

VERONIKA KALMUS, ANU MASSO AND MARJU LAURISTIN
University of Tartu

Preferences in media use and perception of inter- generational differences among age groups in Estonia: A cultural approach to media generations

ABSTRACT

This article adopts a cultural approach in order to provide an empirical grounding to the multidimensional concept of media generations. Data from the representative survey 'Me. The World. The Media', conducted in autumn 2011 among members of the Estonian population aged 15–74 (N=1510), are used to map similarities and distinctions among four age groups with regard to the use of media technologies and channels, format and topic preferences, spatial orientations of media use, and attitudes towards the Internet. The findings demonstrate significant and multifaceted differences between the age cohorts, suggesting that in addition to the ascent of new media technologies, broader social and cultural changes need to be considered in interpreting generational groups' relations with the media. The study partially confirms the hypothesis that media experiences shared with members of another media generation are related to a weaker perception of inter-generational gaps.

KEYWORDS

media generations
media use
generation gap
lifeworld
transition culture
Estonia

INTRODUCTION

In the highly mediated societies of the twentieth and twenty-first centuries, the emergence of various media (technologies) has presumably played a significant role in common experiences of different age groups during their formative years. The media technology and its dominant uses, which an individual gets used to during his or her childhood and youth, can be expected to be the type of media that 'one keeps a special relation with for the balance of one's life' (Bolin and Westlund 2009: 109). Based on this assumption the concept of 'media generations' appears, differentiating, for instance, between the radio generation, the black and white television generation, and the Internet generation (Volkmer 2006). Moreover, present-day children and young people are often defined by their relationship to the media technology they embrace from their childhood as a variety of labels, such as 'the digital generation' (Papert 1996), 'the Net generation' (Tapscott 1998) and 'digital natives' (Prensky 2001) are used to signify supposedly common characteristics of this age cohort. However, these classifications can be criticized for attributing too powerful a role to technology or a particular medium.

In this article we adopt a *cultural conception* of media generations (Aroldi and Colombo 2007; Vittadini et al. forthcoming), according to which neither the development of media technologies or people's ages are relevant in themselves. The cultural approach treats media generations as a multidimensional category that needs to be analysed as closely related to different factors such as positioning in the lifespan, identification with a set of values shared with other members of the same generation, the development of the media system, the phases of technological innovation, processes of domestication and incorporation of technologies and media products, and broader structural changes that affect the social and cultural system (Aroldi and Colombo 2007). Membership of a media generation is defined by 'the fact of having the same age and having to confront the same cultural panorama' (Aroldi and Colombo 2007: 36). Accordingly, in addition to media technologies and their dominant uses experienced during one's formative years, a more nuanced picture of 'media repertoires' (Hasebrink and Popp 2006) or 'media diets' (Aroldi and Colombo 2007) is needed to conceptualize and describe media generations.

The first aim of this article is to map similarities and distinctions among different age groups in Estonia not only with regard to their use of media technologies and channels, but also in terms of format and topic preferences, spatial orientation, and attitudes towards new media technologies (the Internet), to provide a stronger empirical grounding to the multidimensional concept of media generations. We assume that different generations' relations with the media in Estonia are influenced by overall transformations in the sociocultural atmosphere, largely related to the shift from a communist to a capitalist system.

According to the very logic of the concept of media generations, similar and shared experiences with the media during formative years bring people together (Bolin and Westlund 2009), serving as a basis for generational identity. Conversely, different media experiences and 'particular media consciousness produce media gaps which separate people' (Gumpert and Cathcart 1985: 23). Shared 'discursive practices' among members of a generation establish 'generational semantics' and the generational 'generalized other' (Corsten 1999), creating distance between people who belong to

different generations. However, a common ground still exists: 'the exchange between the generations also takes place through the sharing of these different semantics' (Aroldi and Colombo 2007: 39). Thus, we may assume that media experiences and media consciousness shared with members of another media generation may reduce perceived distances between generational groups, and vice versa, a weaker perception of generational gaps fosters uses of the media more common to another media generation. The second aim of this article is to test this hypothesis by analysing how perception of inter-generational differences is related to media use preferences and attitudes towards new media technologies.

THEORETICAL BACKGROUND

The problem of defining 'generations'

The concept of 'generation' has several different meanings in the social sciences. While demographers define generations in terms of reproduction cycles, and family sociologists tend to study individuals as members of generations in the *kinship* sense, sociologists of youth and generations focus on generations in the *cohort* sense, or *social generations* (Pilcher 1994), linking the concept with social time and chronological consciousness (Nugin 2010). According to K. Mannheim's ([1928] 1952) conception of the socially constructed nature of generations, the very notion of a generation depends on the existence of shared generational identity and self-consciousness. Although an objective prerequisite for generations to emerge is that the members were born within the same structural and social conditions (or 'generational location' in Mannheim's terms), a generation as a social construct comes into being 'when a formative historical experience coincides with a formative period of people's lives' (Marada 2004: 153). New generations, in Mannheim's sense, form during sudden and significant societal changes, after which young people have to adjust and develop their *habitus* in a new social context. The young are the first age cohort to experience and negotiate the new social conditions during their socialization years (according to Mannheim, having 'fresh contacts' with the emerging phenomena). This makes young people interpret their common social experiences in a way differing from previous cohorts and providing the young their own shared orientations, principles of evaluation and discursive practices (Corsten 1999), all of which create 'generation as an actuality' in Mannheim's terms.

As formative historical events and social changes may unfold in different pace and cover various time spans, the definition of the length of a generation remains vague (Lovell 2007). Mannheim ([1928] 1952) states that a generation can embrace fifteen to 30 years, but such parameters are never strict. Whilst a generation is a social entity, members of which have a certain 'bond' and 'generational consciousness', the connection between the members is not as tight as in groups, the members of which depend on each other. A generation, thus, does not have to be a homogeneous concept, but rather consists of 'generational units' – people who 'work up the material of their common experiences in different specific ways' (Mannheim [1928] 1952: 304). R. Marada (2004) also argues that people filter a shared experience of historical periods or events through their respective socio-economic classes, gender orientations, geographical locations, etc., which supports the concept of generation as a multidimensional category (Aroldi and Colombo 2007).

Generational consciousness and the media

Relationships between generational consciousness and the media are meaningful in a broad sense, representing changes in social divisions and forms of political participation or value shifts going on in societies in the course of generational replacement (Abramson and Inglehart 1995). We can delineate three main ways the media may contribute to forming generational consciousness and constructing borders or bridges between generations.

First, different media technologies and specific 'news cultures' perform distinctive roles as mediators of the world for different age cohorts (Volkmer 2006). According to S. Anderson's (2001) framework, memories of the media as technologies as well as their meaning in the construction of the lifeworld, experienced during one's formative years, have relevance for today's media usage and world perception. We suggest that the function the media perform as mediators of the world during childhood and youth is related to Mannheim's definition of 'generational location', referring to an age group's 'specific range of potential experience, predisposing them to a certain characteristic mode of thought' (Mannheim [1928] 1952: 291), in other words, the cohort's 'mental opportunities' (Corsten 1999).

Second, different media technologies provide distinctive 'communicative affordances' (Hutchby 2001) that influence the patterns and habits of media consumption, including the extent to which the media are used for participation and creative activities, or 'produsage' in A. Bruns' (2006) terms. This aspect of the media parallels Mannheim's notion of 'generation as an actuality', in the sense of participation 'in the characteristic social and intellectual currents of their society and period' (Mannheim [1928] 1952: 304). Moreover, the media offer an inventory of both symbolic resources and spaces where people can share their *habitus* in terms of 'the collection of practices through which generational experiences are manifest' (Edmunds and Turner 2002: 16), thus serving as a powerful channel in constructing and reinforcing generational identity.

Third, the media may function to provide 'bonds' or construct borders between generations and 'generational units' in Mannheim's sense. As 'objects' and as 'things' the media are 'deeply embedded in the symbolic territory of the family' (Volkmer 2006: 15), providing 'actively, interactively, or passively, links between households, and individual members of households [...], and do this (or fail to do this) in complex and often contradictory ways' (Silverstone et al. 1992: 15). Indeed, as D. Buckingham (2003) has noted, in the age of digital media, boundaries between children's and adults' media worlds are simultaneously disappearing and being reinforced. On one hand, children have easier access to media content meant for adults. Furthermore, several studies indicate that older family members have understood that new media technologies may offer them an opportunity to reach out to the young who otherwise seem to be out of reach (Vittadini et al. forthcoming). On the other hand, children increasingly participate in globalizing cultural and social spaces that are inaccessible, even incomprehensible, to their parents and teachers (Buckingham 2003).

Generation as a cultural space: Spatial and interest horizons in media use

Relationships between the media and generational consciousness may also characterize the generation as a certain cultural space. For example, Mannheim's concept of 'generation as an actuality' emphasizes the collective

cognitive background or *horizon* as part of the *lifeworld* of a generation (Corsten 1999). The phenomenological concept of lifeworld may emphasize both the individual-centredness – the reality region wherein a person could be engaged and which a person could change (Schütz and Luckmann [1975] 2003), and the system-orientedness – the lifeworld as a relationship with the social system (Habermas [1985] 1989). We assume that in transition societies the individuals' skills of operating in different lifeworlds can be seen as an important resource due to the emergence of new communication patterns no longer restricted to a particular territory.

On the societal level, changes in the media system and in society as a whole have been occurring synchronously in Estonia. While during the Soviet time Estonian-language journalism played an essential role in cultural resistance to the totalitarian regime, in the initial phase of post-communist transition the media was active in mobilization and integration of people around national values (see Vihalemm 2006 and Opermann 2013 for overview). The media landscape was also changing from a state controlled and one-sided system to a more diverse and fragmented model, resembling the Nordic media system with its social focus. In particular, the media content changed through focusing on joint actions, protection of common interests within the public arena and analyses of the social environment. The opening up of the Estonian media system, however, did not occur smoothly: along with the former understanding of the journalist's important political role in society pressure towards commercialization was a factor. For the moment, certain politicizing tendencies of media content due to the peculiarity of the ownership have moved the Estonian media system to some degree away from the initial model of the beginning of the 1990s.

On the individual level, one of the main changes characteristic to a transition society is a rapidly growing degree of mobility, increasing the individual's informational reach. An earlier study (Masso 2008) reveals that during the transition process the accessibility of the world has increased. However, individuals may become involved in these processes to different degrees. For example, in Estonia the younger generations have more contacts and affinity with Western European and geographically distant countries, showing their ability to benefit from global communication technologies (Masso 2011). In addition to generational differences, ethnic distinctions play an essential role in Estonia. Studies have indicated that the transition has caused a particular spatial disruption among the ethnic minority; moreover, the inter-ethnic differences are increasing in younger generations (Masso 2011). Other studies have found that Russian-speaking young people in Estonia and Latvia differ from their parents to a greater extent than do young ethnic Estonians and Latvians from theirs with respect to value and identity structures, including global orientation (Kalmus and Vihalemm 2008). Thus, transition societies may be described as divided into 'globalized' groups and groups that feel uncertainty in connection with globalization and geo-cultural changes.

In this article we use the spatial orientation of and thematic interests in media use as indicators for analysing the accessibility and reach of various lifeworlds among different generations. In transition societies, both cultural globalization and changed geo-political affiliations create competitive spatial and thematic preferences among individuals. Having these general social changes in mind, we assume that the spatial orientation of and thematic interests in media use among the older and the younger groups of the Estonian population are different not only due to the age effect, but also

because their primary socialization and education occurred under different political systems.

DATA AND METHODS

Our analysis is based on data from a representative population survey 'Me. The World. The Media', carried out by the Institute of Journalism and Communication, University of Tartu, in cooperation with the Saar Poll market research company in autumn 2011. The survey covered the Estonian population aged between 15 and 74, with a total sample size of 1510 (1018 respondents completed the questionnaire in Estonian and 492 in Russian). A proportional model of the general population and multi-step probability random sampling was used. In order to alleviate the differences between the representativeness of the sample model (based on the demographic statistics data) and the survey outcome, the collected data were weighted by the main socio-demographic attributes (gender, age, ethnicity, education and place of residence).

The survey covered media use, interests, values, attitudes towards changes in Estonia during the past ten to fifteen years, lifestyle and life conditions. A self-administered questionnaire, combined with an interview, was used.

For analysing generational differences, the sample was split into four age groups:

- 15–29-year-olds ($n=424$; born between 1982 and 1996, with their formative years falling in the period after Estonia regained independence in 1991; mainly pupils and students or those having lately entered the labour market at the time of the survey);
- 30–44-year-olds ($n=398$, born between 1967 and 1981, having experienced diverse social circumstances during their formative years; mainly engaged in working and raising children);
- 45–59-year-olds ($n=399$, born between 1952 and 1966, with their formative years falling in the Soviet period; mainly engaged in work);
- 60–74-year-olds ($n=289$, born between 1937 and 1951, with their formative years in the Soviet period; many of them pensioners).

The four groups represent age cohorts rather than delineating social generations in Mannheim's sense: the groups are large and internally heterogeneous, and the cut-off points in the continuum of birth years were chosen for statistical reasons. The age groups are of comparable size and thus appropriate for multidimensional statistical analysis. In following A. B. Spitzer's (1973) advice, we also assume that, if age specific differences are historically significant, they will reveal themselves wherever the cut-offs are made in the continuum.

Four main groups of variables are used for quantitative analysis:

- media technologies and channels (of traditional and new media, including social networking sites), TV formats, and attitudes towards the advantages and risks of the Internet
- topic preferences in media use (such as government, statistics, education, family, science, humour, etc.)
- spatial orientations of media use (local, Russian and western, and self-evaluated level of being informed)
- perception of inter-generational differences, measured with an index formed of four pairs of oppositional assertions about the phenomenon

(e.g. 'Young and old people have usually nothing to talk about with each other' vs 'Young and old people mostly find common conversation topics quite easily').

To compare the four age groups in terms of their preferences for media technologies and channels, and their spatial orientations of media use, the sum indexes, based on a number of original single indicators, were calculated. Statistically significant differences in the mean values of these indexes are estimated by using F-ratio in the analysis of variance. For analysing topic preferences in media use, we first use the ranking of single indicators in the four age groups. Second, we employ factor analysis (the principal components method with Varimax rotation) to group the topics into broader categories. We then compare the mean factor scores of the topic factors in the age cohorts to find out more general trends in thematic interests in media use. The relationships between perception of inter-generational differences and media use are analysed using linear regression models.

RESULTS

Media technologies, channels and formats

Our analysis of the usage patterns of different media technologies and channels and perception of the advantages and risks of the Internet reveals significant differences between age groups with regard to how they relate to these technologies (Table 1). The number of different newspapers read regularly increases linearly with age, being highest among the oldest generation group (60–74-year-olds), which reflects their wide scope of interests and a long-held habit of acquiring access to a broad range of print media, including reading newspapers in public libraries. Similarly, the frequency of watching different news broadcasts as well as talk shows and documentaries on TV increases linearly with growing age. TV entertainment appears, probably due to its versatility and appeal to a wide range of audience groups, to be the only format that bridges gaps between generational groups.

When it comes to consuming traditional media (newspapers, radio and TV) in terms of use frequency and the versatility of channels followed, the linear pattern is broken with the oldest group being somewhat less active compared to two preceding age cohorts. In this respect, people aged 30–44 and 45–59 form a rather coherent group. In addition, these two cohorts have in common above-average perception of risks introduced by the Internet.

Another, completely opposite linear tendency unfolds with regard to having home access to different media technologies (the list of questionnaire items mainly includes new media equipment such as mobile phone, smart phone, PC, laptop, tablet, etc.) and using new media for various purposes. In this respect, the two youngest groups (15–29 and 30–44-year-olds) show figures considerably higher than the sample average, confirming 'an often held claim that young people are more inclined to explore and use new media technologies' (Bolin and Westlund 2009: 109). Not surprisingly, the two youngest cohorts are also most eager to celebrate the advantages of the Internet.

The only exception to fully linear patterns of using new media across age groups has to do with reading online newspapers and news portals: 30–44-year-olds are more active than the youngest group in this respect.

Indexes	All	15–29	30–44	45–59	60–74	F	Sig.
N	1510	424	398	399	289		
Number of newspapers read regularly (maximum 5)	1.99	1.57	2.09	2.17	2.23	13.0	.000
Reading newspapers (frequency and versatility; maximum 4)	2.01	1.71	2.14	2.19	2.03	15.8	.000
Listening to radio (frequency and versatility; maximum 4)	3.00	2.61	3.17	3.28	2.97	25.3	.000
Watching TV (frequency and versatility; maximum 4)	3.02	2.92	3.12	3.13	2.89	4.7	.003
Watching TV news (frequency and versatility; maximum 5)	2.92	2.39	2.89	3.17	3.39	63.3	.000
Watching talk shows and documentaries (frequency and versatility; maximum 5)	2.99	2.35	3.00	3.31	3.47	76.5	.000
Watching TV entertainment (frequency and versatility; maximum 5)	2.98	2.90	3.01	3.05	2.95	1.3	NS
Reading online newspapers and news portals (frequency and versatility; maximum 4)	1.84	2.14	2.23	1.77	.96	70.6	.000
Access to media technologies at home (maximum 5)	3.07	3.47	3.32	2.94	2.31	72.0	.000
Computer use (amount and versatility; maximum 4)	2.07	2.72	2.47	1.87	.84	183.8	.000
Internet use (versatility; max 4)	2.01	2.68	2.43	1.75	.81	227.5	.000
Using the Internet for self-expression and communication (maximum 4)	1.90	2.76	2.25	1.52	.70	241.3	.000
Frequency of using different social media (maximum 4)	1.22	2.48	1.32	.52	.18	301.2	.000
Functional versatility of using social media (maximum 4)	.73	1.39	.88	.34	.08	87.9	.000
Perception of the advantages of the Internet (maximum 4)	2.05	2.32	2.19	2.02	1.47	43.6	.000
Perception of Internet risks (maximum 4)	1.97	1.96	2.12	2.02	1.73	7.2	.000

Table 1: Use of media channels, TV formats and attitudes towards the Internet, by age groups (ANOVA; the means above the average in the case of statistically significant test results are in bold).

These trends allow the outlining of composite sketches of the four cohorts. The youngest age group (15–29-year-olds) has been highly successful in swift domestication of new media technologies: they are the most active in using the Internet, and they demonstrate the strongest perception of the advantages of this medium. The intensity and functional versatility of using the newest platform – social media –, together with creative and communicative uses of the Internet, is the aspect of new media use where the youngest generation's head start, compared to 30–44-year-olds and older groups, is greatest. Conversely, this generation is most passive in consuming traditional media, particularly news, talk shows and documentaries formats.

The group of 30–44-year-olds stands out by virtue of very active and versatile consumption of both traditional and new media. They are the keenest readers of online newspapers and news portals that probably explains the lower frequency of watching TV news in this cohort, compared to two older groups. At the same time, 30–44-year-olds have high reflexivity with respect to new media, demonstrated by strong perception of the advantages as well as risks of the Internet. An explanation probably lies in a large proportion of parents in this age cohort who are facing the challenge of mediating, that is, guiding and/or regulating, their children’s online activities (Kalmus 2012).

Against the background of the two younger age groups, the cohort of 45–59-year-olds is more active in consuming traditional media, while exhibiting considerably less enthusiasm towards using new media forms. Similarly to the cohort of 30–44-year-olds, this age group is highly reflexive concerning the pros and cons of the Internet.

The oldest cohort (60–74-year-olds) displays the strongest preference for serious formats (news, talk shows and documentaries) offered by traditional media. Compared to the three younger age groups, they are least familiar with new media, apparent in low use intensity and weak perception of the specificity of the Internet.

Topic preferences in media use

In order to compare thematic interests of the four age groups, we ranked their preferences, measured with 38 questionnaire items, representing all spheres of media content from politics to family life. Table 2 reveals remarkable similarities between the four cohorts in the high or low level of interest towards some topics. Among five most interesting content items for all age groups are domestic (national) news, local news and foreign news. These are followed by information about TV programmes and films, humour and crime. This picture demonstrates that despite all the differences in channel usage, traditional journalistic news formats still shape a large part of the common social imaginations of all generations.

Topics	15–29	30–44	45–59	60–74
Estonian news	1	1	1	1
Local news	2	2	2	2
Foreign news	3	3	4	5
TV programmes, films	4	7	6	4
Education, learning	5	4	15	17
Humour	6	6	8	10
Youth	7	15	29	32
Music	8	28	26	29
Crime, police, law	9	12	9	9
Computers, the Internet	10	26	30	37
Social life	11	20	22	22
Health care	12	9	3	3
Sport	13	13	18	16
Current debate, opinions	14	8	5	7
Cars	15	22	25	33

continued

Celebrities, relationships	16	21	17	18
Jobs	17	14	14	34
Social security, social problems	18	10	7	6
Home, family, children	19	5	11	15
Legislation, judiciary	20	11	10	11
Sell and buy	21	18	24	31
Travel, tourism	22	23	28	28
Corruption, scandals	23	17	13	14
Business, economy	24	19	21	26
Statistics, surveys	25	31	27	24
Arts, literature, theatre	26	24	23	19
Nature, environment	27	16	12	8
Science, research	28	25	20	21
Construction, real estate	29	30	33	38
History, memory	30	29	19	13
President, parliament	31	32	32	20
Architecture, design	32	33	38	35
Civic participation, NGOs	33	35	34	36
Rural life	34	27	16	12
Government, ministries	35	34	31	25
Politicians, parties	36	36	35	23
State audit, ombudsman	37	38	37	27
Museums	38	37	36	30

Table 2: Ranks of media topics (1–38) in the list of preferences, by age groups.

At the same time, there are considerable differences in the level of interest towards the areas of institutional provision such as education, health care and social security, which pertain to a certain age. In this respect we can hardly speak about generational gaps but rather about age-related differences in informational needs. On the other hand, different levels of interest in some topics (such as music, arts, computers, cars, the natural environment, rural life, politics and history) indicate changing cultural preferences and value orientations, which can be interpreted as effects of generational replacement.

In order to reveal more general trends in the thematic interests of age cohorts, further analysis was made by using the results of a factor analysis of the same list of topics. Seven thematic factors include: F1, Politics, society; F2, Culture, leisure activities; F3, Home, relationships; F4, Celebrities, scandals, social life; F5, Technology, business; F6, News, opinions, sport; F7, Nature, history, rural life (see Appendix 1 for the composition of the factors). Differences in the mean factor scores of the four age groups, compared to the sample average (Figure 1), demonstrate very clearly the divergence of topical preferences between people aged below 45 and above 45, and allow the polarized interest profiles of the youngest and the oldest groups to be raised.

First, we can observe a decline in interest in the natural environment, history and rural life (Factor 7) among the younger generations. This group of topics has been very important in Estonian traditional culture, being for a

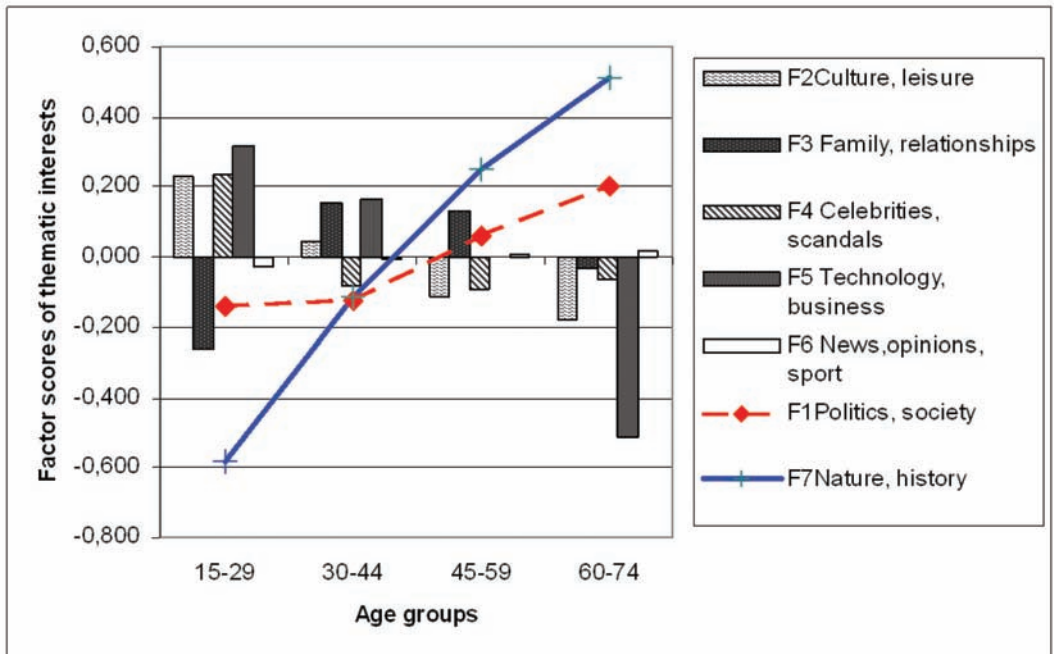


Figure 1: Thematic interests in media use, by age groups (differences in mean factor scores, compared to the sample average).

long time the core theme in self-representations of Estonian national identity (Unwin 1998). Even if a bigger involvement in nature, history and the traditions of rural life could be understood as something 'naturally' characteristic to the older generations, this very clear and sharp contrast between the topical preferences of the young and old respondents seems to reflect a more general cultural shift related to the rapid modernization and globalization of the Estonian society after the fall of communism.

The second factor clearly differentiating the younger and older generations is comprised of topics related to economic and technological matters, including the newest high-tech products (cars and computers; Factor 5). In this area, the two younger groups show much more interest compared not only to the oldest group, but also to middle-aged people (45–59-year-olds). This difference is obviously influenced by the economic and technological transformation of the society.

The third and the most meaningful trend lies in the decline of interest in political issues (Factor 1) among people younger than 45. On one hand, this tendency can be explained with the younger generation's disillusionment and alienation from politics in Eastern and Central Europe (Vogt 2005), which started in the early 1990s after the end of the age of mass movements and general involvement in politics (Vihalemm et al. 1997). Furthermore, the political indifference of the younger generations in contemporary Estonia is strikingly similar to the 'political disengagement' of 'Generation X' in the early 1990s, described by S. Craig et al. (1997). On the other hand, we can speak about the preservation of high interest in politics among people over 45 who were socialized in the atmosphere of the 1960s and participated actively in the revolutionary events of 1989–1991.

An opposite trend is a growing interest in cultural activities and leisure time among young people (Factor 2). Again, we can argue that this domain is always a privilege of youth, but at the same time we can interpret the higher value of leisure activities among the younger cohorts as an indicator of the post-materialist cultural pattern emerging as a result of generational replacement (Abramson and Inglehart 1995).

Spatial orientations of media use

For the analysis of the spatial patterns of media use, we have used ethnolinguistic affiliation as an additional dimension, since previous studies (e.g. Masso 2011) have revealed the existence of different hierarchies of countries, perceived as close or distant, among generational and ethnic groups. The main index variables used to analyse the spatial orientation of media use are: following Estonian media channels, following media channels in Russian, and following western media channels. For the analysis of the spatial reach of media use, we have used the index of self-evaluated level of being informed (about events in one's local environment, in Estonia and abroad in different countries or areas).

Table 3 indicates the existence of statistically significant linear relationships between age and spatial orientations of media use. Following media channels in Russian has one of the highest associations with age. The tendency to follow Russian media channels is more inherent to older age groups; thus, the interest in Russian media is based on generational rather than ethnic differences. However, following Russian media channels is more frequent among Estonian Russians. In the case of ethnic Estonians, the older generations' higher interest in media channels in Russian may be explained by their better knowledge of the Russian language. Among Estonian Russians, media channels in Russian are followed most frequently by the two middle-aged groups, which

Indexes		All	15–29	30–44	45–59	60–74	F	Sig.
<i>Local</i>	EST: Estonian media channels	3.03	2.69	3.16	3.28	3.08	15.55	.000
	RUS: Media channels in Estonian	2.62	2.62	2.67	2.76	2.37	1.87	NS
	RUS: Estonian Russian media channels	3.03	2.65	3.33	3.24	2.74	10.56	.000
<i>Russian</i>	EST: Media channels in Russian	1.75	1.40	1.80	1.98	2.01	15.86	.000
	RUS: Russian media channels	2.96	2.24	3.15	3.22	3.07	17.58	.000
<i>Global</i>	EST: Western media channels	3.17	3.46	3.29	3.01	2.70	17.68	.000
	RUS: Western media channels	3.06	3.13	3.27	3.07	2.72	4.86	.002
<i>Spatial reach</i>	EST: Self-evaluated level of being informed	3.09	3.01	3.13	3.17	3.05	1.18	NS
	RUS: Self-evaluated level of being informed	2.74	2.68	2.91	2.70	2.65	1.15	NS

Table 3: *Spatial orientations of media use, by age groups of ethnic Estonians (EST) and Estonian Russians (RUS) (ANOVA; the mean values on scale 1–5; the means above the average in the case of statistically significant test results are in bold).*

are also the cohorts more interested in following different traditional media channels in general.

The habit of using local media channels is most common among the two middle-aged groups. In contrast to ethnic Estonians, following media channels in Estonian is not divided by generations among Estonian Russians.

The use of western media channels is clearly dominant in the two younger age groups (being particularly high among 15–29-year-old ethnic Estonians and 30–44-year-old Estonian Russians). Such results may indicate a higher accessibility to western countries among younger age groups that can be partly explained by their better knowledge of English (and Finnish), but may also refer to the decrease of ‘ideological’ perception of space among younger age groups, found in previous studies (e.g. Masso 2011). Furthermore, a greater degree of ideological and geographical alienation from the world among older generations, ethnic Estonians and Estonian Russians alike, can be due to their lack of foreign contacts during the Soviet period (Masso 2011).

When it comes to the spatial reach of media use, the two middle-aged groups, both ethnic Estonians and Estonian Russians, display a somewhat higher level of being informed about events in various parts of the world. The differences between cohorts, however, are statistically insignificant.

The results indicate that the spatial foci of media use rather than self-estimated spatial reach shape the generational divides in culturally meaningful space among both language groups in Estonia.

What predicts perception of generational differences?

In order to reveal how perception of inter-generational differences relates to media use preferences, attitudes towards new media technologies and spatial reach, we conducted a linear regression analysis. First we ran a correlation analysis including all variables introduced in the previous sections. Subsequently, the variables that were significantly correlated with the index of perception of inter-generational differences were entered as predictors in linear regression models (run on the whole sample and separately on four age groups). The final best-fitting models include only those variables that turned out to be statistically significant predictors in at least one of the five models (Table 4).

In general, a weaker perception of inter-generational gaps is related to more active and versatile media consumption, except for the use of social media. Particularly, in case of the two younger age groups, more frequent and versatile TV watching is associated with a smaller perceived distance from other generations. Furthermore, middle-aged people (45–59 years old) tend to feel themselves more similar to other generations when they read more news online. In the case of the oldest age group, versatile Internet use is soundly related to stronger feelings of having a common ground with younger generations. In addition, the wider the self-evaluated spatial reach among the oldest respondents, the more they feel they have in common with younger people.

Interestingly, a more frequent use of social media is related to a stronger perception of inter-generational differences among two older age groups. This may be explained with astonishment or even annoyance experienced by members of parents’ and grandparents’ generations when following their children’s or grandchildren’s postings on social media and realizing how different young people’s discursive practices are from their own (for a qualitative description of this phenomenon see Tamme and Siibak 2012).

	All		15–29		30–44		45–59		60–74	
	β	p	β	p	β	p	β	p	β	p
Watching TV (frequency and versatility)	-0.06	0.020	-0.12	0.025	-0.11	0.03	-0.03	NS	0.02	NS
Reading online newspapers and news portals	-0.08	0.029	0.02	NS	-0.06	NS	-0.20	0.005	0.06	NS
Internet use (versatility)	-0.07	NS	0.05	NS	-0.01	NS	-0.03	NS	-0.28	0.004
Frequency of using different social media	0.02	NS	-0.02	NS	-0.07	NS	0.11	0.052	0.16	0.016
Perception of the advantages of the Internet	0.11	0.000	0.09	NS	0.17	0.002	0.15	0.008	0.01	NS
Perception of Internet risks	0.08	0.006	0.06	NS	0.05	NS	0.14	0.007	0.11	NS
Self-evaluated level of being informed	-0.09	0.000	-0.08	NS	-0.07	NS	-0.07	NS	-0.19	0.002
Interest in politics, society (F1)	0.09	0.000	0.04	NS	0.09	NS	0.14	0.009	0.05	NS
R^2	0.045		0.039		0.067		0.092		0.077	

Table 4: Perception of inter-generational differences as predicted by media use preferences, attitudes towards new media technologies and spatial reach (linear regression models; statistically significant regression coefficients are in bold).

Perception of the specificity of the Internet is positively correlated with the perceived distance between generations. This association manifests significantly among two middle age groups who stand between the youngest and the oldest generation with regard to the extent of incorporating the Internet in daily practices. The very fact of being located in such an intermediary zone of domesticating the new technology may foster the mental pattern, according to which heightened perception of the advantages and/or risks of the Internet is related to a sharpened feeling of gaps between generations, reflecting the social constructions of generational groups as highly different in their Internet usage.

A deeper interest in media topics related to politics and society is also positively correlated with perception of inter-generational differences, being statistically significant in the group of 45–59-year-olds. Here a higher sensitivity towards social issues apparently goes hand in hand with a finer perception of gaps between generations as social groups.

DISCUSSION

In this article we provided a multidimensional description of four age groups in Estonia in terms of their media use preferences, including thematic and spatial orientations, and attitudes towards new media technologies.

The composite sketches of the four cohorts outlined in this article allow us, indeed, to interpret the crucial distinctions between the age groups with respect to their use of media technologies as referring to different 'media generations'. Two older age groups in Estonia have remained faithful to traditional media they became used to during their childhood or youth, and demonstrate a certain reluctance towards new media forms. For that matter,

the cohorts born in 1937–1951 and in 1952–1966 possess several traits characteristic to the ‘radio/print generation’ and the ‘TV generation’ (Bolin and Westlund 2009), respectively. Two younger age groups, particularly the youngest generation, have welcomed their ‘fresh contacts’ (Mannheim [1928] 1952) with digital media much more enthusiastically. The cohort born in 1982–1996 displays a number of media use features attributed to the ‘digital generation’ (Papert 1996; Siibak 2009) such as using the Internet extensively for social networking, self-expression and communication. Furthermore, their media use patterns correspond to the self-characterization as the ‘Facebook generation’ that came to light in a focus group interview with young Estonian people born between 1990 and 1995 (see Opermann 2013). It seems that people born in 1967–1981, characterized by a greater inclination towards traditional news media and lesser intensity and versatility of social media use, form an ‘intermediary or buffer generation’ (cf. Pilcher 1994) between the TV generation and the digital generation. Our analysis, nevertheless, shows *prima facie* that the two youngest cohorts have actively responded to the opportunities and affordances provided by their ‘generational location’ on the unfolding developmental track of information and communication technologies, thus acquiring features of ‘generation as an actuality’ (Mannheim [1928] 1952).

Our analysis also demonstrated that in addition to the ascent of new media technologies, broader social and cultural changes need to be taken into account in interpreting generational groups’ relations with the media (cf. Aroldi and Colombo 2007). When looking at the thematic and format preferences, quite a clear divide was discovered between the groups younger and older than 45. This gap is characterized by differing interests in political and historical issues and ‘high culture’ (art, literature, theatre, etc.). In addition to the different social experiences of these broad age groups, this divide also reveals a general change in the cultural paradigm. The older generations were educated during the Soviet period when being interested in politics, social problems, the ‘high matters’ of science and classical forms of arts were perceived as obligatory for a well-developed personality. It was taken for granted that a ‘highly developed person’ participated actively in politics and was not interested in ‘low matters’ of consumption, money and business and did not engage with ‘western popular culture’ (Löhmus et al. 2009). With the change of the political system this normative approach was rapidly replaced by market orientation. Transition culture, described by M. D. Kennedy (2002), pursued values of competitiveness, success, hedonism and consumerism (Kalmus et al. 2009). This shift is also represented by the younger generation’s lower interest in serious political and cultural debates, mainly broadcast on public service TV (Vihalemm et al. forthcoming). These trends bear witness to remarkable shifts in ‘generational habitus’ (Edmunds and Turner 2002), occurring along with rapid social and cultural changes.

Similarly, the cross-generational trends in changing spatial orientations of media use – following the trajectory from Russian media across local media towards global media – reflect broader societal and cultural changes. The older cohorts’ orientation to Russian media is probably a holdover from the Soviet period, reflecting the generations’ ideological alienation from foreign countries and somewhat limited linguistic resources, which influence the accessibility of the world. The global-mindedness of the youngest age groups and the corresponding cultural disruption between them and older generations has also been found in other studies (Kalmus and Vihalemm 2008; Masso 2008). By the same token, though focusing on intellectual generations, J. Edmunds and

B. S. Turner (2002) suggest that the experience of rootlessness and disruption pave the way for cosmopolitanism.

Our hypothesis about the relationship between media-related experiences and consciousness, shared with members of another media generation, and perception of inter-generational differences was partially confirmed. In the two younger age groups, a more active TV watching, as a shared media experience with older cohorts, was associated with weaker perception of generational gaps. Among the oldest respondents, analogous relationships appeared with respect to versatile Internet use and a wide spatial horizon. Unhypothesized, though well-interpretable, findings came to light in the case of social media use that seem to make distinctive 'generational semantics' (Corsten 1999) of younger cohorts particularly evident for older age groups, contributing to a stronger perception of inter-generational differences. In other words, discursive practices on social media apparently epitomize conflicting socialization practices, expectations and tastes of generational cohorts (cf. Bourdieu 1993), creating inter-generational misunderstanding.

As a precaution to drawing overly far-reaching conclusions, we have to concede some limitations of the analysis. First, our index of perception of inter-generational differences consists of fairly indirect indicators. Second, the regression models used explain a rather small amount of variance (4–9 per cent), and several statistically significant regression coefficients remain within the range of small effect. These issues refer to fundamental, hardly solvable, sociological tensions between a need to use quantitative methods to describe generations as large groups in a society, and a qualitative nature of generational consciousness and 'social generations as distinguished by qualitative experience' (Pilcher 1994: 487).

Another limitation of this analysis lies in little attention paid to intra-generational heterogeneity in media usage, documented in a number of studies (see Vittadini et al. forthcoming, for an overview), and referring to 'generational units' in Mannheim's [1928] 1952) sense. Still, we introduced the ethno-linguistic affiliation as a relevant dimension that, according to Edmunds and Turner (2002), has been largely neglected in generational analysis.

In conclusion we admit that relationships between a broader process of generational replacement and the character of media usage, and vice versa, the role of changing media affordances and use preferences as facilitators of changes in political, social and cultural areas is a challenging topic still offering more questions than answers.

ACKNOWLEDGEMENTS

The preparation of this article was supported by grants from the Estonian Research Council (SF0180017s07, SF0180002s07, ETF8329, ETF8527 and ETF9308) and by the European Union through the European Regional Development Fund (Centre of Excellence, CECT).

REFERENCES

- Abramson, P. R. and Inglehart, R. (1995), *Value Change in Global Perspective*, Ann Arbor: The University of Michigan Press.
- Anderson, S. (2001), 'History TV and popular memory', in G. R. Edgerton and P. C. Rollins (eds), *Television Histories: Shaping Collective Memory in the Media Age*, Lexington: University Press of Kentucky, pp. 19–36.

- Aroldi, P. and Colombo, F. (2007), 'Generational belonging in mediascape in Europe', *Journal of Social Science Education*, 6: 1, pp. 34–44.
- Bolin, G. and Westlund, O. (2009), 'Mobile generations: The role of mobile technology in the shaping of Swedish media generations', *International Journal of Communication*, 3, pp. 108–24.
- Bourdieu, P. (1993), "'Youth" is just a word', in P. Bourdieu (ed.), *Sociology in Question*, London: Sage, pp. 94–102.
- Bruns, A. (2006), 'Towards produsage: Futures for user-led content production', in F. Sudweeks, H. Hrachovec and C. Ess (eds), *Cultural Attitudes towards Technology and Communication 2006*, Murdoch: Murdoch University Press, pp. 275–84.
- Buckingham, D. (2003), *Media Education: Literacy, Learning and Contemporary Culture*, Cambridge: Polity Press.
- Corsten, M. (1999), 'The time of generations', *Time & Society*, 8: 2, pp. 249–72.
- Craig, S., Bennett, C. and Stephen, E. (1997), *After the Boom: The Politics of Generation X*, Lanham, MD: Rowman & Littlefield Publishers.
- Edmunds, J. and Turner, B. S. (2002), *Generations, Culture and Society*, Buckingham, Philadelphia: Open University Press.
- Gumpert, G. and Cathcart, R. (1985), 'Media grammars, generations and media gaps', *Critical Studies in Mass Communication*, 2: 1, pp. 23–35.
- Habermas, J. (1989 [1985]), *The Theory of Communicative Action. Volume 2, Lifeworld and System: A Critique of Functionalist Reason*, Cambridge: Polity Press.
- Hasebrink, U. and Popp, J. (2006), 'Media repertoires as a result of selective media use. A conceptual approach to the analysis of patterns of exposure', *Communication*, 31: 3, pp. 369–87.
- Hutchby, I. (2001), *Conversation and Technology: From the Telephone to the Internet*, Cambridge: Polity Press.
- Kalmus, V. (2012), 'Making sense of the social mediation of children's internet use: Perspectives for interdisciplinary and cross-cultural research', in C. W. Wijnen, S. Trültzsch and C. Ortner (eds), *Medienwelten im Wandel: Kommunikationswissenschaftliche Positionen, Perspektiven und Konsequenzen. Festschrift für Ingrid Paus-Hasebrink (Changing Media Worlds: Positions, Perspectives and Consequences for Media and Communication Research. Essays in Honour of Ingrid Paus-Hasebrink)*, Wien: Springer VS, pp. 137–49.
- Kalmus, V. and Vihalemm, T. (2008), 'Patterns of continuity and disruption: The specificity of young people's mental structures in three transitional societies', *Young*, 16: 3, pp. 251–78.
- Kalmus, V., Keller, M. and Kiisel, M. (2009), 'Emerging consumer types in a transition culture: Consumption patterns of generational and ethnic groups in Estonia', *Journal of Baltic Studies*, 40: 1, pp. 53–74.
- Kennedy, M. D. (2002), *Cultural Formations of Post-Communism: Emancipation, Transition, Nation, and War*, Minneapolis and London: University of Minnesota Press.
- Lõhmus, M., Lauristin, M. and Siirman, E. (2009), 'The patterns of cultural attitudes and preferences in Estonia', *Journal of Baltic Studies*, 40: 1, pp. 75–94.
- Lovell, S. (2007), 'Introduction', in S. Lovell (ed.), *Generations in Twentieth-Century Europe*, New York: Palgrave, pp. 1–18.
- Mannheim, K. ([1928] 1952), 'The problem of generations', in K. Mannheim (ed.), *Essays on the Sociology of Knowledge*, London: Routledge and Kegan Paul, pp. 276–322.

- Marada, R. (2004), 'Social construction of youth and formation of generational awareness after socialism', in P. Mareš (ed.), *Society, Reproduction and Contemporary Challenges*, Brno: Barrister & Principal, pp. 149–68.
- Masso, A. (2008), 'Lifeworlds in an enlarged Europe: Differences in personal spatiality in Estonia and Sweden', *European Societies*, 10: 2, pp. 303–25.
- (2011), 'Rethinking of social space: Generational and ethnic differences in Estonia', *Geopolitics*, 16: 4, pp. 902–25.
- Nugin, R. (2010), 'Social time as the basis of generational consciousness', *Trames*, 14: 4, pp. 342–66.
- Opermann, S. (2013), 'Understanding changing news media use: Generations and their media vocabulary', *Northern Lights*, 11: 1, pp. 123–46.
- Papert, S. (1996), *The Connected Family: Bridging the Digital Generation Gap*, Atlanta, GA: Longstreet Press.
- Pilcher, J. (1994), 'Mannheim's sociology of generations: An undervalued legacy', *American Journal of Sociology*, 45: 3, pp. 481–95.
- Prensky, M. (2001), 'Digital natives, digital immigrants', *On the Horizon*, 9: 5, pp. 1–2.
- Schütz, A. and Luckmann, T. (2003 [1975]), *Strukturen der Lebenswelt (The Structures of the Lifeworld)*, Konstanz: UVK Verlagsgesellschaft.
- Siibak, A. (2009), *Self-Presentation of the 'Digital Generation' in Estonia*, Tartu: Tartu University Press.
- Silverstone, R., Hirsch, E. and Morley, D. (1992), 'Information and communication technologies and the moral economy of the household', in R. Silverstone and E. Hirsch (eds), *Consuming Technologies: Media and Information in Domestic Spaces*, London: Routledge, pp. 15–31.
- Spitzer, A. B. (1973), 'The historical problem of generations', *American Historical Review*, 78: 5, pp. 1353–85.
- Tamme, V. and Siibak, A. (2012), 'Enhancing family cohesion through web-based communication: Analysis of online communication practices in Estonian families', *Observatorio (OBS*) Journal*, Special Issue 'Networked Belonging and Networks of Belonging' – COST ACTION ISO906.
- Tapscott, D. (1998), *Growing up Digital: The Rise of the Net Generation*, New York: McGraw-Hill.
- Unwin, T. (1998), 'Rurality and the construction of nation in Estonia', in J. Pickles and A. Smith (eds), *Theorising Transition*, London and New York: Routledge, pp. 284–306.
- Vihalemm, P. (2006), 'Media use in Estonia: Trends and patterns', *Nordicom Review*, 27: 1, pp. 17–29.
- Vihalemm, P., Lauristin, M. and Kõuts, R. (2012), 'Trends in Estonian media landscape in 2000–2012', *Media Transformations*, 6, pp. 12–63.
- Vihalemm, P., Lauristin, M. and Tallo, I. (1997), 'Development of political culture in Estonia', in M. Lauristin and P. Vihalemm (eds), *Return to the Western World: Cultural and Political Perspectives on the Estonian Post-Communist Transformation*, Tartu: Tartu University Press, pp. 197–210.
- Vittadini, N., Siibak, A., Bilandzic, H. and Carpentier Reifová, I. (forthcoming), 'Generations and media: Social construction of generational identity and differences', in N. Carpentier, K. C. Schröder and L. Hallett (eds), *Transforming Audiences, Transforming Societies*, London: Routledge.
- Vogt, H. (2005), *Between Utopia and Disillusionment: A Narrative of the Political Transformation in Eastern Europe*, New York and Oxford: Berghahn Books.
- Volkmer, I. (2006), 'Introduction', in I. Volkmer (ed.), *News in Public Memory. An International Study of Media Memories across Generations*, New York: Peter Lang, pp. 13–17.

APPENDIX 1: RESULTS OF THE FACTOR ANALYSIS OF THE TOPIC PREFERENCES (THE PRINCIPAL COMPONENTS METHOD WITH VARIMAX ROTATION).

Thematic factors	Factor loadings
<i>F1: Politics, society</i>	
Government, ministries	0.776
President, parliament	0.754
State audit, ombudsman	0.722
Politicians, parties	0.711
Corruption, scandals	0.411
Business, economy	0.391
Statistics, surveys	0.344
<i>F2: Culture, leisure</i>	
Arts, literature, theatre	0.670
Architecture, design	0.608
Music, musicians	0.575
Museums	0.567
Travel, tourism	0.426
Science, research	0.413
Youth life	0.383
Civic participation, NGOs	0.373
<i>F3: Family, social policy</i>	
Home, family, children	0.688
Health care	0.609
Education, learning	0.573
Social security, social problems	0.540
Legislation, judiciary	0.388
Local news	0.383
<i>F4: Celebrities, scandals</i>	
Social life	0.727
Celebrities, relationships	0.709
TV programmes, films	0.486
Crime, police, law	0.481
<i>F5: Technology, business</i>	
Cars	0.706
Sell & buy	0.611
Computers, the Internet	0.594
Construction, real estate	0.593
Jobs	0.467
<i>F6: News, opinions, sport</i>	
Foreign news	0.692
Estonian news	0.628
Sport	0.356
Current debate, opinions	0.348
<i>F7: Nature, history</i>	
Nature, environment	0.543
History, memory	0.541
Rural life	0.532
Humour	0.406

SUGGESTED CITATION

Kalmus, V., Masso, A. and Lauristin, M. (2013), 'Preferences in media use and perception of inter-generational differences among age groups in Estonia: A cultural approach to media generations', *Northern Lights* 11, pp. 15–34, doi: 10.1386/nl.11.15_1

CONTRIBUTOR DETAILS

Veronika Kalmus is Professor of Media Studies at the Institute of Journalism and Communication, University of Tartu, Estonia. Her research interests are related to socialization, inter-generational relationships and cultural values. She leads the research project 'Generations and inter-generational relations in the emerging information society', financed by the Estonian Research Council.

Contact: Institute of Journalism and Communication, University of Tartu, Lossi 36, Tartu 50090, Estonia.

E-mail: veronika.kalmus@ut.ee

Anu Masso is Senior Researcher in Media Studies at the Institute of Journalism and Communication, University of Tartu, Estonia. Her main research interests are personal social space (geo-cultural mobility, cultural distances and contacts). She leads the research project 'Geographies of media and communication in a transition country', financed by the Estonian Research Council.

Contact: Institute of Journalism and Communication, University of Tartu, Lossi 36, Tartu 50090, Estonia.

E-mail: anu.mass@ut.ee

Marju Lauristin is Professor of Social Communication at the Institute of Journalism and Communication, University of Tartu, Estonia. Her research interests are related to the social, cultural and political conditions and implications of the Estonian post-communist transition.

Contact: Institute of Journalism and Communication, University of Tartu, Lossi 36, Tartu 50090, Estonia.

E-mail: marju.lauristin@ut.ee

Veronika Kalmus, Anu Masso and Marju Lauristin have asserted their right under the Copyright, Designs and Patents Act, 1988, to be identified as the authors of this work in the format that was submitted to Intellect Ltd.
