focus on *news media avoidance* as we have transitioned from a low- to a high-choice media environment. News media in this study refers to what is commonly understood as mainstream media which, in turn, can be described as the societal system created by specific legacy media organisations that share institutional characteristics resulting in a large overlap of practices, norms and output (Altheide & Snow, 1979; Cook, 2005; Esser & Strömbäck, 2014). Two main reasons for this choice can be highlighted. First, most scholars agree that consumption of legacy media works as a leveller of political knowledge gaps among citizens and contributes to a more informed electorate with less partisan-selective exposure (Dahlgren, 2019; Fraile & Iyengar, 2014; Shehata & Strömbäck, 2021). On a broader scale, it has also been argued that news media are important for its integrating and stabilizing function in society (Anderson, 1991; Blekesaune et al., 2012; Syvertsen et al., 2014; Usher, 2021). Hence, habitual estrangement from these outlets should be of certain concern on both an individual and societal level, especially if we are witnessing growing gaps between groups (Van Aelst et al., 2017). Second, the choice to focus on news media comes from this study's longitudinal design. Given that this study investigates developments spanning over three decades, a problem arises since individuals may perceive news in different ways over time (Daniller et al., 2017; Edgerly & Vraga, 2020; Strömbäck et al., 2020), with especially younger generations having a much broader notion of what can be considered news (Edgerly et al., 2018; Newman et al., 2022, pp. 44-45). However, while what is

perceived as *news* is more fluent in today's hybrid high-choice media environment, there still seems to be consensus on what constitutes *the news* or *news media* — namely legacy, traditional news organizations (Newman et al., 2022, pp. 44-45; Tsfati et al., 2023). Thus, we believe that measuring the use and avoidance of well-established and well-known news media institutions in Sweden — rather than a general notion of news — improves the comparability and validity of our measures over time (Daniller et al., 2017).

Age-period-cohort effects on News Media Avoidance

As outlined in the introduction, previous research on news media avoidance — and more generally on news media consumption — has identified two broad trends that have contributed to decreases in news use (Boulianne & Shehata, 2022; Edgerly et al., 2018; Espeland, 2024; Strömbäck et al., 2013; Thorson, 2015; Zukin et al., 2006). The first is the increasing age-based gaps which in turn have been attributed to both life-course effects as well as generational belonging. The second is the historical change in the form of the technological transitions from a low- to a high-choice media environment in recent decades. In other words, we are dealing with three distinct but interconnected factors: respondents age, their birth cohort and lastly the period in which they were measured. However, to our knowledge there are currently no studies simultaneously assessing these effects and, as a result, the relative importance of these different factors – age, period and cohort effects – is uncertain.

As such, we will investigate the topic of news media avoidance using age-period-cohort analyses which have been used extensively in other parts of the social sciences (see Fosse & Winship, 2019 for review) due to its power to untangle the independent contributions of these factors, but not yet utilized in the study of news avoidance. The basic proposition of the age-period-cohort analysis is that any particular sociological outcome can be attributed to three distinct but also interrelated processes, namely age, period and cohort effects (Fosse & Winship, 2019). Below we detail each effect and relate it to the study of news media consumption and avoidance.

Age Effects

First — and perhaps most straightforward — there are effects of people moving through their individual life-courses. These processes are more commonly referred to as age effects and they have continuously been observed in empirical studies on news avoidance (eg., Edgerly et al., 2018; Shehata, 2016). Younger people often have less of those resources that have been found to be related to higher levels of news consumption at their disposal, resources that older people have accumulated during their lifetime (Quintelier, 2007). These are, for example education, income, as well as social and political ties. Additionally, being in a formative phase of their life, younger people might prefer to socialize with friends, playing games and doing sports rather than watch the news. In short, the life-course perspective assumes that differences in news consumption are "mostly tied to cohort members' specific place on a

developmental continuum and thus will change in predictable ways as these members age (Zukin et al., 2006, p. 11).

Cohort effects

Related to life-course effects are cohort effects which builds on the sociology of generations greatly influence by Karl Mannheim (1952). While generally acknowledging that people to a certain extent change their news behaviours as they grow older, the generational perspective argues that age should not be studied in isolation and rather be seen as a guide to belonging of a specific generational cohort. These socially shaped generations differ from each other based on their shared social locations which in turn is the result of their common experiences of historical and social processes. In short, people growing up having the formative phase of their lives at similar times and contexts tend to develop similar experiences, values, and practices in that "early impressions tend to coalesce into a natural view of the world" (Mannheim, 1952, p. 298), a worldview that they keep throughout their life. From this perspective then, substantial social and cultural change occurs because of the continuous replacement of older cohorts by younger ones (Mannheim, 1952).

Connecting these generational effects to the study of news consumption and avoidance, two main explanations can be identified in previous research. First, we have scholars highlighting that "media generations" tend to form around the medium that were dominant during individuals adolescence, forming the basis of their news habits (Ghersetti & Westlund, 2018; Westlund & Färdigh, 2013; Westlund & Weibull, 2013). In short, "the media that were important when people grew up remain central as people grow older" (Westlund & Färdigh, 2013, p. 187). As such, one explanation for the reported age gap in news media consumption is that younger individuals belong to generations which have grown up in a media environment less dominated by traditional news media and more characterised by online and social media and, as a result, they have formed both their news habits as well as conceptions of what news is in relation to these media (Boulianne & Shehata, 2022; Edgerly & Vraga, 2020; Edgerly et al., 2018). Second, apart from generational changes in news habits, scholars have also argued that normative changes are taking place among newer generations which have contributed to declines in news media consumption. In short, the process of social modernization in western post-industrial societies in the latter half of the 20th century, has made traditional social networks and institutional loyalties less rigid which in turn have impacted citizenship norms (Inglehart, 1990). It has been noted that generations growing up in these post-industrial societies puts less emphasis on duty-based citizenship and institutional politics, compared to older ones (Dalton, 2008). Lance Bennett (2008) argued that this also extends to news consumption where conventional news media caters to older generations' conceptions of citizenship which might turn younger generations away. The traditional news media is filled both with the views of government officials and delivered in a top-down one-way model of communication. In online and social media, information flows more freely and is more open for discussion and sharing which is thought to be more conductive to younger generations notions of

citizenship and participation (Bennett, 2008). Relatedly, based on extensive interviewing with US adolescents, Thorson (2015) found that the most widely shared norm about a good citizen was that any specific expression of political participation, such as following the news, was optional, a "choice left up to the individual. And it is a choice driven by personal interest" (Thorson, 2015:17). Additionally, since good citizenship was increasingly viewed as optional, based on personal interest, young people did not judge those who chose to disengage because of a lack of interest. It was not seen as a prerequisite for being a good citizen. Engaging with politics has moved "out of the realm of ought-to and into the territory of optional" (Thorson, 2015:5-6).

Period Effects

Lastly, there are period effects which occur due to social, economic, and cultural changes that are unique to specific time periods as well as specific events in particular year (Yang, 2008). They differ from cohort effects in that period effects induce similar changes across individuals of all ages due to them experiencing them simultaneously. In the case of Sweden for example, the end of the state monopoly on broadcasting in 1986 — the first year of this study — can be considered a period effect since it affected all Swedish citizens that year regardless of age or cohort.

Relating period effects to news media consumption and avoidance, the biggest focus in previous research has been on the historical transformation of the media environments in western post-industrial societies from low-choice to high-choice media environments and how this has radically changed our media habits (Van Aelst et al., 2017). One of the most influential scholars in this tradition is Markus Prior (2007) who argued that the decline of news media audiences was primarily an effect of the expansion of media choice. In the earlier tv-broadcast era, the networks had similar scheduling practices, placing the evening newscast at the same slots during primetime. Additionally, due to the low number of outlets, people might have been tuning in for the latest top series but decided to continue watching the news afterwards. This had a levelling effect of news consumption gaps and political knowledge in the electorate since homogenous audiences exposed to the same news broadcast, whether it be due to people intentionally tuning in or simply being incidentally exposed to it as an inadvertent audience. As the media choices have grown exponentially since the height of the broadcast era, people will increasingly have to make media choices based on their preferences. Thus — the argument goes — we will see increasing gaps in news consumption were people interested in news and politics can engage with news whenever and wherever they want, while people less interested increasingly tune out (Bennett & Iyengar, 2008). Empirically, even though there are few truly longitudinal studies investigating the relationship between the transition towards a high-choice media environment and the frequency of news media avoidance, the ones that do exist generally support the notion that news media consumption has gone down and news media avoidance has increased over time and that we are witnessing growing gaps in news consumption (Aalberg et al., 2010; Espeland, 2024; Karlsen et al., 2020; Strömbäck et al., 2013; Van Aelst et al., 2017). It is also worth mentioning that some scholars also point out that the affordances

in the new media environment might actually decrease news media avoidance through the combined forces of cultural production and consumption powered by algorithms (Karlsen et al., 2020; Webster, 2014), which could potentially indicate null or negative period effects.

As detailed above, previous research clearly indicates variations in news media consumption across ages, birth cohorts and periods. However, most extant research on news media avoidance tend to study these effects in isolation, or limit themselves to age and period effects (eg., Espeland, 2024; Strömbäck et al., 2013). To our knowledge there is so far no studies that incorporates all three effects and try to discern their independent contribution. Untangling these effects are important to deepen our understanding of the phenomenon. Both in and of itself by deepening our understanding how socio-technological and temporal change relates to news media consumption, but also to identify — to the extent we consider news media avoidance problematic — where potential efforts towards minimizing the practice would be most effectively targeted. For example, if we can separate out that we are mostly dealing with age effects, this entails a much different course of actions for news organizations since we can safely assume that younger news avoider will "come into the fold" as they grow older. If we, on the other hand, find that we are mainly witnessing growing generational differences, other course of actions needs to be taken since these would reflect broader social changes in relation to news consumption. Or is the main culprit period effects, due to the proliferation of choice in the high-choice media environment as Prior (2007) argued, stating that "people have not necessarily changed; they have merely changed the channel. And they would have done it sooner, had they been given the chance" (Prior, 2007, p. 19). Thus, we believe this untangling — and confounding — of effects will prove beneficial to our understanding of news media avoidance.

RQ1: What are the independent effects of age, birth cohort, and period on the probability of news media avoidance?

Social inequalities and news media avoidance

This article will also investigate whether social inequalities increase or decrease across ages, birth cohorts, and over time. We do this because we believe that a key question of if, and to what extent, news media avoidance should be considered a problematic phenomenon needs to be evaluated on the basis of to what extent the phenomenon is tied to specific groups and whether we are witnessing growing gaps (see also Van Aelst et al., 2017). Especially if such gaps run the risk of exacerbating already existing inequalities in political involvement. While we know from previous studies that low socioeconomic status — such as education and income — is related to low levels of news media consumption (Blekesaune et al., 2012; Edgerly, 2021; Strömbäck et al., 2013; Toff et al., 2023; Trilling & Schoenbach, 2013), there still exists little research focused specifically on whether and how socioeconomic gaps in news media avoidance increase or decrease over the life-cycle, over time and across generations.

We can hypothesize that socioeconomic differences in news media avoidance varies across the life-course. On the one hand one, as people age, they accumulate more resources and become more socially integrated in society through work, child-rearing and so on which would suggest that social inequalities in news media consumption might become less important as one ages. On the other hand, it has also been theorized that early inequalities in socioeconomic status puts individuals on diverging life-trajectories where those initially advantaged are more likely to continually enjoy other advantages — better education, leads to higher wage job, leads to better pension and so on — compared to those disadvantaged. This has been named the cumulative advantage / disadvantage theory and/or the Matthew effect (Bask & Bask, 2015). To our knowledge, there are currently no studies investigating whether socioeconomic gaps in news media avoidance increase or decrease over the life-course.

Period effects — and more specifically the transition towards high-choice media environments — could be hypothesized to contribute to increasing socioeconomic gaps following the knowledge gap hypothesis, in which the influx of mass media information into as social system tend to increase socioeconomic gaps (Tichenor et al., 1970). So far, however, the longitudinal studies investigating period effects on socioeconomic gaps in news media consumption seem to provide somewhat inconclusive results. Studying news avoidance in Norway between 1997-2016, Karlsen & colleagues (2020) found that the gap between high and low-educated people in the number of people tuning out from news had increased from 5 per cent to 15 per cent. In another longitudinal study, Bergström et al. (2019) showed that out of the four outlets measured — national morning newspapers, tabloids, public service television and commercial television — the impact of socioeconomic status had only increased for national morning papers and decreased for the other three. However, one downside of the paper is the fact that it does not account for online or digital news media consumption. Additionally, both articles focused solely on how the effect of socioeconomic status has changed *over time* and thus cannot disentangle whether and to what extent the reported effects might be attributable to age and generational effects.

As for cohort effects, to our knowledge there exists no study specifically investigating and comparing the socioeconomic gaps in news media avoidance across generations (see Andersen et al., 2021, for partial exception). However, we could expect that different generations exhibit differences in socioeconomic gaps. Cohorts that came of age in the height of the broadcast era could be suspected to have smaller socioeconomic gaps compared to cohorts before and after since media choices were limited and the television news made news consumption more accessible for many people — for example requiring less reading comprehension compared to newspapers (Prior, 2007; Syvertsen et al., 2014). As younger generations come of age in the high-choice media environment, scholars have theorized that these might exhibit greater socioeconomic gaps in news media consumption. By growing up in a high-choice media environment where news consumption is increasingly individualized (Prior, 2007; Syvertsen et al., 2014) in combination with weakening norms surrounding news media consumption as a requirement for being a good citizens (Bennett, 2008; Thorson, 2015) younger generations find

themselves increasingly in a zone of heterogenous socialization where the transmission of unifying cultural values will get more difficult and thus already existing gaps in news consumption might increase more among young citizens (Aalberg et al., 2013, p. 299). On the same theme, Thorson (2015) argued that such a heterogenous media and social environment "offers extraordinary possibilities for self-made policy experts and civic innovators but provides little guidance to those for whom politics is at best tangential and at worst irrelevant to daily life" (Thorson, 2015, p. 5). Indeed, recent empirical studies have suggested that news consumption gaps related to individual motivations are greater for younger people when it comes to the choice of consuming news (Andersen et al., 2021; Andersson, 2019; Boulianne & Shehata, 2022) and that this relationship has grown over time (Espeland, 2024), indicating generational effects. Similar studies are however lacking when it comes to gaps between socioeconomic groups. Based on the above discussions we ask:

RQ2: How does socioeconomic gaps in news media avoidance develop over the life-course, across birth cohorts and over time?

Data and method

Context of the study

Sweden will constitute the empirical context of this study. On the one hand, Sweden's media system has been characterized as a media system with traditionally high levels of newspaper readership, high levels of press freedoms and organization of journalists, as well as a broad consensus of journalism as a public good (Hallin & Mancini, 2004; Syvertsen et al., 2014). From the audience side, Swedes have comparatively high levels of trust and consumption of news media, and it has remained remarkably stable on an aggregate level (Newman et al., 2023; Strömbäck et al., 2013).

On the other hand, while the aggregate picture of the Swedish media system might be one of stability and consensus, an increasing fragmentation and segmentation of the Swedish news audience have been found in previous studies. The most important being, preference-based (Strömbäck et al., 2013), socioeconomic (Bergström et al., 2019; Ohlsson et al., 2016), and generational news consumption gaps (Ghersetti & Westlund, 2018; Wadbring & Bergström, 2017).

As such, the Swedish case is beneficial to this study because it contains many of those factors thought to promote news consumption and decrease levels of news avoidance — providing a tougher test for this study's hypotheses — while at the same time showing developments of increasing audience fragmentation reported in other post-industrial western democracies.

Data

This study uses data from the Society, Opinion and Media (SOM) surveys conducted yearly from 1986 to 2023 in Sweden[1]. The SOM-surveys presents one of the best sources of nationally representative data

on the development of Swedish public opinion and media use due to their use of systematic probability sampling and continuous high response rates compared to other surveys (SOM-institute, 2025).

Dependent variable

The dependent variable is news media avoidance and was operationalized by first creating an additive index of news media consumption and then classifying avoiders using a threshold based on the index mean. A challenge when constructing the index relates to the fact that the measures must have been consisted for the whole time-series — so that it does not discriminate against respondents in those years where the measures were not yet available — while at the same time needing to be able to incorporate the changes that the Swedish media system has experienced since the surveys started in 1986. As a solution, we opted for a platform-neutral but news media type-specific approach. More specifically we took the news media types that were present in the earliest surveys — newspapers, tabloids, radio news and television news — and kept these categories throughout the time-series. As new media options became available, those options were incorporated into the already existing news media type, with the highest frequency within each news media type determining respondents' score. For example, a respondent reading a newspaper in print 3-4 days/week (a score of 3 on that variable) and daily online (a score of 5) would score 5 on the newspaper consumption variable[2]. The news media measures used can be found in Table 1. While we acknowledge that these measures are far from exhaustive, the outlets measured make up the vast majority of news media consumption in Sweden, both on and offline (Newman et al., 2024).

Next, we standardized the measurements for all four news media type variables to ensure comparability of measurements which means that all news media measure ranges from 0 (Never) to 1 (Daily or 6-7 days/week) with multiple values in between. Then we combined the respondents scores for the four news media type measures into an index of news media consumption (Newspapers + Radio news + Tabloids + TV news). Thus, the news media index ranged from 0 (no news) to 4 (all news media daily). The news consumption index shows a normal distribution (appendix B). As a final step, we created the News media avoidance variable as a dummy variable where respondents were coded as news media avoiders if they scored equal to or less than 1 on the news media index, which represents roughly one and a half standard deviation below the news index mean. To avoid discriminating against respondents who rely on single outlets, respondents who scored 1 (daily consumption) on any of the individual news media type variables were removed from the news avoider category.

Table 1. News media measures

News media type	Outlets measured	Measurement scale
Newspapers	National newspapers, print and/or online (Dagens Nyheter, Svenska Dagbladet) Regional newspapers, print and/or online Local newspapers, print and/or online	0 = Never 1 = More seldom 2 = 1–2 days/week 3 = 3–4 days/week 4 = 5–6 days/week 5 = Daily
TV – news	Aktuellt and/or Rapport on Swedish television (public service television news) Swedish television news online (public service) TV4 news (commercial TV-news) TV4 news online	Same as Newspapers
Radio news	Ekot (public service radio news) Swedish radio news online (public service)	Same as Newspapers
Tabloids	Aftonbladet (print and/or online) Expressen (print and/or online)	1986–2013: 0 = Never, 1 = More seldom, 2 = 1–2 days/week, 3 = 3–5 days/week, 4 = 6–7 days/week. 2014–Ongoing: Same as newspapers

Independent variables

The key independent variables used the analyses are age (mean-centered variable) ranging from 16 to 75 since this is the age interval available for all survey years, period measured by survey year and birth cohort measured in five-year intervals (ranging from 0 = born 1912-1916 to 18 = born 2002-2006). Socioeconomic status was measured using education since it is usually stable across life-course and more resistant towards temporal fluctuations, such as employment status. Education was coded as two dummy variables, one indicating low education (1= primary education or less, 0= more than primary education) and one indicating high education (1 = university/college education, 0=less than university/college education).

The analysis also controls for variables that have been shown to correlate with news media avoidance such as political interest (0=low political interest 1=high political interest), gender (0=female, 1=male), and household income (0=low income, 1=medium income, 3=high income, adjusted for inflation).

Data analysis

Despite the theoretical and conceptual affordances offered by age-period-cohort analyses (APC henceforth) the method has historically (and continuously) struggled from methodological problems. Most salient of which is the fact that — by trying to separate and estimating the effects of age, period

and cohort — we are confronted with the "identification problem". This problem stems from the exact linear dependency between the key factors since period – age = cohort which means that it is impossible to estimate effects of one variable while holding the other two constant. As a result, scholars have grappled with how to break this exact linear dependency. While multiple solutions of the identification problem have been proposed, there is not yet a universally agreed upon solution (Fosse & Winship, 2019). For this article we have chosen to go with the hierarchical APC (HAPC) model promoted by Yang (2008). The HAPC seeks to break up the linear dependency between age, period and cohort variables by specifying a cross-classified random-effects model (CCREM) with age and an age-squared terms in combination with varying intercepts for the period and cohorts groups (Yang, 2008). While the HAPC approach has been extensively used by sociologist and demographers, it has been criticized for running the risk of putting nonobvious constraints on the estimates, most notably on the cohort effects which run the risk of being set close to zero (see Fosse & Winship, 2019, for review). However this problem seem to be most prominent when the cohort variable has a larger number of categories compared to the yearly indicators (Fosse & Winship, 2019) which is not the case in our dataset.

Results (Please note these are all very preliminary results from the analyses)

We begin by investigating the age, period and cohort effects on news media avoidance before turning to the question of social inequalities in news media avoidance. As a first step, we can calculate the variance partition coefficient (VPC) for the different levels — i.e. how much variance in news media avoidance is explained at the individual, the birth-cohort, and the yearly levels. Inspecting the variance components in the random-effects parameters (Table 2) we calculate the VPC by dividing the individual variance by the total sum of all variances. For the individual level — called Var(Residual) in the models — we can conclude that roughly 90.5 percent of the variance is located at the individual level (.068 / (0.68 + .006 + .001)). For the higher-level categories, 8 percent of the variance is explained by cohort effects and around 1.5 percent is explained by the yearly indicators. In sum, we see that most of the variance is explained at the individual level, which should be expected, followed by the time individuals were born and lastly the yearly context explains the least amount of variance of these three.

In Table 2, we can also see that our coefficients are statistically significant and in the expected direction. The coefficient for age is negative which means that as one gets older the likelihood of news media avoidance decreases. This negative effect also seems to increase over the life course, given that the Age-squared term is also negative and statistically significant. Additionally, we see that having the fixed effects for the two education dummies show that a low education increases the likelihood of news media avoidance, while having a high education decreases the likelihood. Furthermore, we see that political interest has a strong effect on the likelihood of news media avoidance, with a fixed effect coefficient of roughly -.064 compared to those who are uninterested in politics.

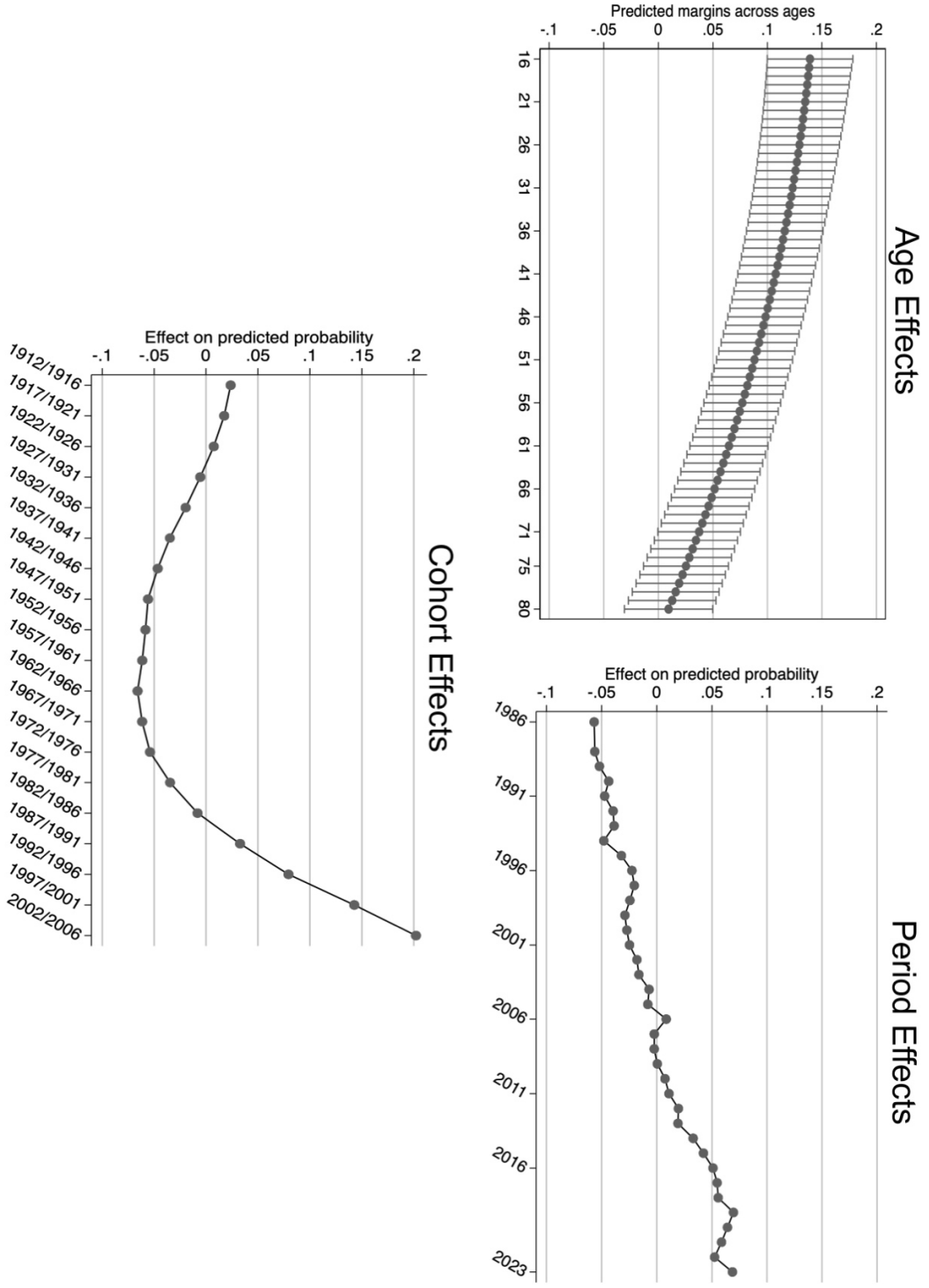
Table 2. The Effects of Age, Period and Cohort on News media Avoidance.

	News Media Avoidance				
	Model 1	Model 2	Model 3	Model 4	Model 5
Age	-.002***	-.002***	-.002***	-.002***	-.002***
	(.000)	(.000)	(.000)	(.000)	(.000)
Age²	-.000***	-.000***	-.000***	-.000***	-.000***
	(.000)	(.000)	(.000)	(.000)	(.000)
Low Education		.017***	.015***	.025***	.019***
		(.002)	(.003)	(.002)	(.002)
High Education		-.004***	-.000	-.004***	-.003**
		(.001)	(.002)	(.001)	(.001)
Political interest (ref: uninterested)					
Interested		-.064***	-.064***	-.064***	-.064***
		(.001)	(.001)	(.001)	(.001)
Gender (ref: female)					
Male		.007***	.007***	.007***	.007***
		(.001)	(.001)	(.001)	(.001)
Low Education x Age				-.001***	
				(.000)	
High Education x Age					.001***
					(.000)
Intercept	.097***	.124***	.126***	.124***	.125***
	(.019)	(.018)	(.018)	(.018)	(.018)
	Random-Effects parameters				
Var(Birth Cohorts)	.006	.005	.005	.005	.005
	(.003)	(.002)	(.002)	(.002)	(.002)
Var(Year	.001	.002	.002	.002	.002
	(.001)	(.001)	(.001)	(.001)	(.001)
Var(Low Education)			.000		
			(.000)		
Var(High Education			.000		
			(.000)		
Var(Residual)	.068	.065	.065	.065	.065
	0	(.000)	(.000)	(.000)	(.000)
N	180712	171180	171180	171180	171180
Chi-square	64.623	2901.880	2600.681	2975.682	2946.702
Prob > chi2	0.000	0.000	0.000	0.000	0.000
Akaike crit. (AIC)	28255.193	18187.943	18154.258	18116.812	18145.883

In Figure 1, we visualize the independent effects of Age, Period and Cohort. For the Age effects, we have plotted the predicted probabilities of news media avoidance across ages while holding all other variables at their mean values. For the period and cohort effects, these consist of the random effects structure and therefore show the mean change in the predicted probabilities for different values of these variables.

Beginning with the age effects, the results are not surprising. The younger the individual, the greater the probability of news media avoidance. Following the x-axis, we see a steady downward slope and at the right side of the axis, the effect is effectively zero. Keep in mind that these are fixed effects across the whole 39 years of study and, as such, we safely conclude that there are strong and robust life-course effect when it comes to news media avoidance. As individuals come of age, they seem to increasingly turn to news media.

Figure 1. Age, period & Cohort effects on probability of news media avoidance



Note: Figure based on Cross-Classified Random Effects model (CCREM) with Age treated as fixed effects while Period and cohort effects as random components. Age Effects presents predicted probabilities of news media avoidance while all other variables are set at their mean. Period and Cohort effects show the mean change in the predicted probabilities for different values of these variables. Models control for education, gender and political interest.

Moving to the period effects (Figure 1) we see that the effect of the yearly context is overall quite small but continuously trending upward. At the beginning of the time series, if you were being situated in the 1986 context, this could be said to decrease your chances of news media avoidance by roughly 5 percent. It is not until around the year 2011 we can start talking about the period effects meaningfully increasing the probability of news media avoidance. After this, however, the period effect has continuously grown except for some decreases in the 2020s. A qualified guess would be that this short term decrease could be due to the covid pandemic increasing individuals' news consumption. In the most recent survey year 2023, the period effect on the probability of news media avoidance is roughly 7 percent.

Lastly, we have the cohort effects which displays an interesting U-shape when it comes to its effects on probability of news media avoidance. Those being born in first decades in of the 20th century, had a somewhat heightened likelihood of news media avoidance. Beginning with the cohort born in 1927-1931 we see a steady downward slope in the cohort effects on likelihood of news media avoidance, reaching its lowest point among the birth cohorts born between 1947 – 1971. For the birth-cohorts born 1972 and forwards the slope turn upwards and seems to accelerate. The 1987-1991 birth cohort is the first cohort which has a positive effect on probability on news media avoidance.

Educational gaps across age, period and cohort

Apart from just studying the independent effects of age, period and cohort on the probability of news media avoidance, we are also interested in investigating whether and if so, how socioeconomic gaps in news media avoidance develop over the life-course, across birth cohorts and over time? We do this because we believe that to make a normative assessment about the communication phenomenon of news media avoidance, we need to know to what extent it is connected to certain groups in society and whether it is coupled with growing inequalities in society.

In Figure 2, we map the average marginal effects of having low or high education on the probability of news media avoidance. Inspecting the life-course effects of education we see that there are differences between these groups. Having a low education increases the probability of news media avoidance, while having a high education decreases the probability. At the same time however, the effect of having a low education seems to decrease the older one and there are no effects of low education later in life. Interestingly, the effect of high education shows the opposite trend. Having a high education in younger years decreases the probability of news media avoidance, but as individuals age this effect wears of, having no effect when middle-aged and actually increasing the likelihood of news media avoidance later in life.

Mapping out how the effect of education differs across period and birth-cohorts, we modelled a random coefficient model (Table 2, model 3) to allow for variations in the education coefficients between birth-cohorts and measurement years. Doing this, in Figure 3 and 4 we can see how the mean coefficients vary for the different birth-cohorts and years.

Figure 2. The effects of education across ages

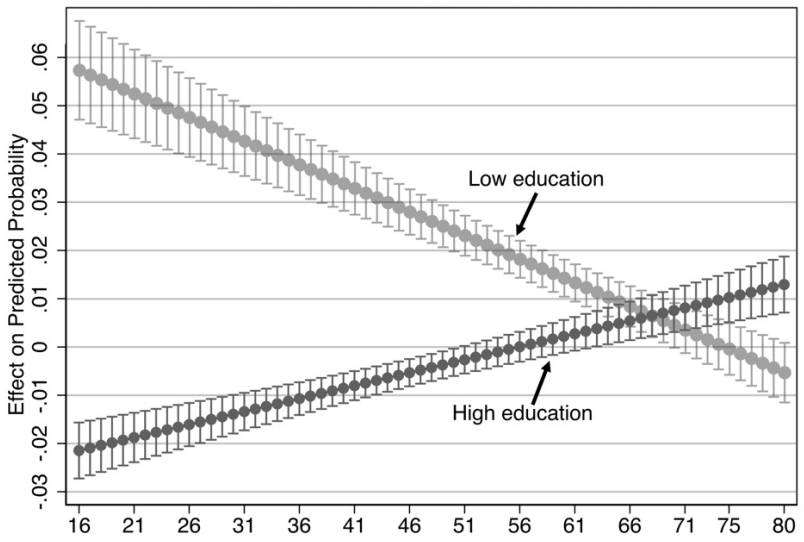


Figure 3. The effects of education across different years

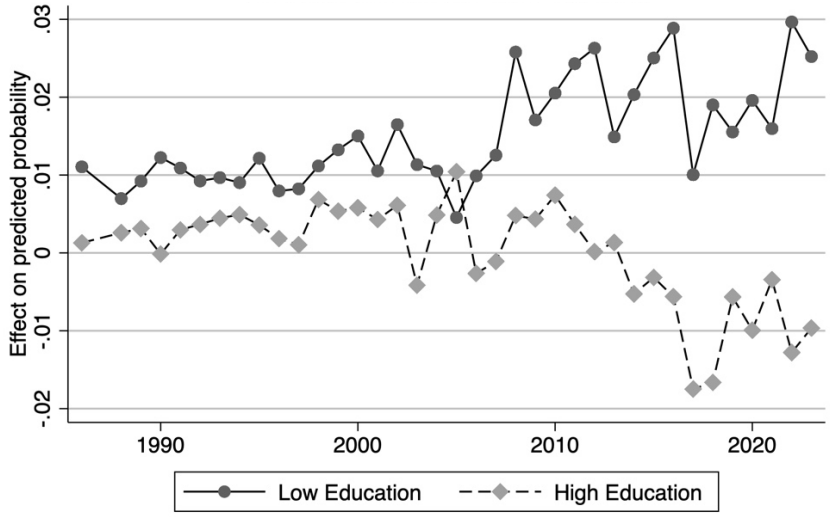
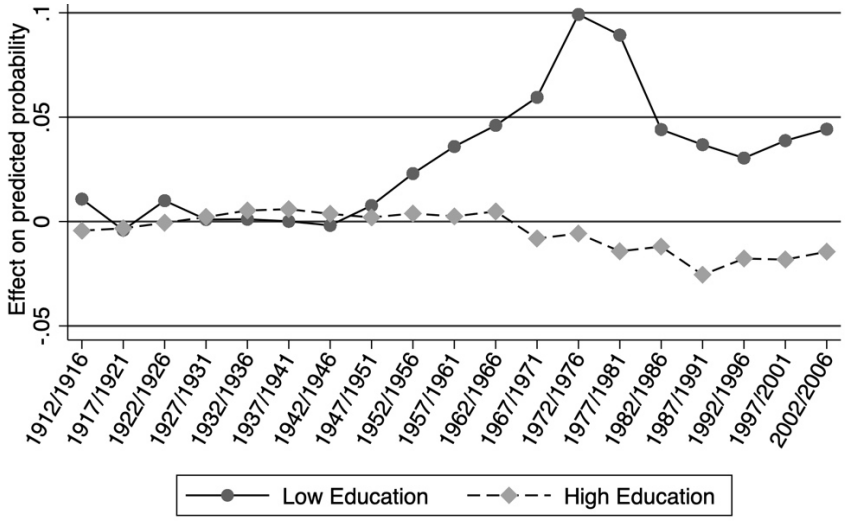


Figure 4. The effects of education across different years



Inspecting how the effect of education has varied over the years (Figure 3) and across birth-cohorts (Figure 4), there are a few key takeaways. First, inspecting the x-axes from left to right we see that historically there have been growing gaps between the low and high educated across both birth-cohorts and years. Second, in general the coefficients for education are generally larger for the birth-cohorts, indicating that educational gaps might be driven mostly by generational effects.

Starting with birth-cohorts (Figure 4), we see that for cohorts born up until 1951 education did not really have an effect. After this period, we can see that the effect of having a low education starts to increase, and peaks for the birth-cohorts born in the 1970s. After the peak in the 1970s, the effect of education among subsequent birth cohort seem to exhibit rather steady gaps in the effects of education. Educational gaps among birth cohorts. The impact of education across years shows similar patterns to birth-cohorts. In the beginning of the time-period there were smaller gaps in the effects of education. Starting in the mid 00s, we see a fluctuating but still increasing gap between the low educated and the highly educated.

Thus, based on the finding presented here we can see that the effect of education on news media avoidance decreases over the life-course, but it has become more important in recent years compared to earlier. For birth cohorts, the effect of education has increased historically, reaching its peak for the generations born around the 1970s and while the effect has decreased somewhat, the gap persists among the younger cohorts.

Conclusion

To be continued

Notes

1. SOM-Institute (2023). The SOM Institute Cumulative Dataset 1986–2023 v2022.1. University of Gothenburg
2. See Appendix A, for details regarding question wordings and measurement scales.

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