TV news exposure of young people in changing viewing environments: A longitudinal, cross-national comparison using people-meter data
Wonneberger, A.; Kim, S.J.

Published in: International Journal of Communication : IJoC

Citation for published version (APA):

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

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
TV News Exposure of Young People in Changing Viewing Environments: A Longitudinal, Cross-National Comparison Using People-Meter Data

ANKE WONNEBERGER¹
University of Amsterdam, the Netherlands

SU JUNG KIM
Iowa State University, USA

Concerns have been raised about younger generations dropping out from news consumption and the possible consequences for political knowledge and involvement. Increasing opportunities for choice have been held responsible for distracting young adults from the news. This study analyzed TV news viewing among young people in the Netherlands and South Korea during the transition from low- to high-choice viewing environments. Individual people-meter data offered precise exposure measures that were comparable across countries and time. The results revealed that young adults in both countries spent less time watching news during this time of transition; however, more channels did not necessarily lead to a decrease in news consumption.

Keywords: TV news exposure, young viewers, selective exposure, channel repertoires, people-meter data

The role of news media in promoting political engagement has received much scholarly attention. Many researchers have emphasized the media’s unique ability to disseminate political information to a wide audience (Delli Carpini & Keeter, 1996; Graber, 2001) and its function as a shared public forum (Katz, 1996). Adolescents and young adults are of particular importance for this topic because media use habits formed at this early stage of life affect political and civic engagement in later adulthood (McFarland & Thomas, 2006; St. Peters, Fitch, Huston, Wright, & Eakins, 1991). If younger generations make a habit of consuming news from various sources, this will lead them to become more knowledgeable about political issues and, thus, more active participants in the political system. If they are more attracted to entertainment offerings and abandon news, the result could pose a potential threat to the future of democracy. In the current media environment, the picture is not optimistic.

¹ The authors thank the Dutch Audience Research Foundation (Stichting KijkOnderzoek), the audience research department of Netherlands Public Broadcasting, and Dr. Namjun Kang at Seoul National University and the Foundation for Broadcast Culture for making the data available.
Despite the general consensus regarding the importance of news media use among youth, there is only limited knowledge about the development of news consumption by young people over a longer period of time. Furthermore, little research discusses how young audiences’ television news use patterns have changed as television viewing environments have progressed from low- to high-choice environments. In particular, there is a need for international comparative research that studies youth across national borders. Few studies have examined news consumption behaviors comparatively (e.g., Shehata & Strömbäck, 2011), and those studies that did were conducted within the same region. To the best of our knowledge, cross-continent analyses are scarce (for exceptional cross-continental research, see Papathanassopoulos et al., 2013).

The aim of this study is twofold. First, we track the changes in young people’s exposure to TV news programs in countries that witnessed decreasing shares of public television with the introduction of commercial and cable television. We are particularly interested in television because it still is considered the most prominent and trusted source of political information in many countries (Gottfried, Barthel, Shearer, & Mitchell, 2016; Papathanassopoulos et al., 2013). In the historical era of expanding TV landscapes, young people in particular have been found to rely increasingly on TV while turning away from newspapers (Peiser, 1999, 2000; Van Cauwenberge, d’Haenens, & Beentjes, 2013). Although patterns of declining newspaper readership among young people are well documented in many Western countries (Lauf, 2001; Peiser, 1999, 2000), there is a lack of research looking at trends in young people’s exposure to TV news. Second, in examining young people’s news consumption patterns in the changing media environments, we conduct international comparative research by focusing our attention on non-U.S. contexts. There is some concern about a decreasing trend in television news consumption by those younger than age 30 years in the United States. Little, however, is known about the trends of youth news consumption in other parts of the world (Pew Research Center, 2012). With the Netherlands and Korea, this study compares two countries that have experienced similar transformations of their TV markets from a limited number of public-service channels to a wider mix of public and commercial channels and cable television programming. We ask how the commercialization of TV markets and the changing relevance of public broadcasting as a provider of TV news programming have affected young viewers’ news consumption.

To make a rigorous comparison between the two countries, we use people-meter data collected at the individual level from both countries. People meters offer detailed information on news-viewing behavior and characteristics of individual viewers by electronically recording individual household members’ television viewing. The sample period chosen for each country reflects a dynamic change in the respective television landscape. A longitudinal and comparative perspective based on precise measures of individual-level people-meter data makes this study a unique contribution to the literature of news consumption and audience research.

**Relationship Between News Media Use and Civic or Political Engagement**

The media plays a crucial role in contemporary politics because people depend on it as a primary source of political information (Coulter, Livingstone, & Markham, 2007; Delli Carpini, 2000). Despite the media’s potential for enhancing political knowledge and participation, scholarly research on the political
effects of media use has been divided into two contradictory views, the so-called vicious or virtuous cycle. The former posits that the media hampers political learning and participation because media use displaces time that otherwise could be devoted to civic activities and, thus, erodes social capital and civic engagement (Putnam, 1995). Others who support this view emphasize that mass media drives political cynicism by disseminating negative portraits of political figures or institutions (Cappella & Jamieson, 1997; Jebril, Albaek, & de Vreese, 2013). In contrast, those who support the virtuous cycle argue that media use, and news exposure in particular, helps people become more knowledgeable and active politically. Previous research has shown that exposure to news and information increases the level of political knowledge and interest, which in turn motivates people to participate in politics (De Vreese & Boomgaarden, 2006; Eveland & Scheufele, 2000; Norris, 1996).

Those who support the positive effects of media use have emphasized that it is the content of the media that leads to political engagement or disengagement (De Vreese & Boomgaarden, 2006; Newton, 1999; Norris, 1996). Many studies that examined the effects of media use on political engagement found differential effects of media content. Despite his criticism, for example, that television is the culprit of diminishing civic activities, Putnam (2000) found that newspaper reading and television news viewing are positively associated with civic engagement, whereas entertainment television viewing shows the opposite result. Likewise, Newton (1999) found that exposure to broadsheet newspaper and television news has positive links to political knowledge and mobilization, whereas tabloid reading and television viewing in general provide weak or insignificant evidence for the vicious circle. More recent studies also support the positive influence of news media (Erentaitė, Žukauskienė, Beyers, & Pilkauskaitė-Valickienė, 2012; Kruikemeier & Shehata, 2016; Tworzecki & Semetko, 2012).

The Decline of News Consumption Among Young People

The importance of news consumption in civic or political engagement is amplified when it comes to younger generations. Not only is the mass media a significant source of political information, it has been considered a major agent in youth political socialization processes, along with family, peer groups, and school (Erikson & Tedin, 2005). With the proliferation of media outlets, young people can encounter more opportunities to learn about salient political and social issues through the mass media (Chaffee & Kanihan, 1997). Moreover, the media can help young people learn the norms and values of the political system, shape their own political views, and develop a sense of civic responsibility (Chaffee & Kanihan, 1997; Youniss et al., 2002). Media habits established in the adolescent or early adult years are crucial because these habits can influence political behaviors after young people have matured into adulthood (McFarland & Thomas, 2006; St. Peters et al., 1991).

Empirical work on news media use by young people has shown positive relationships between news media use (e.g., newspaper, radio, television, and the Internet) and various political measures such as political awareness (Pasek, Kenski, Romer, & Jamieson, 2006), knowledge (Pasek et al., 2006), voting (Moeller, de Vreese, Esser, & Kunz, 2014), and civic engagement (Hoffman & Thomson, 2009; Pasek et al., 2006). Pasek and colleagues (2006) found, for example, that watching national news programs on television was positively related to political awareness, knowledge acquisition, and civic engagement. Hoffman and Thomson (2009) showed that both traditional news programs (e.g., national and local news)
and nontraditional sources of political information (e.g., late-night comedy shows such as *The Daily Show with Jon Stewart*) on television increased young people’s internal political efficacy, which then positively affected their civic participation. The news media also provides young audiences with an opportunity to discuss political and civic issues, which increases their internal efficacy (Moeller et al., 2014) or civic engagement (Erentaitė et al., 2012).

Despite the media’s positive impact on political socialization, recent trends in news consumption among adolescents and young adults have raised concerns about the future of political and civic engagement (Delli Carpini, 2000; Patterson, 2007). A decrease in youth news consumption across different news media outlets has been observed in many parts of the world. A survey from the Pew Research Center found that young audiences between 18 and 31 years old spend about 46 minutes on news consumption, a considerably lower amount than other age groups (Pew Research Center, 2012). Although adding more devices to the youth media diet may lead to more frequent usage of news media (Mitchell, Rosenstiel, & Christian, 2012), what appears more problematic is that there is "little indication that that [sic] they will become heavier news consumers as they age" (Kohut, 2013, para. 2). There also has been a consistent decline in young people’s newspaper readership across European countries (Lauf, 2001; Peiser, 1999). Regardless of the types of newspapers (national, regional, or tabloid), the amount of newspaper readership among young people has declined considerably since 1980. One can observe similar trends in Asia. According to a survey conducted by the National Youth Policy Institute (2009), average Korean middle and high school students spent 4.7 minutes per day reading newspapers. Moreover, 61% of the respondents answered that they did not read newspapers at all. The amount of time spent reading is a slight decrease from 6 minutes of newspaper reading reported in a time-use survey in 1990 (Korean Broadcasting System, 1991).

A common assumption is that young people use the Internet more often than they consume traditional media. Consequently, young people may have adopted newer media as their main source of news and information (Papathanassopoulos et al., 2013). More rapid forms of online communication might also lead to more superficial modes of news exposure. Despite the increasing use of social media for news acquisition among youth, only about one third of those who get news form social media said they follow up full stories (Kohut, 2013). Young people in the Netherlands still report that television is their most important news source (Drok & Schwartz, 2009; Van Cauwenberge et al., 2013). The same applies to other countries worldwide (Papathanassopoulos et al., 2013; Patterson, 2007). Through its rapid and widespread adoption, the Internet has become a significant source of information for Korean youth (KPF, 2008). Korean adolescents reported the Internet (54.4%) and television (32.5%) as their primary sources of news and information (Citizens’ Coalition for Economic Justice, 2005). This finding shows that television remains a crucial source, although the Internet has become preferred. In addition, the life patterns of Korean young people may structurally inhibit the use of television news and/or facilitate the use of online and mobile news. Many adolescents in Korea simply are not available during prime time because of work, self-study, or commuting (Statistics Korea, 1999). The differences in everyday life patterns in both countries should be noted when comparing the trends of news media use among Dutch and Korean youth.
News Exposure in Changing Viewing Environments

Despite the importance of television as a news medium for young people, little is known about how exactly news exposure of young people has changed over past decades. In particular, country-specific changes in TV markets and news programming may be influential factors. Structural features of the media environment have been identified as one of the main drives behind patterns of news consumption (Kim, 2016; Kim & Viswanathan, 2015; Shehata & Strömbäck, 2011; Wonneberger, Schoenbach, & van Meurs, 2011, 2012). Specifically, Prior (2007) studied the impact of the transformation of a low-choice TV environment to a high-choice one on declining levels of TV news exposure. He found that the expansion of available viewing opportunities that followed the introduction of cable TV in the United States resulted in a growing gap between high levels of news exposure for politically interested and involved citizens and lower levels of exposure for citizens less interested in news and current affairs.

Such a trend of audience polarization can be observed typically in periods of growing markets (Webster, 2005). Increasing differences in individual viewing patterns are often explained by increasing audience selectivity. According to the uses-and-gratifications approach to media choice, more choice opportunities allow TV viewers to customize their viewing diets by choosing programs that yield the best possible match with their interests and preferences (e.g., Ruggiero, 2000). Applied to news programs, this approach suggests that individual viewing motivations such as being interested in current political events become more important for the choice to watch the news when more alternatives become available. Greater audience selectivity eventually results in greater gaps between news seekers and news avoiders (Ksiazek, Malthouse, & Webster, 2010; Prior, 2007). In both the Netherlands and Korea, the national TV market has faced tremendous changes over the past two decades. Both countries have gone through a transformation from a low-choice environment dominated by public-service broadcasting to a high-choice environment consisting of a mix of public-service and commercial channels as well as cable programming. As opposed to assumptions of audience polarization, Dutch news programs were found to reach large audiences even in a high-choice viewing environment. High levels of news exposure in the Netherlands could be explained by structural factors of audience behavior and TV programming (Wonneberger et al., 2011, 2012). In contrast, Korean news audiences were found to polarize to some extent after the introduction of cable TV, but remained at a moderate level thereafter (Kim & Webster, 2012).

In both countries, news consumption is still dominated by traditional news media, specifically, by TV news. In 2007, Dutch viewers were found to spend 47 minutes on average watching news programs, as opposed to 15 minutes listening to news on the radio and about 21 minutes reading newspapers. With an average of 7 minutes per day, the Internet ranked considerably lower (Van der Burg, Lauf, & Negenborn, 2011). Korean viewers spent about 39 minutes on average per day watching television news programs in 2008. Newspapers ranked second with 24 minutes, followed by the Internet (16 minutes) and radio (6 minutes; KPF, 2008). People in the Netherlands and Korea have allocated about 50% and 45%, respectively, of their news consumption to television news programs. As is typical for democratic-corporatist media systems, social responsibility in terms of informative and educational functions are ascribed to public broadcasting (Hallin & Mancini, 2004). Accordingly, public-service broadcasting has remained the main provider of public affairs information in both countries (KPF, 2008; SKO, 2011).
The research period of the present study mainly covers the period after the transformation from a low- to high-choice viewing environment. Although media convergence—that is, the transition of news viewers to other, mainly online channels—might influence traditional news viewership, such trends of convergence commenced at a later time point in both countries. The Dutch public television service Netherlands Public Broadcasting launched an online on-demand service in 2003. The private channel RTL introduced video on demand on its website in 2005. In 2006, the websites of the most important Dutch news program "NOS Journaal" reached 23% of the population aged 12 years and older. By 2014, the reach of NOS.nl had increased to 39% (Mediamonitor, 2005a, 2005b). In Korea, the convergence between online and offline came in the mid-2000s. The Korea Press Foundation commented in its 2007 report (KPF, 2007) that it witnessed the convergence of old and new media and the emergence of user-created content.

Hypotheses

With generally high levels of television news exposure, the Netherlands and Korea offer appropriate contexts in which to study changing patterns of news consumption among young people. On the one hand, diverse and frequent news programming is still available in both countries. On the other hand, sufficient choice alternatives have become available over the past two decades, allowing viewers to avoid watching news programs completely. Based on the above discussion about generally declining interest and involvement of young people in news and politics, we predict that news exposure of young viewers has also diminished in countries with generally high levels of news exposure. To distinguish this trend from overall declining levels of news exposure, decreasing exposure levels for young people should be observable in comparison to older viewers and overall. These two points are summarized by the following hypotheses:

H1: The difference in TV news viewing among young adults and their older counterparts has increased as the number of available channels has increased.

H2: The overall level of TV news viewing among young adults has decreased as the number of available channels has increased.

As described earlier, increasing choice opportunities have been regarded as a main reason for a general decline in news exposure (Ksiazek et al., 2010; Prior, 2007). Consequently, we assume that decreasing news consumption among young people also can be related to a strong influence of specific choice opportunities that are available to young people when they are watching. An overall increase of TV channels, however, does not automatically and uniformly alter individual choice behavior. Individual channel repertoires constitute preselection through which program choices are made in specific viewing situations (Yuan & Webster, 2006). Only with expanding channel repertoires can changing program environments effectively change news consumption. The next hypothesis reflects this impact of channel repertoires on news exposure:

H3: Larger channel repertoires lead to a decrease in the amount of news consumption.
Viewing Environments in Flux

In this section, we provide a brief background regarding changes in television viewing environments in both countries to help our readers better understand the contexts. In both the Netherlands and Korea, commercial TV was introduced into the national markets relatively late. In both countries, the trends of commercialization were related to a massive expansion of viewing alternatives that took place over the past two decades. The Dutch TV market was dominated by two public-service channels until 1988. In subsequent years, national commercial channels were introduced and more foreign and local TV channels became available. In 2010, about 58% of all TV households received digital TV and, thus, 50 or more channels. The remaining analog households had access to about 30 channels. Despite more channels, the concentration of the market remained relatively high, with about 78% of the market share distributed among nine channels in 2010 (SKO, 2011).

The television industry in Korea underwent a rapid change during the 1990s. Three nationwide terrestrial television networks (KBS1/KBS2, MBC, and SBS) dominated the television market before the first commercial terrestrial broadcaster was established in 1991, followed by the launches of eight local commercial broadcasters in 1995. Cable television was introduced in Korea in 1995, but cable subscription increased substantially after the Korean government implemented deregulation in 2002, and cable surpassed a penetration rate of 80% in 2009 (Korean Communications Commission, 2009). The average number of channels provided by cable operators increased from 68 in 2002 to 131 in 2009. With the growth of cable and satellite television, the market share of the terrestrial networks diminished considerably. In 2002, the total audience share of the four terrestrial channels (including both public and commercial broadcasters) accounted for 70.7%, but dropped to 57.4% in 2007, according to the statistics from the Korea Cable Television & Telecommunications Association (2016).

Because of earlier and more rapid adoption of the Internet by young people in Korea; differences in everyday life patterns, as described earlier; and a greater abundance of TV channels, the transition from a low- to high-choice viewing environment may have had greater consequences for levels of television news exposure for young adults in Korea compared with the Netherlands. The following research question addresses this comparative aspect:

**RQ1:** To what extent do the changes in television news exposure of young adults differ in Korea and the Netherlands?

**Method**

**Data**

We use unique data sets from both countries that enable us to perform a comparable analysis of changes in youth television viewing behavior. We used multiple years of people-meter data that are collected at the individual level in the Netherlands and Korea. People-meter data offer detailed and unobtrusive measures of exposure to TV news. Moreover, the television audience measurement is particularly suitable for international comparative research because it is conducted in a highly comparable
manner in many countries (e.g., Napoli, 2005; Mytton, 1999), including the Netherlands and Korea. People meters are installed and connected to the television sets in households of audience panels. The panel members are asked to register individually every time they watch TV with a separate remote control. While registered, the meters record the channels that are watched for every viewer. The programming per channel per day is analyzed so that additional information about specific programs can be linked to channel watching. Furthermore, the measures of individual viewing behavior can be linked to self-reported individual characteristics of the viewers that are provided by the people-meter company. For each country, the data encompass important periods of changes of the TV landscape.

In 1987, Continu KijkOnderzoek was established to conduct the national television audience research in the Netherlands. Since 2002, this research has been continued by Stichting KijkOnderzoek. The Dutch audience panel consists of a nationally representative sample. The collection of the people-meter data and annual surveys among the panel members was carried out by Intomart GfK. Programming data from the major Dutch cable channels were collected by TV Times. The Dutch sample included one week in March of every second year from 1988 to 2006. This time span covers major transformations of the national TV market: the introduction of commercial TV and subsequent expansion of available channels with increasing competition between national news programs. In contrast to peaks during summer and winter months, TV viewing in March is only marginally influenced by weather or vacation time. Moreover, viewers were accustomed to major programming changes that are typically implemented in September. The chosen weeks do not overlap with national elections or other exceptional public events. The total sample size of Dutch viewers aged 15 years and older was \( n = 17,080 \) (for a more detailed methodological description, see SKO, 2008).

The Korean audience panel came from AGB Nielsen Media Research Korea’s (AGB Nielsen’s) people-meter households. The data were collected from the households that subscribe to cable television, and minute-by-minute television viewing behavior was recorded at the individual level. Data collection occurred during the third week of April from 2001 to 2007 at two-year intervals in the Seoul market, which is the largest market in Korea. The sample years were chosen considering the recent growth of cable television in Korea. Previous research pointed out that the development of cable television in Korea can be characterized as having an infant period (2001), a take-off period (2003), and a mature period (since 2005) in terms of the increase in the combined shares of all available cable channels (Cho & Kang, 2009). Following this approach, this study examined individuals’ news viewing patterns at two-year intervals from 2001 to 2007. The sample weeks were chosen to avoid sudden changes in programming due to atypical events that might have affected normal television viewing behavior. The total sample size of Korean viewers aged 15 years and older was \( n = 7,246 \) (for a more detailed methodological description, see Nielsen Korea, 2016).

**Measures**

*News exposure.* For the Netherlands, the duration in minutes that a viewer spent watching news programs during one week was calculated. Short incidental instances of watching news programs for less than five minutes were excluded from this measure. News watching included the complete national news programming broadcast on public-service channels and, if available in a sample year, on commercial
channels. The public-service NOS Journaal was the only national news program until 1989, when the first commercial newscast, RTL Nieuws, was launched. From then on, these two programs with their main evening bulletins as well as several reruns and short bulletins each day dominated the TV news market. Additional programs were introduced throughout the years, leading to a remarkable increase of the total volume of news programming after 1999.

For Korea, total news exposure was calculated by summing individuals' time spent on terrestrial prime time news programs and cable news channels during weekdays. Among terrestrial television, only weekday prime time news programs of the four terrestrial channels (KBS1, KBS2, MBC, and SBS) were included in the measure because (1) prime time news programs are the main news offerings that deliver the most salient issues of the day; (2) these programs were scheduled in the same time slot (9 to 10 p.m. for KBS1 and MBC, 8 to 9 p.m. for KBS2 and SBS) for several years and were available to almost all television households in Korea, making them less likely to be affected by audience awareness or channel coverage; and (3) the data obtained from AGB Nielsen were the aggregation of minute-by-minute people-meter data in a one-hour window (i.e., 24 one-hour windows per day), so prime time news programs that run for an hour per day made the analyses more accurate and consistent. Cable news channels included one general news channel (YTN), three business news channels (MBN, WOW-TV, Business&-TV), one policy channel (KTV), and one National Assembly channel (NATV) as they became available in the cable television market during the sample years.

Channel repertoire. The repertoire of channels that a viewer used comprised the number of channels watched for at least 10 minutes during one week. This definition comes from the concept of one of the secondary channel repertoires by Neuendorf, Atkin, and Jeffres (2001).

Sociodemographics. Additional viewer characteristics derived from the survey data were age, gender, education, and income. For Korea, AGB Nielsen provided age as a categorical variable consisting of five-year intervals (i.e., 15–19 and 20–24 years). Accordingly, the same age grouping was applied to the Netherlands. Young people’s life patterns differ between the two countries, with Dutch people typically moving out of their parents’ homes at an earlier age than young people in Korea. For comparison, we applied a relatively broad definition of young viewers comprising those between ages 15 and 24. Viewers 25 years and older were subsumed under the group of older viewers. The Dutch sample included 1,983 viewers in the group aged 15 to 24 years ($n = 118$ in 1988, 185 in 1990, 163 in 1992, 174 in 1994, 216 in 1996, 208 in 1998, 196 in 2000, 210 in 2002, 209 in 2004, and 304 in 2006). The Korean sample included 1,028 viewers of this age group ($n = 221$ in 2001, 230 in 2003, 251 in 2005, and 326 in 2007).

The following characteristics were added in the analyses as control variables. For both countries, education initially comprised six categories that reflected the national educational system. Because of unequal distributions among young people, education was recoded with three categories: middle school education and lower, high school education, and college education and higher. Household income was measured with five categories for Korea and with 10 categories for the Netherlands that were subsequently merged to five categories.
Analytical Procedures

Because many viewers avoided news programs completely, the distributions of the measures of news exposure were right-skewed; therefore, log transformations were performed before hypothesis testing. H1 was formally tested by comparison of means. The mean difference between news exposure of younger and older viewers over time was compared. For every viewer in the group aged 15 to 24 years, the difference in news exposure and the mean news exposure of all older viewers in a given year was calculated. This difference measure was then used for a one-tailed t test between the oldest and the most recent years. Multiple regression analysis was conducted on the log-transformed measures of news exposure of young viewers to test H2 and H3. Dummy variables of the sample years and a viewer’s channel repertoire were used as independent variables. Sociodemographics were included as control variables. Finally, RQ1 was answered descriptively.

Results

Total TV News Viewing by Young Adults Over Time

We found similar trends regarding television news consumption by young people in the Netherlands and Korea. Figures 1 and 2 present the average time that younger and older people spent watching news programs in one week throughout the entire sample periods in both countries. In the Netherlands, the average level of news exposure among young viewers 15 to 24 years old decreased from 49.3 minutes per week (SD = 44.17) in 1988 to 36.9 minutes (SD = 48.72) in 2006. In Korea, news consumption by young viewers 15 to 24 years old dropped from an average of 30.6 minutes (SD = 48.81) in 2001 to 18.1 minutes (SD = 32.28) in 2007.

Figure 1. Average duration of news exposure of younger and older viewers in Korea over time.
More detailed examination of the entire research periods in both countries, however, revealed different developments over time. News consumption by young viewers in Korea showed a linear decline throughout the period of a rapid increase in the number of available channels. On average, Korean young viewers watched news for about 30 minutes during weekdays in 2001, but spent only 18 minutes in 2007. In contrast, in the Netherlands, we could discern three different phases of the transformation process. After the introduction of national commercial channels in 1988, levels of news exposure for young people dropped from about 50 minutes per week to about 22 minutes in 1990, followed by a gradual decrease to about 17 minutes in 1998. With the expansion of national news programming after 2000, young viewers spent more time watching the news. A peak was reached in 2004 with an average of 44 minutes per week, followed by a decrease to about 37 minutes in 2006.

**Increasing Gaps in TV News Viewing Among Younger and Older Adults Over Time**

In Korea and the Netherlands, adult viewers spent more time watching news programs after 2000 and 2001, respectively. In Korea, levels of news exposure decreased again after 2003, whereas the overall increase continued in the Netherlands. The comparison between younger and older viewers in both countries revealed that the decline in news consumption was greater for younger viewers than for older viewers. To test whether the gaps in news viewing between age groups increased over time, news exposure of young viewers 15 to 24 years old was compared with the exposure time of their counterparts 25 years and older. In 1988, young viewers in the Netherlands spent, on average, 22.1 minutes per week less on news viewing ($SD = 44.17$) than adult viewers. In 2006, this difference amounted to 79.6 minutes ($SD = 48.72$). The difference between those two years was significant, $t(420) = 13.06$, $p < .001$. In Korea, younger viewers spent, on average, 47.7 minutes ($SD = 48.81$) less on news watching in 2001. In 2007, this difference increased to 60.5 minutes ($SD = 32.28$). Again, the difference between the two
years was significant, $t(545) = 3.63$, $p < .001$. Consequently, H1 was confirmed for both countries. The difference in TV news viewing between young adults and their older counterparts increased with an increase of the number of available channels.

**News Exposure in Changing Program Environments**

Multiple regression analyses of news exposure among young people were conducted to formally test the decline of exposure levels over time and the influence of individual channel repertoires on news consumption (Table 1). It should be noted that both models were highly similar in the proportion of variance explained as well as in the magnitude and direction of the regression coefficients.

For both countries, all coefficients of the dummy variables for year were negative and significant. In other words, news consumption by young viewers was significantly lower in all later sample years compared with the first year. Consequently, H2 was confirmed for both countries. In the Netherlands and Korea, news viewing among young adults has significantly decreased as the number of available channels has increased. The influence of channel repertoires was significant in both models, showing a positive relationship to news exposure. Contrary to our expectation, bigger channel repertoires were associated with higher levels of news exposure. Consequently, H3 could not be confirmed. The more viewers made use of increasing choice opportunities by watching a larger number of channels, the higher their news consumption.

Age was positively related to news exposure for both countries; therefore, the group 20 to 24 years old watched, on average, more news than those 15 to 19 years old. Gender and income depicted negative relationships to news exposure for the Netherlands but not for Korea. Dutch young men and those living in households with higher incomes spent slightly less time watching the news. No influence of education could be found across countries.

Regarding RQ1, our data revealed a mixed picture. In comparison, young viewers in Korea showed lower levels of television news exposure compared with young viewers in the Netherlands (see Figures 1 and 2). The difference between younger and older adults, however, was larger in the Netherlands, and the increase of the gap between younger and older adults was greater in the Netherlands than in Korea.
Table 1. Multiple Regression Models of Log-Transformed Duration of News Exposure Among Young Viewers (Aged 15 to 24 Years).

<table>
<thead>
<tr>
<th>Year</th>
<th>The Netherlands</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>1990</td>
<td>−0.62</td>
<td>0.09</td>
</tr>
<tr>
<td>1992</td>
<td>−0.73</td>
<td>0.09</td>
</tr>
<tr>
<td>1994</td>
<td>−0.80</td>
<td>0.09</td>
</tr>
<tr>
<td>1996</td>
<td>−0.92</td>
<td>0.09</td>
</tr>
<tr>
<td>1998</td>
<td>−1.02</td>
<td>0.09</td>
</tr>
<tr>
<td>2000</td>
<td>−1.19</td>
<td>0.10</td>
</tr>
<tr>
<td>2002</td>
<td>−0.73</td>
<td>0.09</td>
</tr>
<tr>
<td>2003</td>
<td>−0.82</td>
<td>0.10</td>
</tr>
<tr>
<td>2004</td>
<td>−0.82</td>
<td>0.10</td>
</tr>
<tr>
<td>2005</td>
<td>−0.86</td>
<td>0.09</td>
</tr>
<tr>
<td>2006</td>
<td>−0.86</td>
<td>0.09</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.24</td>
<td>0.04</td>
</tr>
<tr>
<td>Gender (male)</td>
<td>−0.10</td>
<td>0.04</td>
</tr>
<tr>
<td>Education</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Income</td>
<td>−0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>Channel repertoire</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Constant</td>
<td>3.37</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Adjusted R²: .196 (The Netherlands), .172 (Korea)
n: 1,983 (The Netherlands), 1,028 (Korea)

Note. In the Dutch model, 1988 is the year of reference for the dummy variables for year. In the Korean model, 2001 is the reference year.

*p < .05, **p < .01, ***p < .001

Discussion

This study analyzed changes in TV news viewing among young people during a period of transition from low- to high-choice viewing environments. The decline in news media use by young people has raised concerns about young people maturing into less informed and less active citizens. By looking at the Netherlands and Korea, which experienced similar changes in their television markets, we examined how the expansion of viewing options has affected young people’s news-viewing behavior. The national TV markets of both countries moved from a public broadcasting system with a restricted number of channels to the coexistence of public and commercial TV and growing competition from cable channels. Using people-meter data at the individual-viewer level from both countries, we studied how these changes in the TV landscapes affected news consumption of young adults.

The results showed that young adults spent less time watching TV news programs when more alternative channels became available in both countries. This decline in news consumption could be clearly distinguished from overall trends in news exposure as the difference in news viewing between younger
and older viewers increased over time. However, the older cohorts among the young viewers watched more news programs than the younger cohorts. This indicates that young people developed news-viewing habits between ages 15 and 24 years. With more choices available, the development of viewing habits in high-choice environments might start later and take longer than in low-choice environments.

Contrary to the assumption that more choice opportunities would lead to more news avoidance (Ksiazek et al., 2010; Prior, 2007), we found that an increasing abundance of channels may not be the ultimate reason why young people do not watch the news. With a greater number of viewing alternatives, young people in Korea watched the news less often than their Dutch counterparts; however, more choice opportunities did not lead to a greater gap between younger and older adults, indicating that the relationship of increasing viewing opportunities and decreasing news exposure might not be linear. In addition, the positive influence of channel repertoires shows that those young viewers who watched a greater variety of channels spent more time watching news programs as well. Consequently, growing diversity on the supply side can offer opportunities for viewers to encounter news programs more frequently, increasing what scholars call “incidental exposure” (Lee, 2009; Prior, 2007; Tewksbury, Weaver, & Maddex, 2001). Viewers who restrict their choices to a limited channel repertoire might more often choose special-interest channels that do not broadcast national news programs. Young viewers in the Netherlands have been found to prefer commercial channels over public broadcasting (SKO, 2011), making it less likely that those viewers will encounter news programs accidentally.

Although this study focused on an era before television news became available on various online platforms, similar patterns may be observed if we expand the context to multiplatform media usage. According to a report by the Pew Research Center, people who access news using multiple devices read news more frequently than those who only read news using either a desktop or laptop computer (Mitchell et al., 2012). With the growing adoption of smartphones and tablets among younger demographics, this trend—along with the current finding that media surroundings that allow incidental exposure to news increases the time spent on news—can be a positive sign of young people’s overall news media usage.

In addition to providing greater diversity of information, the Internet has created various possibilities for watching television content via computer or mobile devices. Specifically, young people have taken up this convergence culture and revert less to traditional screen viewing (Metzger & Flanagin, 2008; Mitchell, Gottfried, & Matsa, 2015). Consequently, media convergence may have positively affected young people’s news exposure. For our research period, however, traditional screen viewing was the primary news source for young people in the Netherlands (Drok & Schwartz, 2009; Van Cauwenberge et al., 2013). In Korea, the Internet has become a significant source of information, given its rapid and widespread adoption (KPF, 2008), but traditional television is reported as the second most important source of information among youth.

The present research focused on the preceding historical period of change from a low- to high-choice viewing environment in the Netherlands and in Korea. Extending this research by looking at the subsequent period of media convergence will provide more insight about recent developments in young people’s news exposure. Recent studies have discussed the role of social media in promoting young people’s interest in news by encouraging them to discuss news topics with their social connections.
Anke Wonneberger & Su Jung Kim


(Erentaitė et al., 2012). Social media also helps young audiences become “prosumers” of news content (Holton, Coddington, Lewis, & Gil de Zúñiga, 2015) by producing their own news and sharing it via various platforms such as Facebook, Twitter, YouTube, and Reddit.

**Limitations and Suggestions for Future Research**

Although the highly accurate and comparable data on news consumption can be considered a strength of this study, people-meter data have also been criticized for several reasons (e.g., Ettema & Whitney, 1994; Napoli, 2005; Webster, Phalen, & Lichty, 2006). The accuracy of the measures depend on the cooperation of panel members who have to register with the system each time they watch TV. Coincidental checks for the Netherlands (SKO, 2008) conducted by telephone yielded accuracy of 95% for viewer registrations. Most important, the level of accuracy did not differ by age or by other individual and household characteristics; therefore, the quality of the data did not differ between younger and older viewers. In addition, the representativeness of the audience samples has been criticized, for instance, concerning the inclusion of minority groups (Milavsky, 1992; Napoli, 2005). The Dutch sample selection includes quotas for ethnic minorities that are controlled and corrected on a monthly basis.

Because of the difference in data availability, a longer period could be analyzed for the Netherlands than for Korea. This might explain why the trends obtained for Dutch viewers were more nuanced compared with the linear decline of news consumption among young adults in Korea. In both countries, however, we found that adults spent more time watching news programs after 2000. One explanation for this result might be an increase in awareness and interest in political news and current affairs after the 9/11 attacks in the United States in 2001 and the following military interventions and economic effects of these attacks. Interestingly, Dutch young viewers followed the trend of increasing news consumption, albeit to a lesser extent than their older counterparts, but young viewers in Korea did not. This might be explained by generally high levels of political interest and awareness in the Netherlands. In a European comparison, the Dutch have been found to consume more political information than citizens of other countries (Tenscher, 2008). Our results, however, indicate that young Dutch people might not keep up with this political culture in the future. Because of the secondary nature of the data used in this study, the influence of motivational factors such political interest could not be examined. Consequently, whether political interest increasingly influences news consumption by young people remains an open question (see, Hopmann, Wonneberger, Shehata, & Hoijer, 2015; Shehata & Strömbäck, 2011).

Despite these limitations, this study was one of the first to explore news consumption by young people over longer periods of time in an international setting. The overall decline in news exposure and growing differences between younger and older viewers provided evidence of generational changes regarding the relevance of political news and current affairs for young citizens. Similar results for both countries may point to relationships that are generalizable beyond these two national contexts. Future research should continue to pay attention to declining news consumption by younger generations and its possible consequences for the functioning of democratic societies.
References


Korean Communications Commission. (2009). *Annual report on the broadcasting industry.* Seoul, Korea: Author. Retrieved from http://www.kcc.go.kr/user.do?mode=view&page=A02160000&dc=K021600008&boardId=1022&cp=1&txt=ALL&searchKey=ALL&searchVal=%EB%B0%A9%EC%86%A1%EC%82%B0%EC%97%85+%EC%8B%A4%ED%83%9C%EC%A1%B0%EC%82%AC&boardSeq=29009


