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Author(s): Kuoppamäki, Sanna-Mari; Taipale, Sakari; Wilska, Terhi-Anna

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The use of mobile technology for online shopping and entertainment among older adults in Finland

Sanna-Mari Kuoppamäki, Sakari Taipale, Terhi-Anna Wilska

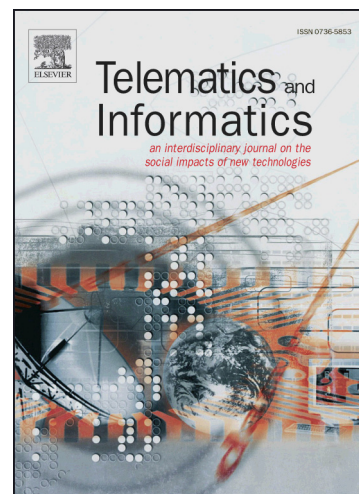
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The use of mobile technology for online shopping and entertainment among older adults in

Finland

Corresponding author:

Sanna-Mari Kuoppamäki (1)

Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

Address: PO Box 35, FI-40014 University of Jyväskylä, Finland

Phone: +35840 805 3562

Email: sanna.kuoppamaki@jyu.fi

Other authors:

Sakari Taipale (2)

Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

Address: PO Box 35, FI-40014 University of Jyväskylä, Finland

Phone: +358400 728 852

Email: sakari.taipale@jyu.fi

Terhi-Anna Wilska (3)

Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

Address: PO Box 35, FI-40014 University of Jyväskylä, Finland

Phone: +35840 805 4201

Email: terhi-anna.wilska@jyu.fi

Author biographies

Sanna-Mari Kuoppamäki is a PhD candidate in Sociology at the Department of Social Sciences and Philosophy, University of Jyväskylä, Finland. Her research interests include consumption, life-course and digital technologies. Currently she studies ageing consumers and digital technologies.

Sakari Taipale is an Academy Research Fellow at the Department of Social Sciences and Philosophy, University of Jyväskylä, Finland. He is also an adjunct professor (docent) at the University of Eastern Finland. His research interests include information society and use of new media and digital technologies.

Terhi-Anna Wilska is a Professor of Sociology at the Department of Social Sciences and Philosophy, University of Jyväskylä, Finland. Her research interests include consumption and consumer society, lifestyles and well-being, age and generation and the social effects of new technology.

**The use of mobile technology for online shopping and entertainment among older adults
in Finland**

Abstract

Older adults are becoming an important market segment for all internet-based services, but few studies to date have considered older adults as online shoppers and users of entertainment media. Utilising the concept of life course, this article investigates the use of mobile technologies for online shopping and entertainment among consumers aged 55 to 74. The data were collected with a web-based survey completed by a panel of respondents representing Finnish television viewers (N=322). The results reveal that consumers aged 55 to 74 use a smartphone or tablet to purchase products or services online as often as younger consumers. In contrast, listening to internet radio and watching videos or programmes online with a smartphone or tablet are most typical for younger male consumers. The results demonstrate that mobile-based online shopping is best predicted by age, higher education, and household type (children living at home), and use of entertainment media by age and gender.

Keywords: mobile technology, online shopping, entertainment, older adults, smartphone, tablet computer

1. Introduction

With the ageing of the population and the rapid growth of mobile technology the needs and preferences of older adults as users of digital technologies have garnered increasing interest worldwide. Frequent use of digital technologies among older adults has been shown to be connected to wellbeing, wider social networks, and independent lifestyle, and thus is expected to improve the lives of older adults in many ways (e.g. Choi and DeNitto, 2013; Hills et al., 2015). At the same time many studies indicate that older adults experience more barriers related to technological environments, from usability preferences and difficulties learning the required skills to perceived values and risks (e.g. Barnard et al., 2013; Lian and Yen, 2014). Factors such as age, education, socioeconomic status, access to technology, attitudes and trust, and the perceived benefits of technology influence the use of technologies among older adults (Czaja et al., 2006; van Deursen and Helsper, 2015; Näsi et al., 2012; Piper et al., 2016; Selwyn, 2004; Zickhur and Madden, 2012). The younger, more economically advantaged, and more educated an individual is, the more likely they are to use the internet for selected purposes (Räsänen and Koiranen, 2016).

The digital skills of older adults are improving and they are becoming a more important user segment of all online-based services. During the past decades, the amount of leisure time has increased in all Western societies (Aguiar and Hurst, 2007). In Finland, among older people, time spent watching television has increased, and Finns are less socially active and spend significantly more time at the computer (Räsänen and Koiranen, 2016; Statistics Finland, 2011). Personal and mobile devices have become more common, and the internet is used several times per day (Statistics Finland, 2015; Zickhur and Madden, 2012). The ownership of smartphones has increased among all age groups, but the proportion of smartphone owners is larger among younger people (90% of individuals aged 16 to 44 in comparison to 63% of individuals aged 55 to 64). Among older adults (aged 55 to 74), the ownership of

smartphones is fairly gendered, as older men own smartphones more frequently than older women do. Ownership of tablet computers, similar to smartphones, has increased in all age groups, and in 2015, about half of Finnish people aged 55 to 64 lived in a household that owns a tablet computer (Statistics Finland, 2015).

This article investigates the use of smartphones and tablet computers for online shopping and entertainment among older consumers (aged 55 to 74). Older consumers refer to a group of individuals who undergo late midlife (roughly between years 46 to 60) and approach old adulthood (61 and over) in their individual course of life (Hutteman et al., 2014). Age-based analysis is conducted in order to further investigate the significance of age and life course on the use of digital technologies (e.g. van Deursen and Helsper, 2015; Eynor and Helsper, 2015; Haddon, 2005; Prendergast and Garrattini, 2015). In previous studies, older adults as online shoppers and users of entertainment have received less attention, despite these activities being typical for older people (Statistics Finland, 2015; Zickhur, 2014). In addition, few studies have explored particularly online shopping and entertainment in terms of life course stage, understood as age and household type.

This article is structured in the following way. The article first discusses the effect of the life course on the use of digital technologies with respect to age and gender. This is followed by discussion of previous empirical research on older adults as online shoppers and users of entertainment. The use of digital technologies for online shopping and entertainment is investigated with the results of a web-based survey conducted among 322 Finnish-speaking consumers in 2015. Finally, differences between these two online practices are discussed in terms of age and life course stage.

2. Life course and the use of digital technologies

The significance of age in the use of digital technologies is usually based on the time periods of an individual's life: the skills to use technologies are shaped in youth which affects orientations towards technologies in later life (Green, 2008; Haddon, 2005). These generational experiences affect core values of individuals, which may however change with ageing as life events transform the needs and necessities for use. The significance of age in the use of digital technologies emerges from the life course stages, more specifically from changes in social roles and personal relationships (Hutchison, 2011). In late mid-life, important changes occur as children leave home. Leisure time typically increases (Helson et al., 2006; Kokko, 2010), and wellbeing in terms of daily demands, time constraints, and work-family conflicts usually improves (Bouchard, 2014; Erickson et al., 2010). After retirement, people have more opportunities for cultural and educational pursuits as children do not limit their activities (Karisto, 2007; Näsi et al., 2012; Weiss et al., 2002). Also family relationships change, as the time spent with the spouse increases, usually improving marital quality and satisfaction in late midlife. The significance of social and personal relationships on wellbeing and happiness becomes more important in old adulthood (Charles and Carstensen, 2010), underlining the significance of using digital technologies for support and fulfilling social needs (Boase, 2010; Ling, 2008; Livingstone et al., 2005; Rasi and Kilpeäläinen, 2016; Thayer and Ray, 2006).

Household structure and family context typically have an effect on the use of digital technologies (Livingstone et al., 2005). The presence of young people in the home influences adults' internet use in three ways: young people provide a reason for acquiring home internet access, they increase adults' interest in using the internet for different purposes, and they may teach or motivate adults to improve their online skills (Eynor and Helsper, 2015). For instance, adults often buy computers thinking it will benefit their child's education (Haddon,

2005; Kiesler et al., 2000). Parents may decide to use the internet as a way to support various aspects of family life such as co-ordination amongst family members (Kennedy et al., 2008; Rainie and Wellman, 2012) or parents may aim to improve their internet skills to support their children (Korupp and Szydlik, 2005). As children move away from home when parents approach late midlife, parents do not necessarily have the urgent need or reason for internet use that is typically brought by their children. The rhythm of daily life changes and digital technologies are no longer necessities in terms of time management. Moreover, the developmental challenges related to late midlife and old adulthood (Bouchard et al., 2014; Charles and Carstensen, 2010; Hutteman et al., 2014) create new demands for technologies, as the significance of social networks in terms of happiness and wellbeing increases. Age differences in online consumption might be blurring, as older people want to take part in the same online activities as younger people (see also Räsänen and Koiranen, 2016).

Life course transitions and changes in social roles typically differ between men and women. Parenthood, for instance, typically deepens gender divisions and domestic division of labour in households, which simultaneously affects the use of technologies (Fortunati, 2011). For women, the transition to parenthood increases routine housework hours and the time spent doing housework and simultaneously decreases the time spent on leisure activities such as entertainment (Baxter et al., 2013). Online platforms focussing on entertainment are typically used by men whereas online shopping is less clearly gendered (Dittmar et al., 2004; Helsper, 2010; Papastergiou and Solomonidou, 2005; Räsänen and Koiranen, 2016; Traeen et al., 2006). In late midlife, as children move away from home and daily housework decreases, the gender division of housework is expected to change.

3. Older adults as online shoppers and users of online entertainment

In developmental studies, the adult life has been divided into early adulthood (18 to 30 years), middle adulthood (31 to 60 years) and old adulthood (61 years and over) (Hutteman et al., 2014). In social sciences, boundaries of each life stage are perceived as flexible (Green, 2008). Older adults, typically understood as adults that undergo late midlife and approach old adulthood, are a group of online consumers with high potential as well as challenges. The income level of those aged 55 to 65 has risen and they generally consume more than 30 years ago (Ahonen and Vaittinen, 2015; Atkinson and Hayes, 2010). In Finland, adults aged 55 to 64 use the internet actively for travel and culture related online shopping. The share of the Finnish population making purchases online did not grow in 2015; instead, the share of individuals having made online purchases fell from the previous year by two percentage points in all age groups (Statistics Finland, 2015). Online shopping is typical for well-educated consumers in higher income quartiles (Räsänen and Koironen, 2016). Other factors that influence online purchases are management of costs, perception of the risks related to online purchases, and the influence of social networks on digital skills (Livingstone et al., 2005). Typically, older adults might perceive more risks in purchasing online, such as financial risks or risks related to payment or online security (Kwon and Noh, 2010; Lian and Yen, 2014). The degree of social capital and the importance of social networks, reciprocity and trust are significant in making purchases online. Among young adults, for instance, consumption preferences are affected by online-based peer relationships that among older adults are typically less common (Pfeil et al., 2009). For older adults, social influence and social networks affect the skills required to access these technologies (see also Lian and Yen, 2014; Livingstone et al., 2005).

In Finland, older adults consume internet-based entertainment frequently. Over half (58 %) of the population aged 55 to 64 have watched internet-based television programmes during the

past three months – this percentage being only slightly less than in the younger age groups (Statistics Finland, 2015). The use of entertainment media is strongly affected by generational experiences of certain media landscapes (Bolin and Westlund, 2009; Bolin, 2014). Generational experiences refer to socially shared values and ideals by each birth cohort that typically remain unchangeable throughout the life course (Mannheim 1952; Riley, 1973; Smola and Sutton, 2002). People born in the 1950s, for instance, are illustrated as the ‘TV generation’ that was formed by television and popular culture media, and that was considered the first ‘media generation’ formed by and in relation to the media (Bolin and Westlund, 2009). Certain types of media landscapes can produce emotions of nostalgia, i.e., sentimentality for the past, typically for a period or place with happy personal associations (Boym, 2001). Adults aged 55 to 65 are likely to prefer a certain type of media on the basis of their individual childhood memories and their socially shared, collective memories formed during the developmental years (Bolin, 2014).

4. Research questions

Previous research has highlighted the significance of age, gender, education and household type in the use of internet and digital technologies among older adults (e.g. Boase, 2010; van Deursen and Helsper, 2015; Eynor and Helsper, 2015; Ling, 2008; Livingstone et al., 2005; Näsi et al., 2012; Rasi and Kilpeäläinen, 2016; Räsänen and Koiranen, 2016; Selwyn, 2004; Thayer and Ray, 2006, Zickhur, 2014). As mentioned above, few studies have examined particularly mobile-based online shopping and entertainment among older adults with respect to life course stage (understood as age and household type). By comparing these two mobile-based activities the particularities related to diverse online environments can be better revealed. The research questions are the following:

RQ1: With regard to the use of mobile technology (smartphone or tablet computer) for online shopping and entertainment, in what respects do older adults (aged 55 to 74) differ from younger consumers, if any?

RQ2: In what ways can the use of mobile technology for online shopping and entertainment be explained by life course stage (understood as age and household type)?

5. Data and methods

5.1. Data and participants

This article analyses the results of an online survey conducted among Finnish television viewers of the commercial media company MTV. The survey was administered between the 2nd and 17th of November 2015 to a panel of respondents (N=630) representing Finnish-speaking television viewers aged 18 to 74. The target group of the survey consisted of participants aged 55 to 74 (N=144) with a control group of participants aged 18 to 54 (N=176). The total number of respondents was 322 with a response rate 51 %.

In the analysis, a comparison was conducted between 55 to 74 year-olds (i.e. older adults) and under 55 year-olds (i.e. younger adults). Considering that definitions of each life stage vary across disciplines, and 55 to 74 year-olds can be regarded as a heterogeneous group in terms of life transitions (e.g. Hutteman et al., 2014; Green 2008), 55 to 74 year-olds were further classified into age groups of 55–59; 60–65; 66–70 and 71–74, in order to expose differences among 55 to 74 year-olds. From the respondents aged 55 to 74, 86 % owned a smartphone, and 58 % owned a tablet computer. This indicates that participants selected for the survey were slightly more active and computer literate online users in comparison to the whole Finnish population (Statistic Finland, 2015). It is thus natural to assume that becoming

a member of a media company's research panel inevitably requires higher than average media activity.

The survey questionnaire was composed of 14 questions measuring use of the internet, use of digital devices, and attitudes towards the internet, with six questions measuring the socio-demographic background of the respondents. Internet use was measured with questions regarding the use of computers, laptops, tablet computers, smartphones, and smart TVs, including questions about the frequency and location of use. The use of smartphones and tablet computers was measured separately with questions about online shopping, entertainment, information and communication technologies, domestic technologies, and health monitoring.

5.2. Variables

The dependent variables consist of four (4) statements measuring the use of smartphones or tablet computers for online shopping and entertainment media. Participants were asked about their use of and intention to use smartphones or tablets with a three-point scale (1=yes, 2=no, but interested and 3=no, not interested). The statements covered the following practices: purchasing products or services online; activating a mobile-based application for payment of purchases; listening to internet radio or music online; and watching videos or programmes online.

The independent variables consist of age, gender, and household type, with control variables of education and residential area. Regarding household type, respondents were given four (4) answer categories: single, co-habitation with a spouse, co-habitation with a spouse and children living at home, and other household type. Regarding education, respondents were given six (6) response options: no education, college degree, vocational training, post-

secondary education, Bachelor's degree and Master's degree¹. The options for residential area were: large city (> 100 000 inhabitants), another city, urban area, and rural area.

5.3. Statistical procedures

To provide an overview of the interrelations between age and mobile technology practices, the use of, and intention to use smartphones or tablets, a contingency table was constructed and related statistical tests were conducted. A contingency table was constructed for male and female respondents comparing under 55-year olds with 55 to 74 year olds. Pearson's chi-squared test was used to assess the significance between the differences of the two proportions.

The other statistical tool applied was the General Linear Model (GLM). The GLM models were designed and executed to examine the effect of age, gender and household type while controlling for other independent variables (education and residential area). The GLM models also showed which independent variables were significant predictors of engagement in online shopping and entertainment. The continuous variables were singular statements concerning online shopping and entertainment², and age, gender, household type, education, and residential area were used as categorical variables.

6. Results

6.1. The use of mobile technology for online shopping and entertainment

Table 2 shows the contingency table comparing between two age groups for male and female respondents. Older respondents use a smartphone or a tablet computer for online purchases nearly as frequently as younger respondents. Older males report less interest in online

¹ In the final analysis the response options were reduced in order to make the interpretation easier.

² In the final analysis, the order was reversed to 3=yes, 2=no, but interested and 1=no, not interested.

purchases in comparison to younger males. Female respondents are equally interested in online purchases in both age groups.

Male respondents aged 55 to 74 are the group which most frequently activate a mobile application for the purpose of paying for purchases. Younger males are most interested in mobile-based payment methods and significantly more interested than younger females. Among older adults, the differences in interest level between genders are less pronounced. Regarding the possibility for mobile-based payment, younger women are the least interested group.

With regard to mobile-based entertainment, older adults listen to internet radio or music online less frequently than younger adults. This finding is pronounced among both male and female respondents. Music or radio listening with a mobile device is most typical for younger males and least typical for older females. Older females responded most often with interest towards internet radio or music despite not having consumed it before.

Younger males use mobile devices for watching videos and online programmes most frequently. Mobile-based videos are watched least frequently by older females. In the other responses, the response distribution between groups is comparable to internet radio or music listening, with older females most often indicating non-use and non-interest in use.

Table 1. Use and intention to use mobile technology (smartphone or tablet), cross-tabulation by age among male and female respondents (%)

Which of the following have you done or would you be interested in doing with your smartphone or tablet:		Male				Female			
		under 55	55–74	Sig. (Pearson Chi-Square); Age, Male	Sig. (Pearson Chi-Square); Gender under 55	under 55	55–74	Sig. (Pearson Chi-Square); Age, Female	Sig. (Pearson Chi-Square); 55–74
<i>Online shopping</i>									
Purchased products or services online	Yes	62.2	56.6	n.s.	n.s.	62.0	51.7	n.s.	n.s.
	No, but interested	14.6	7.2			12.0	12.1		
	No, not interested	23.2	36.1			26.7	36.2		
	Total	100.0	100.0			100.0	100.0		
Activated a mobile application for payment of purchases	Yes	6.3	7.2	*	**	5.4	3.5	n.s.	n.s.
	No, but interested	46.3	26.5			19.6	22.8		
	No, not interested	47.5	66.3			75.0	73.7		
	Total	100.0	100.0			100.0	100.0		
<i>Entertainment media</i>									
Listened to internet radio or music online	Yes	76.8	53.0	**	n.s.	64.1	39.3	**	n.s.
	No, but interested	6.1	9.6			16.3	23.2		
	No, not interested	17.1	37.3			19.6	37.5		
	Total	100.0	100.0			100.0	100.0		
Watched videos or TV programmes online	Yes	87.7	66.7	**	n.s.	76.1	46.6	***	n.s.
	No, but interested	4.9	6.0			7.6	10.3		
	No, not interested	7.4	27.4			16.3	43.1		
	Total	100.0	100.0			100.0	100.0		

*** p < 0.001; **p < 0.01; *p < 0.00

6.2. Determinants for the use of mobile technology for online shopping and entertainment media

The comparison between age groups in Table 1 does not show whether the differences are based on age, or if other variables predict use better than age. Table 2 displays the results from the main effect tests of the GLM for online shopping and entertainment. The overall statistical significances of the independent variables were indicated by the F value. The unstandardised parameter estimates (β) describe how much the means of the different categories of independent variables deviate from the reference category. The adjusted coefficients of determination (adjusted R²) show the proportions of variance explained by all independent variables together. R-square (R²) value indicates the goodness-of-fit of measures where the higher value predicts the better model fit for the data (e.g. Cameron and Windmeijer, 1997). In the GLM model, the R-square values are relatively, yet not exceptionally, low considering the field of the study. The values indicate that there are other predictors not included in the model that explain variation in the dependent variables. As our main interest is to estimate the relative contribution of each independent variable, R-square values are only of the secondary importance. The determinants for online activities are statistically significant depending on the variable and thus useful in explaining the online behaviour.

6.2.1. Online shopping

Table 2 shows that age remains a significant predictor of purchasing products or services online when other variables are controlled for. Compared to under 55-year-olds, those aged 60 to 64 and 70 to 74 use mobile devices for online purchases most infrequently. Household

type is associated with online purchases: respondents who are living with a spouse and who have children living in the household more typically use a mobile device for online purchases. Having a university degree is the strongest predictor of mobile-based shopping, while gender does not remain as a significant factor. As regards activating a mobile-based payment application, the analysis shows gender and age differences, indicating that it is most typical for male respondents and least typical for the oldest age group.

6.2.2. *Entertainment media*

Regarding listening to music and radio online, age and residential area turn out to be significant predictors of use. Respondents aged 60 to 64 and 70 to 74, as well as those living in a large city, are least likely to use smartphones or tablets for music or radio listening. Gender, education, and household type are not associated with listening to music or radio online. Watching videos or programmes online is determined by age and gender only, as household type, education, and residential area have no explanatory power.

Table 2. Determinants for use of mobile technology for online shopping and entertainment,
General Linear Model

	<i>Purchasing products or services online</i>	<i>Activating a mobile application for payment of purchases</i>	<i>Listening to internet radio or music online</i>	<i>Watching videos or programmes online</i>
	Parameter Estimates (β)			
Age (ref. under 55) (F)	F=2.713*	n.s.	F=2.892*	F=3.395**
55–59	-.033	.022	-.241	-.385**
60–64	-.399*	-.144	-.469*	-.437*
65–69	-.079	-.046	-.327*	-.343*
70–74	-.516*	-.335*	-.481**	-.411*
Gender (ref. male) (F)	n.s.	F=9.517**	n.s.	F=9.244**
Female		-.214**		-.283**
Household type (ref. single) (F)	n.s.	n.s.	n.s.	n.s.
Co-habitation	.070			
Co-habitation, children	.303*			
Other	-.162			
Education (ref. no education) (F)	F=3.025*	n.s.	n.s.	n.s.
Vocational training	.081			
College degree or post- secondary education	.050			
University degree	.384*			
Residential area (ref. rural area) (F)	n.s.	n.s.	n.s.	n.s.
Large city			-.294*	
Other city			-.259	
Urban area			-.043	
R-Squared (Adjusted R²)	.089(.045)	.065(.020)	.111(.069)	.116(.075)

7. Discussion and conclusions

This study aimed to investigate the use of mobile technology for online shopping and entertainment among older adults with a focus on age and life course stage effects. In response to RQ1, the study demonstrated that older adults use smartphones or tablet computers for online purchases almost as often as younger adults. The use of mobile-based entertainment, however, is differentiated by age and gender, demonstrating that younger males use mobile devices for entertainment in a more versatile way compared to older adults. Among older adults, differences between male and female respondents are more pronounced in the use of entertainment than in online shopping, implying that female consumers aged 55 to 74 use a mobile device for entertainment least frequently.

In response to RQ2, mobile-based online shopping is best explained by life course stage and education. In mobile-based online shopping, age is especially significant during certain life stages: in the ages 60 to 64 and 70 to 74 a stage appears in which the use of mobile-based online shopping is the lowest. For some people, retirement age (approximately from 60 to 64) might affect online shopping as income level decreases. On the other hand, after retirement people have more opportunities to shop offline as the time constraints related to work and family typically improve (Bouchard, 2014; Erickson et al., 2010). Those aged 70 and over rarely own a mobile device, or if they do, they might lack social networks that provide digital skills to shop online or they may perceive more financial or management risks towards it (Kwon and Noh, 2010; Lian and Yen, 2014; Livingstone et al., 2005). Our study revealed that the presence of children in the household increases the probability for online purchases. In these households, the necessary technological skills are more easily passed from children to parents, and the need for consumption is typically larger and opportunities to shop offline fewer.

This study supports previous findings about the significance of education in the use of digital technologies among older adults (Czaja et al., 2006; van Deursen and Helsper, 2015; Livingstone et al., 2005; Näsi et al., 2012; Piper et al., 2016; Räsänen and Koironen, 2016; Selwyn, 2004; Zickhur and Madden, 2012). Nevertheless, not all internet-based activities necessarily require education-based digital skills, nor does education necessarily affect the use of all digital technologies. For instance, making purchases online requires understanding of the management of costs, the ability to tolerate risks, the capacity to understand visualised content, and simultaneously, the influence of social capital and networks on navigating various shopping environments (e.g. Kwon and Noh, 2010; Lian and Yen, 2014; Pfeil et al., 2009). These skills are perhaps connected to education level. However, our study shows that older people do not significantly differ from younger adults in their use of mobile devices for online shopping. Perhaps those older adults who have access to a mobile device have developed sufficient skills to perform mobile-based shopping with the use of the device. Therefore, a lack of skills probably does not restrict online shopping among mobile device owners under the age of 70.

Mobile-based entertainment, on the contrary, is less predicted by household type, but is connected to age and gender. Similar to online shopping, respondents aged 60 to 64 and 70 to 74 use mobile devices for entertainment least frequently. The use of entertainment is differentiated by gender only as regards video watching, which is more typical for men than women. In terms of life course effects, it is important to note that education and household type do not remain significant predictors for mobile entertainment use when other variables are controlled for. The use of mobile-based entertainment media thus requires less technological skills. Despite this, older adults use mobile-based entertainment clearly less frequently than younger adults. One explanation could be generational preferences for certain types of media landscapes. For those born in the 1950s, television was the medium that

further established some of the patterns introduced by radio, but also introduced new ones (Bolin, 2009). Hence, the use of mobile entertainment could perhaps be understood through generational aspects of media use. In addition, well-educated older females prefer highbrow cultural activities such as theatre, opera, or classical music (Purhonen et al., 2011) which might reduce the time they spend using their mobile devices for entertainment purposes.

This study supports previous findings that digital entertainment, or entertainment in general, is a gendered and age-specific practice (Helsper, 2010; Papastergiou and Solomonidou, 2005; Traeen et al., 2006). Some studies argue that gender differences are generational and that they will not remain in the future, since younger females use new technology in a similar way to younger males (Dutton and Helsper, 2007; Fallows, 2005; Helsper, 2010). This study revealed that, in listening to internet radio or music online, gender differences are similar in both age groups, which represents the effect of life stage and the continuity of gendered roles in radio or music listening. Regarding online video watching, gender differences were larger among older adults which might indicate the generational effect on video watching in older male and female media users. Videos were not yet very common in the young adulthood of today's 55 to 74-year-olds which suggests generational preferences in watching videos online or offline (see also Bolin and Westlund, 2009). Moreover, among the oldest generation, gender roles have been more traditional, which could explain the gender differences in the use of entertainment. Therefore, it is likely that the non-use of mobile devices for entertainment purposes, especially among older women, can be explained by both life stage and strong gender roles among the older generation. Future research should thus investigate whether or not gender differences persist, increase or decrease as the younger generations age, and in which ways various life events related to social and personal relationships in late midlife influence the use of entertainment media technologies among men and women.

The study involves certain limitations concerning the representativeness of the data. The survey was conducted among Finnish television viewers which might exclude some part of the Finnish population. The respondents were members of a research panel of TV viewers and thereby, the ownership rates of smartphone and tablet computer were slightly higher in comparison to all Finnish people. Our results represent mainly active and computer literate consumers who probably have better access to mobile technology than the population on average. Despite these limitations, the study distinguished some particularities among Finnish consumers and their use of mobile devices for online consumption and entertainment, which enriches the understanding of ageing digital consumers.

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Highlights

- Older adults use mobile devices for online shopping as often as younger adults
- Mobile-based entertainment use is most typical for younger male adults
- Older female adults use mobile-based entertainment least frequently
- Age, household structure and high education predict mobile-based online shopping
- Mobile-based entertainment use is best predicted by age and gender

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