

Changing Media Preferences?

Comparing the Perceived Importance of Television, Newspapers and the Internet in Finland, 1999-2009

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Abstract

As the Internet provides extensive sources of information and entertainment platforms, traditional forms of media have come under scrutiny ever since the early days of the information and communication technologies (ICTs). In the present article, we examine how media preferences in Finland have changed over the past ten years by focusing on the perceived importance of television, newspapers and the Internet. We use three sets of nationally representative survey data from 1999, 2004 and 2009, respectively, to establish a comparative view of the preferences during this time. Our findings indicate that even though the perceived importance of the Internet has increased during the past ten years, media preferences in general have not changed radically. In addition, we are able to witness clear variations between socio-demographic groups across all points in time. Some of these variations have weakened over time, but not all of them. Broader implications for a changing media landscape are discussed in relation to the results.

Keywords: Internet, television, newspapers, Finland, survey data, media perceptions

Introduction

The emergence of the Internet and other new information and communication technologies (ICTs) in the mid-1990s led to extensive speculation on the potential impacts the new technology would have on various aspects of everyday life. One of these areas of speculation was the position of traditional media, and whether the emergence of the Internet would diminish the role of television and newspapers as central means of information and entertainment. Early research did make a claim that the Internet had undesirable influences on, for instance, social life and community participation (e.g., Kraut et al. 1998; Kubey et al. 2001), as well as speculating about whether the traditional media could indeed fall victim to the emerging new media (e.g., Gilster 1997; Lin 2001). However, later studies on the Internet have held a more positive tone in relation to both social relationships and media preferences (e.g., Mesch & Talmud 2006; Haythornthwaite 2002; Cummings & Kraut 2002; Räsänen 2008). Nonetheless, the Internet has been identified as the first media since television to have a major impact on household leisure-time use preferences (e.g., Robinson et al. 2002; Gershuny 2003).

Although the Internet provides relatively easy access to information and entertainment, one should not make the assumption that it automatically replaces the old media.

For instance, reading the newspaper with your morning coffee or watching television on the couch after work might serve different purposes than streaming TV shows online or having a quick look at the latest news on your mobile (see also Van der Wurff et al. 2008). In fact, television has served for decades as the number one media in most households in terms of leisure-time consumption (e.g., Gilster 1997; Fidler 1997), and contrary to some of the predictions ten years prior, the impacts of the new ICT on television viewing have appeared to be relatively modest. In the American context, for instance, Robinson and Martin (2009) speculate that it is in fact the increasing television viewing that has had a negative impact on the time spent on other traditional media, such as newspapers. In this sense, information reflecting the early impacts of television on newspaper readership, as well on the society, would have been valuable in the context of new the ICTs. Unfortunately, such research appears to be more or less lacking, particularly outside the United States.

In the past, both newspapers and television provided information and entertainment in a pre-set schedule, leaving people with more limited options when it came to accessing different news sources. What this also meant was that news providers had more control over the kind of news people would consume and when. This is no longer the case with the new, or more precisely electronic media, a term coined already in the 1970s (McQuail 1994), because having an Internet connection has made it possible to access information and entertainment around the clock. Equipped with the appropriate devices, one can receive the news as it is published, meaning that users have access to a constant flow of information and multiple providers from which to choose from. Isotalus and his colleagues (2003), for instance, examined how personal digital assistants (nowadays more commonly known as smart phones and tablet computers) would influence news consumption experiences compared to the more traditional media at the turn of the millennium. According to their findings, respondents in the study indicated that they would be willing to “transfer their habits” and instead of reading the newspaper, access the same news using the new portable digital tools (Isotalus et al. 2003: 60). Therefore, examining the media landscape over a period of a decade allows us to take into account to what extent the emergence of new media has impacted the media use landscape in Finland, and whether increasing Internet use has led to changed media habits among Finns.

In order to do so, we use three sets of nationally representative survey data from 1999, 2004 and 2009, respectively, to enable a comparative view of how important the different media were perceived to be during this period. Finland is generally thought to be a forerunner in new technology adoption (e.g., Castells & Himanen 2002), thus the scope of ICT impacts should be well represented in the Finnish data for these years.

Our article is structured as follows. First, we take a look at the changing media landscape from the point of view of the new ICTs. We aim at locating some of the relatively recent changes in the media landscape that the Internet is argued to be primarily responsible. After this, we move on to our presentation of the research questions, data, and methods. The article is concluded with a discussion on the characteristics of the Finns’ media attitudes.

Media Preferences in Finland

Statistics show that, in the early 1980s, more than 90 per cent of Finns aged 15 and over followed at least one newspaper on a regular basis. The statistics were almost identical up to early 1990s, but by the turn of the millennium the situation had changed. Readership among all the age groups had dropped, most notably among teenagers and young adults. Among the 15- to 25-year-olds the proportion of regular newspaper readers dropped by almost 20 per cent (Hanifi 2007). This is an interesting trend to follow, especially when taking online newspapers into the equation. That is, young Finns aged 15-24 were the least active consumers of newspapers, whereas the majority of those aged 45 or older followed at least one newspaper on a regular basis (Hanifi 2009). However, rather than following the traditional newspapers, most 16- to 24-year-olds have been reading online news instead (Statistics Finland 2010a). Thus young Finns who decide to follow the news, seem to do so mostly online. In general, statistics show that, over the past few years, online news has been consumed at an increasing rate by the Finns (see also Skogerbø & Winsvold 2011). In 2008, 69 per cent of all Finns had been reading online newspapers, whereas in 2010 this number had risen to 74 per cent, with young adults between 25-44 years being the most avid readers (Statistics Finland 2009, 2010a). Elsewhere, statistics reveal that in the UK only about half and in the US about 62 per cent of those with Internet access followed news online (e.g., Office for National Statistics UK 2010; Newspaper Association of America 2011).

At the turn of the millennium, Finns perceived both newspapers and television to be far more important media than the Internet, but by 2004 the importance of newspapers and television had declined slightly, whereas the Internet had become increasingly more important (e.g., Räsänen 2008; see also Leung and Lee 2008). Although Hanifi (2009) stated that the newspaper readership has held a rather established position in Finland for most of the 2000s, circulation numbers and advertisement revenues took a deeper downturn in 2009 and 2010 as a result of the global recession (Statistics Finland 2010b; Association of Finnish Newspapers 2011). Moreover, factors such as the changing focus within the industry, along with the financial situation or busy lifestyle of some subscribers, have also been suggested to play a role in the decline (Hujanen 2002; Plambeck 2009). Television viewing, on the other hand, increased steadily between 1994 (137 minutes per day) and 2010 (173 minutes per day) (Finnpanel 2011), despite the increasing Internet usage during this period. This is argued to result from the fact that society is ageing (e.g., Robinson et al. 2002; Jones et al. 2008).

In this context, it is worth noting that the purposes of Internet users in general tend to be rather versatile. According to Statistics Finland (2010a), the most common online activities among 16- to 74-year-old Finns during the past 3 months included sending and receiving emails (77%), online banking (76%), reading online newspapers/following online sites of television channels (74%), searching information regarding possible consumption decisions (74%) and general information (67%). In regards of entertainment, 44 per cent had either listen to radio or watched television online and 42 per cent had listened to music. Forty-two per cent had also been active in a social networking site. Activities such as playing online games (11%) or downloading them from the Internet (7%) were relatively uncommon.

What the statistics indicate is that Finns use the Internet first and foremost for information retrieval, news, and indeed for emailing, banking services and general travel planning.

Entertainment and socializing were also relatively popular user purposes. In terms of the actual share of time (percentage of minutes per media per day) used for media consumption during leisure time in 2009, statistics reveal that television was still by far the most time-consuming media activity in Finland, equalling roughly 35 per cent of overall time per media, whereas newspapers and magazines comprised 13 per cent and the Internet 12 per cent of daily media activity, with very little change over the past five years (Statistics Finland 2009). The Internet was the only media for which use increased during this period.

However, the statistics presented above merely provide information regarding Finns' general media consumption rather than their attitudes towards the different media. Therefore, instead of relying on traditional user statistics, our data provide a unique way of approaching Finns' media needs by asking what media they actually perceive as important. For instance, although Finland had one of the highest Internet penetration rates in the world already in the late 1990s, the perceived importance of the Internet was still relatively low in 2004, when only 20 per cent of Finns perceived it a necessity (Räsänen 2008). Thus, it would seem that the Internet has only recently established a more significant position in the Finnish media landscape.

Data and Methods

Research Questions

In order to examine the perceived importance of the given media among Finns, the following two research questions were formulated:

RQ1: How did the perceived importance of television, newspapers and the Internet evolve among Finns in 1999, 2004 and 2009?

RQ2: What kind of socio-demographic differences existed in media preferences among Finns between the years 1999, 2004 and 2009?

Regarding RQ1, we may note that television and newspapers have had a relatively established position in terms of media preferences in Finland already since the late 1990s (e.g., Räsänen 2008). At the same time, it is possible to argue that, in 1999, the Internet was taking its first steps as a mainstream medium and its impact was still relatively minor. However, by 2004 it had become increasingly more important, and the more recent data should provide additional details on the developments in Internet's position on the Finnish media landscape.

Regarding RQ2, we assume that there will be temporal changes in responses between 1999, 2004 and 2009, and that socio-demographic effects on responses will vary considerably between the years. More specifically, it is likely that socio-demographic distinctions in media preferences were clearest in the 1990s when the new technology was first introduced (e.g., DiMaggio et al. 2001; Fidler 1997). As the technologies became more commonplace in the 2000s, the connections between socio-demographic factors and media preferences probably also began to diminish.

Questionnaire and Measures

Our data consist of responses to three Finnish mail surveys focusing on the Finnish consumer lifestyle: "Finland 1999", "Finland 2004" and "Finland 2009". The sample

sizes varied across the three measurement points: in 1999 it was 2,417 (response rate 61%), in 2004 3,574 (response rate 60%) and in 2009 1,202 (response rate 49%), but all in all the data are directly comparable with each other. The data are repeated in cross-sectional data sets; the surveys included the same questions but were not answered by the same respondents. The samples, however, are comparable across the measuring points. All surveys used simple random sampling, and the samples have been found to represent the citizens of Finland aged 18-75 (for a more detailed description of the data, see Sarpila et al., 2010).

In the surveys, respondents were asked the question “How important (necessary) are the following items in your everyday life?”. The list included a total of 12 consumption commodities and consumer technologies from cars and dishwashers to video games and television. Out of these items, we chose to focus on the following three measures: television, newspapers and the Internet. The reason these three were chosen is because they represent popular forms of both traditional and new media. By examining the perceived importance of newspapers, television and the Internet between the years 1999, 2004 and 2009, we have a basis for establishing a pattern of changes in media preferences during the past decade. The three-point scale on which the perceived importance is measured is the following: 1=“very important”, 2=“slightly important” and 3=“not at all important”. In this way, the media preferences refer to practices that may or may not be realized, but that focus on the relative significance of one medium compared to another.

Our independent background variables consist of age, gender, education, place of residence, and social class. We restrict our examination into these variables, as they are typically seen as the basic determinants of media and ICT use patterns (e.g., Cummings and Kraut 2002; Gershuny 2003; Robinson, et al. 2003; Räsänen 2008). Age was specified in the questionnaire as year of birth; thus it provided a continuous measure. In order to allow parallel comparisons with the other independent measures, age was categorized into four groups: 18-30, 31-45, 45-60, and 60+. This categorization can be seen as reflecting a broad classification of the phases distinguished in adult life. The years from 18 to 30 are often referred to as early adulthood. The next two age groups can be defined as early and late middle age. Finally, people over 60 years of age are often characterized as elderly, because at this age the person is usually entitled to a pension in Finland. Education was measured in the data as vocational education. The classification used consisted of four categories: “unskilled”, “vocational school”, “intermediate level” and “academic degree”. This variable can differentiate the respondents’ educational background both by skill level and by qualification. We also use place of residence as a control variable, as media use patterns often vary between urban and non-urban dwellers (e.g., Rice & Katz 2003; Hanifi 2009). Place of residence was measured in our data simply by asking the respondents to choose their type of residential area. In the questionnaires, there were two options to choose from: “urban/densely populated” and “rural”. We also control for the possible effect of social class. While our social class item is purely a subjective measure of class identity, it does provide relevant information regarding respondents’ experienced social rank. The variable includes four categories: “upper class”, “higher middle class”, “lower middle class” and “working class”. In addition, the variable also had a category labelled as “other”, which included those respondents who were unwilling to label their class position. For the analyses, categories “upper class” and “higher middle class” were merged and re-named as “upper middle class”.

In general, the data allow us to explore structural effects and temporal changes in Finns' media preferences. Disparities in ICT use have been present since the early days of the Internet, and have largely been due to different socio-demographic background factors. For instance, early on education played a major role in Internet adoption, as those with a higher education tended to be more active users. Individuals with a higher education background are often more prone (and often also financially able) to adopt new technologies. Besides education and class, age is also a major determinant, as young adults tend to be far more active in adapting and using the new ICTs than do the older generations (e.g., Wang and Yuk Ting Law 2007; Robinson et al. 2002; Rice & Katz 2003), which also reflects the statistics regarding traditional newspaper readership (where older generations are more active readers). Moreover, education plays a role in terms of television, as those with lesser education are more prone to television viewing than are those with a university degree (e.g., Peacock & Künemund 2007; Räsänen 2008).

Analysis Techniques

The methods of analysis include two different techniques: cross-tabulation and logistic regression. Cross-tabulations are used to offer an overview of the profile of media preferences between the years. Logistic regression models are used for a more specific evaluation of the effect of the selected background variables. Using this technique, it is possible to predict an outcome of preferring a given medium as “very important” (or as a necessity) from a set of independent variables.

The main effects regression models are presented in the analysis. The effects of the independent variables in the models are presented with the odd ratios ($\text{Exp}\beta$), indicating the increase (or decrease if the ratio is less than one) in the odds of being in the examined outcome category when the value of the independent variable increases by one unit (Tabachnick & Fidell 2001:521-3). The statistical significance of the models is indicated by chi square statistics (χ^2). The chi square tests of independence examine the association between the discrete variables in the models. Also the pseudo-coefficients of the determination (Nagelkerke Pseudo R^2) of the models are reported. Basically, a pseudo-coefficient of the determination provides an approximation of the strengths of associations between variables. The Nagelkerke measure is one of the most common coefficients utilized; it describes the amount of variance accounted for in a model (with a range of 0 to 1).

Results

General Profile of Media Preferences

The first task in the analysis was to compare the overall profile of media preferences in 1999, 2004, and 2009. According to Table 1, the perceived importance of newspapers has been on a steady decline over the past ten years. In 1999 newspapers were considered “very important” by 45 per cent of the respondents, in 2004 the share was 43 per cent. In 2009 this share was even less: 39 per cent. At the same time, the share of respondents stating that newspapers were not at all important had risen to almost 10 per cent. Similar measures for television reveal that the pattern has been less consistent. In 1999

approximately 37 per cent considered it very important, in 2004 the same number was 31, but in 2009 it had risen slightly to 32 per cent. However, the share of respondents who considered television not at all important has risen constantly.

Table 1. *Perceived Importance of Television, Newspapers and the Internet in 1999-2009*

Item	Year	“Very important”	“Slightly important”	“Not at all important”
Newspaper	1999	45 (1080)	42 (992)	13 (302)
	2004	43 (1521)	40 (1423)	17 (593)
	2009	39 (465)	38 (455)	23 (267)
Television	1999	36 (850)	51 (1218)	13 (313)
	2004	31 (1083)	54 (1907)	15 (544)
	2009	32 (375)	50 (592)	18 (216)
Internet	1999	7 (168)	27 (662)	66 (1519)
	2004	20 (701)	39 (1369)	41 (1428)
	2009	48 (563)	33 (382)	18 (219)

Note: Results represented as percentages, number of cases in parentheses.

On the other hand, the biggest change in terms of media preferences is seen in relation to the Internet. In 1999 only 7 per cent considered the Internet very important, but in 2004 the share had already risen to 20 per cent, and in 2009 nearly half of respondents (48%) considered the Internet to an important necessity. In 2009 only 18 per cent felt that the Internet was not at all important, whereas in 1999 the same number was dramatically higher: over 65 per cent.

It is obvious that there have been considerable changes in Finns’ media preferences over the past decade. However, we may assume that the patterns of change have been different across various socio-demographic groups. By looking at the basic factors that might influence media preferences among Finns, we discover that age, education and gender all have a significant impact on the preference patterns (see Table 2). Younger respondents show less interest in newspapers in comparison to older age groups. This is probably because, these days, the young consume most of their news online. Education, on the other hand, plays a key role in television watching, as individuals with a lower education are more prone to television viewing than are those with a higher education. Interesting observations can also be found when investigating responses by social class. In particular, differences in the perceived importance of newspapers and the Internet between respondents who identify with the upper middle class versus working class are notable.

In 1999, the Internet was mostly accessed by young adults with a higher education, but by 2009 education and age had become less significant factors. Differences between the social classes, however, appear to remain relatively constant. In 1999, only one per cent of working class respondents considered the Internet to be very important, while as much as 17 per cent of upper middle class respondents did so. In 2009, the respective percentages were 37 for the working class and 59 for the upper middle class. Place of residence is also of minor significance here. In 2009, for instance, urban dwellers were more likely to consider the Internet a necessity than were non-urban dwellers. In general, however, the differences between residential categories tend to be relatively small. Between 1999

Table 2. *Perceiving Newspapers, Television and the Internet as “Very Important” by Independent Variables in 1999-2009*

Item	Year	Age				Education			
		<30	30-44	45-60	>60	Primary	Vocational	Secondary	BA
Newspaper	1999	21 (110)	37 (251)	55 (377)	71 (321)	44 (247)	40 (297)	47 (244)	55 (152)
	2004	15 (107)	32 (278)	55 (622)	67 (457)	40 (319)	41 (502)	46 (365)	45 (258)
	2009	9 (19)	24 (68)	44 (137)	65 (227)	38 (66)	36 (125)	48 (123)	35 (88)
Television	1999	26 (133)	25 (169)	39 (269)	58 (261)	40 (220)	35 (264)	34 (173)	29 (79)
	2004	22 (155)	23 (199)	32 (363)	49 (332)	34 (277)	34 (408)	26 (208)	25 (143)
	2009	13 (29)	23 (63)	31 (96)	50 (174)	41 (70)	32 (116)	34 (86)	19 (47)
Internet	1999	10 (52)	9 (62)	7 (47)	2 (7)	5 (28)	4 (30)	9 (44)	19 (53)
	2004	25 (184)	23 (201)	21 (241)	8 (55)	19 (146)	16 (196)	21 (169)	30 (170)
	2009	63 (135)	54 (150)	49 (151)	34 (114)	39 (65)	43 (153)	53 (136)	63 (160)

Item	Year	Gender		Place of residence			Social class		
		Male	Female	Urban	Non-urban	Other	Working class	Lower middle	Upper middle
Newspaper	1999	46 (492)	44 (551)	45 (789)	47 (265)	37 (166)	42 (295)	49 (324)	53 (264)
	2004	45 (705)	42 (804)	42 (1105)	46 (372)	35 (220)	40 (472)	45 (431)	53 (380)
	2009	38 (194)	41 (266)	38 (320)	42 (107)	30 (54)	38 (145)	39 (135)	46 (121)
Television	1999	38 (407)	33 (415)	36 (629)	35 (197)	29 (131)	36 (254)	38 (248)	39 (195)
	2004	36 (568)	26 (505)	30 (797)	31 (252)	27 (169)	34 (400)	31 (299)	28 (203)
	2009	32 (166)	31 (203)	31 (265)	32 (80)	28 (51)	33 (124)	34 (115)	30 (79)
Internet	1999	9 (93)	6 (73)	8 (135)	6 (30)	7 (30)	1 (9)	7 (42)	17 (84)
	2004	21 (333)	19 (364)	21 (537)	19 (156)	24 (150)	11 (130)	20 (188)	32 (227)
	2009	50 (252)	47 (305)	50 (423)	43 (106)	51 (89)	37 (139)	52 (175)	59 (154)

Note: Results represented as percentages, number of cases in parentheses.

and 2009 the perceived importance of newspapers among all age groups declined, most notably among those under 30 years (21% in 1999 compared to 9% in 2009), however among the older age groups this decline was relatively insignificant. Also, the proportion of those under 30 years who did not perceive newspapers as very important, as compared to those over 60 years of age, has more than doubled over the ten-year period.

In 2009, significantly fewer of those with a higher education considered newspapers to be a necessity. The percentages for those who did were 55 in 1999 and 34 in 2009. A similar trend can also be witnessed by social class, although the decline in newspapers’ importance among the middle classes was not as strong as among the higher educational categories. Other socio-demographic groups did not experience as much change in their preferences. Gender in particular did not play much of a role in the changing newspaper preferences.

Television lost most of its importance among respondents under 30 years (26% in 1999 and 13% in 2009). What is noteworthy is that television lost its importance in most other age groups as well and at about the same rate during the ten-year period. But with regard to education, television retained its position of importance among most levels of education, with the exception of those with a higher level degree (29% in 1999 and in 19% in 2009). Social class does not have a strong effect here at any point in time. The differences between class categories are within a magnitude of ten percentage points each year. Gender differences had all but diminished during this time, as in 1999 the percentage for men was 38 and for women 33. In 2009, however, about 32 per cent of men and 31 per cent of women viewed television as a “very important” necessity.

It appears that significant changes in media preferences can be detected by age, education, social class and gender. Some small differences were also detected by place of

residence. However, the interecine effects of the variables have not been controlled in Table 2. This is why we need to continue our examination by utilizing multivariate tests to see whether there are similar socio-demographic differences and temporal trends in media preferences when the effects of other independent variables are taken into account.

Furthermore, we also conducted a simple cohort analysis comparing the five different cohort groups of respondents born between 1972-1981, 1962-1971, 1952-1961, 1942-1951 and 1932-1941 (not shown in the tables). We were able to compare how respondents in the 10-year age groups perceived newspapers, television and Internet as very important between 1999 and 2009 and also whether the age groups had changed their views in ten years' time. The results indicated that all of the three media followed similar trends in percentages, as shown in Table 2. For instance, 20 per cent of the youngest cohort perceived newspapers as very important in 1999, whereas in 2009 the figure was 13 per cent of the same cohort. Similar to this, the oldest age cohort showed a three percentage point drop between 1999 and 2009. In terms of television, 24 per cent of the youngest cohort perceived television as very important, and in 2009 this was the case among 18 per cent of the respondents. For the oldest cohort, 56 per cent in 1999 and in 51 per cent in 2009 perceived television as very important. As for the Internet, the percentages in Table 2 were almost identical among the different age cohorts. In 1999, 10 per cent of the youngest cohort perceived the Internet to be very important, while 51 per cent of the youngest cohort reported this in 2009. Among the oldest cohort, in 1999 the corresponding figure was only 3 per cent, and in 2009 as much as 27 per cent. Therefore, the different age groups and their attitudes towards different media types followed similar trends, as did the overall attitudes across the decade under study. These observations enabled us to continue our analysis by comparing the three time periods separately.

Regression Analysis of Media Preferences

Our explanatory analysis focuses on each medium separately. We estimate likelihoods of preferring a given medium as "very important" between different age groups, educational categories, social class, and genders. We start this examination with the data on newspaper preferences in 1999, 2004 and 2009. Similar analysis will be then conducted for preferences regarding television and the Internet. Because our descriptive analysis has already shown that the independent variables selected are connected with media preferences, we enter all independent variables into the models at the same time. In this way, we can compare the structure of socio-demographic variation in preferences regarding these media. In addition, this analysis also allows us to evaluate temporal trends in perceptions of the different media as necessities. Especially with regard to the 2009 data, where the number of cases is limited, we should note that the predicted outcomes given in the tables are based on only a few observations. The high proportion of these outcomes results naturally from the fact that age and education are included in the same model. For this reason, we need to be cautious when interpreting the structure of socio-demographic variation.

Table 3 shows logistic regression models for newspapers in 1999 (Model I), 2004 (Model II), and 2009 (Model III). It is obvious that age has the strongest effect each year. Differences between educational categories are also quite prominent. However,

the effects of gender and place of residence are not significant in these models. In addition, social class is a surprisingly weak predictor. It has a notable effect only in the 2004 data. The reason why social class is not a stronger predictor than this is that the effect of education is also adjusted in the model. Despite this, however, upper middle class respondents tend to rate newspapers as a very important medium more often than do respondents in the other class categories.

Table 3. Odds Ratios for Perceiving Newspapers as “Very Important” in 1999-2009, Logistic Regression Models with chi square coefficients (χ^2)

Main effects	1999 Model 1, Exp β	2004 Model 2, Exp β	2009 Model 3, Exp β
Age, χ^2	250,0***	495,6***	201,1***
<30 years	0.10 (0.18)***	0.08 (0.14)***	0.04 (0.34)***
30-44 years	0.20 (0.16)***	0.21 (0.12)***	0.13 (0.22)***
45-60 years	0.45 (0.16)***	0.59 (0.11)***	0.40 (0.19)***
>60 years (a)	1	1	1
Education, χ^2	12,8**	7,6 (ns)	5,0 (ns)
BA	1.71 (0.18)**	1.40 (0.14)*	1.44 (0.29) (ns)
Secondary	1.33 (0.15) (ns)	1.22 (0.12) (ns)	1.44 (0.26) (ns)
Vocational	0.97 (0.13) (ns)	1.03 (0.11) (ns)	0.94 (0.24) (ns)
Primary (a)	1	1	1
Gender, χ^2	1,0 (ns)	2,1 (ns)	3,0 (ns)
Male	1.11 (0.10) (ns)	1.12 (0.08) (ns)	0.76 (0.16) (ns)
Female (a)	1	1	1
Place of Residence χ^2	0,4 (ns)	0,4 (ns)	0,1 (ns)
Urban	1.08 (0.12) (ns)	1.02 (0.09) (ns)	0.94 (0.18) (ns)
Non-urban (a)	1	1	1
Social class, χ^2	10,7*	26,4***	6,0 (ns)
Other	0.61 (0.16)**	0.54 (0.13)***	0.58 (0.28) (ns)
Working class	0.68 (0.16)*	0.60 (0.12)***	0.60 (0.23) (ns)
Lower middle	0.83 (0.15) (ns)	0.74 (0.12)**	0.73 (0.22) (ns)
Upper middle (a)	1	1	1
χ^2 (model)	289,1***	558,2***	224,3***
df	11	11	11
Pseudo R²	0.18	0.22	0.29

Note: Results represented as odds ratios (Exp β), standard errors in parentheses; *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; (ns) = $p > 0.05$; (a) = reference category.

As expected, the parameter estimates indicate that the younger the individual, the less likely he or she is to perceive newspapers as a very important medium. In fact, respondents under 30 years are over ten times less likely than those over 60 years to report this. Findings are consistent over the time period covered. We can thus argue that the disparities between age categories have not weakened at all. On the contrary, the difference between the oldest and the youngest respondents has probably grown stronger.

When examining the results across educational categories, we see a clear pattern as well. The odds of perceiving newspapers as very important increase relatively steadily when moving from the lowest to the higher educational categories. The difference between the two lowest categories is not significant, however. Odds ratios for reporting newspapers as a necessity vary between 1.7 and 1.4 against 1.0 when comparing the highest and the lowest educational categories. It appears that the effect of education has

decreased somewhat from the late 1990s. In 2009, education is no longer significant. But all in all, the structural differences in terms of age have remained relatively similar over the years. The explanatory proportions of the models indicate that considerable shares of the total variance of newspaper preferences can be explained each year.

Next, we take a look at how Finns have perceived the importance of television between 1999, 2004 and 2009. Three logistic regression models for television preferences are given in Table 4. The first observation in this table is that age clearly has the strongest effect. The youngest respondents are approximately three to five times less likely than the oldest ones to perceive television as a very important medium. These findings are understandable given that it is the oldest consumers who spend most time watching television (e.g., Gershuny 2003; Robinson et al. 2002). The structure of variation between the age categories is similar across the three data sets.

Table 4. Odds Ratios for Perceiving Television as “Very Important” 1999-2009, logistic Regression Models with chi square coefficients (χ^2)

Main effects	1999 Model 1, Exp β	2004 Model 2, Exp β	2009 Model 3, Exp β
Age, χ^2	118,4***	126,6***	64,4***
<30 years	0.23 (0.16)***	0.29 (0.13)***	0.16 (0.27)***
30-44 years	0.24 (0.15)***	0.33 (0.12)***	0.36 (0.21)***
45-60 years	0.45 (0.15)***	0.51 (0.11)***	0.53 (0.19)***
>60 years (a)	1	1	1
Education, χ^2	9,2*	6,2 (ns)	15,4**
BA	0.58 (0.19)**	0.78 (0.14) (ns)	0.35 (0.28)***
Secondary	0.84 (0.15) (ns)	0.80 (0.12) (ns)	0.59 (0.25)*
Vocational	0.94 (0.13) (ns)	1.00 (0.12) (ns)	0.74 (0.22) (ns)
Primary (a)	1	1	1
Gender, χ^2	4,7*	28,3***	0,0 (ns)
Male	1.24 (0.10)*	1.54 (0.81)***	0.97 (0.15) (ns)
Female (a)	1	1	1
Place of residence χ^2	1,3 (ns)	3,4 (ns)	0,8 (ns)
Urban	1.15 (0.12) (ns)	1.19 (0.10) (ns)	1.18 (0.18) (ns)
Non-urban (a)	1	1	1
Social class, χ^2	9,4*	1,9 (ns)	5,5 (ns)
Other	0.63 (0.17)**	0.94 (0.14) (ns)	0.72 (0.27) (ns)
Working class	0.69 (0.16)**	1.09 (0.12) (ns)	0.61 (0.23) (ns)
Lower middle	0.82 (0.15) (ns)	1.07 (0.12) (ns)	0.88 (0.21) (ns)
Upper middle (a)	1	1	1
χ^2 (model)	149,5***	186,1***	93,6***
df	11	11	11
Pseudo R²	0.10	0.08	0.14

Note: Results represented as odds ratios (Exp β), standard errors in parentheses; *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; (ns) = $p > 0.05$; (a) = reference category.

Education, on the other hand, has a somewhat weaker impact here when compared to the analysis of newspaper preferences. While this is true, we can also observe an interesting temporal trend. In the 1999 data, the differences between educational categories were quite weak. In 2004 the differences became insignificant, but in 2009 they were significant again. The results indicate that those in the highest educational category (BA or higher) are more likely than less educated individuals to perceive television as a necessity. This interpretation does not apply to other education categories (differences are

not statistically significant at the $p < 0.01$ level). Examination of results by gender also reveals interesting temporal trends. Men were slightly more likely than women to rate television as very important in 1999, and even more so in 2004. By 2009, however, this difference has disappeared altogether. Social class had a weak effect in 1999, indicating that working class respondents and those belonging to the category ‘other’ considered television less important than did the middle classes. The effect is no longer significant in 2004 or 2009, however. Place of residence is not significant at all. In addition, we may note that the explanatory shares for the models are relatively modest each year, with less than 15 per cent of the total variance accounted for.

Table 5. Odds Ratios for Perceiving the Internet as “Very Important” in 1999-2009, logistic regression models with chi square coefficients (χ^2)

Main effects	1999 Model 1, Exp β	2004 Model 2, Exp β	2009 Model 3, Exp β
Age, χ^2	20,6***	69,7***	23,9***
<30 years	4.72 (0.42)***	3.24 (0.18)***	2.76 (0.21)***
30-44 years	4.24 (0.42)***	2.89 (0.17)***	1.56 (0.19)*
45-60 years	3.06 (0.43)**	2.77 (0.17)***	1.69 (0.19)**
>60 years (a)	1	1	1
Education, χ^2	14,1**	4,7 (ns)	13,7**
BA	2.15 (0.28)**	1.15 (0.15) (ns)	2.16 (0.24)***
Secondary	1.17 (0.28) (ns)	0.90 (0.14) (ns)	1.88 (0.23)**
Vocational	0.82 (0.29) (ns)	0.88 (0.13) (ns)	1.26 (0.21) (ns)
Primary (a)	1	1	1
Gender, χ^2	11,3***	4,1*	3,7 (ns)
Male	1.84 (0.18)***	1.21 (0.09)*	1.31 (0.14) (ns)
Female (a)	1	1	1
Place of residence χ^2	0,1 (ns)	0,2 (ns)	0,2 (ns)
Urban	1.06(0.24) (ns)	0.95 (0.11) (ns)	1.07 (0.17) (ns)
Non-urban (a)	1	1	1
Social class, χ^2	49,8***	77,4***	5,4 (ns)
Other	0.44 (0.25)***	0.70 (0.14)**	0.76 (0.24) (ns)
Working class	0.11 (0.38)***	0.31 (0.14)***	0.62 (0.21) (ns)
Lower middle	0.40 (0.23)***	0.58 (0.12)***	0.76 (0.19) (ns)
Upper middle (a)	1	1	1
χ^2 (model)	142,4***	180,1***	61,4***
df	11	11	11
Pseudo R²	0.17	0.09	0.09

Note: Results represented as odds ratios (Exp β), standard errors in parentheses; *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; (ns) = $p > 0.05$; (a) = reference category.

The last medium analysed was the Internet. Table 5 shows three logistic regression models regarding Internet preferences. Age and education seem to have the strongest effects, while differences by gender are clearly weaker. Again, the effect of place of residence is not significant here at all. What is more noteworthy, however, is that the effects of some variables have weakened over time. Social class was a particularly strong predictor in 1999 and 2004, but it became insignificant in 2009. In 1999, respondents in the upper middle class category were nine times as likely as working class respondents to report the Internet as very important. Similarly, in 1999 the most educated respondents were nearly four times as likely to perceive the Internet as very important compared

to the least educated ones. In 2004, however, the difference decreased considerably. In 2009, the differences between educational categories are again as clear as they were in 1999. The findings are interesting also for age and gender. In 1999, men and younger respondents were more likely than women and older respondents to consider the Internet very important. In the 2000s, they are less and less likely to do so. Gender differences are no longer significant in the 2009 data. Despite this, it is reasonable to argue that age, gender, social class and education are still connected with Internet preferences. The explanatory proportions show that quite modest shares of the variance in Internet preferences can be explained each year.

The main effect models were used to compare the significance of the effects of socio-demographic variables on media preferences in 1999, 2004, and 2009. Further analyses were also conducted to determine interaction effects among the independent variables. No significant interactions (at the $p < 0.01$ level) were found, which means that our interpretations based on main effect tests remain valid. We can conclude that newspaper and Internet preferences can be predicted rather efficiently using the selected variables. In particular, age and education continue to provide strong sources of variance for these two variables. Television preferences can be mainly explained by respondents' age. In addition to these findings, some interesting temporal trends connected to the importance of the Internet were also detected in the analysis. Moreover, one of the most important observations was that class-based social status associations measured with the media preferences have clearly weakened in the 2000s.

Conclusions and Research Implications

Drawing from three comprehensive data sets concerning media preferences in Finland, the present study examined how the emergence of the new ICTs, the Internet in particular, has influenced the Finnish media landscape during the past decade. We focused on three different media: television, newspapers and the Internet. According to our findings, it is possible to conclude that different socio-economic factors such as age and education influenced media preferences over the past decade. Older people tend to assign traditional newspapers a higher value than online news, whereas young adults tend to favour online newspapers. Television has been able to hold its position as the favourite medium, but those with a higher education have decreased their television viewing, although the ageing society in general watches more and more television. Even though the perceived importance of the Internet, in all age, education and gender groups has increased during the past ten years, media preferences in general have not changed radically. At the same time, however, it is obvious that Finns' media preferences are not associated with class identities as much as they were in the late 1990s and early 2000s.

It is obvious that the findings have several implications for ageing societies, as the older age groups appear relatively unwilling to change their media habits. Perhaps we could also note here that, a decade ago, DiMaggio et al. (2001) made profound reflections on the social implications of the Internet during its early days. Even though we have witnessed a host of new themes, such as the Web 2.0, smart phones and social media, the same economic and socio-demographic disparities persist (e.g., Hargittai & Hsieh 2010; Stern et al. 2009). Similar to our results, for instance, at the time the Internet had a

rather minor overall impact on media consumption in general, as both printed media and television have been able to maintain their positions relatively well. Yet the only major differences appear with the digital divide, which has narrowed significantly due to the almost global availability and affordability of high speed Internet access (DiMaggio et al. 2001: 311-2; Stern et al. 2009). However, a host of different experts have created an image of the Internet as a source of direct competition with the more traditional media, thus forcing them to seek new ways to both fund their existing services and increase their popularity and profitability.

After acknowledging this, we should stress that Finns have not dismissed the value of the traditional media. Although the new ICTs do add a host of new dimensions to information and entertainment consumption, the traditional media manage to operate alongside the new media rather well. In this sense, the social implications of the Internet, and the value of it, are largely produced within the domain itself, and often without proper justifications. Therefore, the question is not so much one of old versus new media, but rather old and new in relation to the current media landscape.

As the official statistics generally focus solely on penetration rates, the findings of the present study provide new information on how the different media were actually valued in Finland over the past decade. At the same time, however, as the results rely on a subjective measure of the importance of the given media, addressing such preferences from alternative perspectives is recommendable in further investigations. It is also evident that the response rate in survey studies seems to be in significant decline, with over a 10 percentage point drop between 2004 and 2009. However, because the samples have been found to be relatively representative in terms of the research population, there should not be any major bias in our estimated differences between population groups. Finally, the present study only covers Finland, thus a cross-national survey looking at similar statistics would provide an interesting case for examining the more widespread impacts of the new ICTs.

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