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Media generations and their advertising attitudes and avoidance: a six-country comparison

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This cross-national survey ($N = 5784$) examined generational differences in media use, advertising attitudes and avoidance for five media (websites, social media, mobile phones, television, newspapers) in six countries (Germany, Spain, United Kingdom, United States, France, and the Netherlands). The results showed that the net generation and the newspaper generation, but not the TV generation, were clearly distinct in the frequency of their media use in all six countries. For advertising attitudes, generational patterns were visible, however, neither for all media nor in all countries. When generational differences did occur, the net generation was on the positive end, whereas the newspaper generation was usually the most negative. For advertising avoidance, generational patterns were less present and consistent. The findings point out interesting directions for future research. Practical implications for advertisers and media planners are discussed.

Keywords: advertising attitudes; advertising avoidance; cross-national comparison; generations; media generations; media use; survey

Introduction

This study aims to investigate whether it is appropriate to characterize age groups as *media generations* that differ in their media use. Additionally, the study aims to explore whether media generations differ in their advertising attitudes and avoidance. A cross-national survey ($N = 5784$) was conducted examining generational differences in media use, advertising attitudes and avoidance for five media (websites, social media, mobile phones, television, newspapers) in six countries (Germany, Spain, United Kingdom, United States, France, and the Netherlands). As such, this study contributes to the scientific literature and generates practical recommendations in at least three ways.

First, this study contributes to the existing literature on media and generations by building upon the idea that generations may adopt specific patterns of media use when they are young and remain faithful to them throughout their lifespans (e.g., Mares and Woodard 2006; Van der Goot and Beentjes 2015a). We therefore distinguish three media generations, with the most famous being the net generation (Hargittai 2010; Tapscott 2008), although the notion of a TV generation has also been put forth (Mares and

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Woodard 2006; Peiser 1999). In addition, we identify a newspaper generation (Bolin and Westlund 2009). Academic research that compares the media use of these three generations is scarce. Therefore, it remains unclear whether it is appropriate to identify the net, the TV, and the newspaper generation as groups that differ in their media use.

For advertising scholars, it is valuable to know whether the notion of media generations has empirical ground, because it makes the three groups easily identifiable and distinguishable. Moreover, insights in the validity of the media generation approach are valuable for media researchers because they can use these insights to formulate expectations about generational differences in various media-related attitudes and behaviors. For advertising and media practitioners, investigating whether it is appropriate to characterize age groups as media generations is meaningful as well, because they typically select media using demographics and data on a target group's media use. In case our study shows that the three generations indeed differentiate in terms of their (current) media use, the respective media could be used to specifically reach a certain generation.

Second, the study contributes to the advertising literature by connecting the notion of media generations with advertising attitudes and avoidance. Previous studies showed age differences in advertising attitudes (e.g., Alwitt and Prabhaker 1994; Shavitt, Lowrey, and Haefner 1998; Smit and Neijens 2000) and avoidance (Rojas-Méndez, Davies, and Madran 2009; Speck and Elliott 1997) and put forth the suggestion that these differences may be caused by age differences in media use (Speck and Elliott 1997). However, research investigating this assumption is still lacking. Therefore, this study investigates whether generations that supposedly differ in their media use also differ in their advertising attitudes and avoidance. For advertising researchers, the study thus generates new information, which helps to understand variation in advertising attitudes and avoidance. For practitioners, it is helpful to know whether the three generations differentiate not only in their media use but also in their stances toward advertising on different media platforms. Insights in a target group are always pivotal, and in case a generation is not only unique in its media use but also in its attitudes and avoidance, practitioners can use this knowledge to improve their communication with this generation.

The third contribution of this study is that it adopts a cross-national approach. Repeated calls have been made for more cross-national advertising studies (e.g., Okazaki and Mueller 2007; Taylor 2005, 2007), including international advertising research with a focus on social media (Okazaki and Taylor 2013). Obviously, global advertisers are confronted with the question of whether it is a good idea to standardize their international advertising campaigns (De Mooij 2014; Terlutter, Diehl, and Mueller 2010) and to identify cross-national, cross-market or global segments (Okazaki and Taylor 2013; Taylor 2005). For researchers, the study reveals whether generational patterns in media use, advertising attitudes, and advertising avoidance are uniform across countries. For practitioners, it would be very convenient if the three generations distinguish themselves (in terms of their media use, attitudes and avoidance) in the same way in all six countries.

Background

Media generations

Although age groups simultaneously represent generations (e.g., generation Y, baby boom generation) and life stages (e.g., adolescents, adults) – a point that we will reiterate in the discussion – the current study focuses on a demarcation in terms of generations. Any distinction between generations starts with the basic assumption that the

circumstances in which a generation grows up determine to a large extent its behavior later in life (e.g., Mannheim 1952). Generations are supposed to be different from each other because they grow up in distinctive societal, political, and economic circumstances. Scholars argue that experiences during socialization or during adolescence, the so-called formative years, leave long-lasting impressions on values and attitudes, and continue to influence behavior later in life (e.g., Mannheim 1952; Strauss and Howe 1991).

A number of generations have been identified in the twentieth century, in the United States and in other western countries. The precise names and birth years are debated, but the categorization is typically as follows (e.g., Strauss and Howe 1991): the pre-war (born before World War II) or silent generation, the baby boom generation (born between 1946 and 1964), generation X (born between 1965 and 1976), generation Y or millennials (born between 1977 and 1995), and generation Z (born after 1995).

Communication scholars have argued that generations may adopt specific patterns of media use when they are young and remain faithful to those throughout their lifespans (Bolin and Westlund 2009; Gumpert and Cathcart 1985; Mares and Woodard 2006; Van der Goot and Beentjes 2015a, 2015b; Volkmer 2006; Westlund and Weibul 2013). Generations that are young when a particular medium becomes popular may have a stronger attachment to that medium than do previous or later generations. In other words, there may be 'media generations' that differ in their current media use because they differ in the media they grew up with.

The most famous 'media generation' is the net generation (e.g., Hargittai 2010; Oblinger, Oblinger, and Lippincott 2005; Tapscott 1998, 2008), the so-called digital natives (Jones et al. 2010; Palfrey and Gasser 2008; Prensky 2001): people born between approximately 1978 and 1995 whose distinctive characteristic is that they grew up with information technology, most importantly, the Internet (Hargittai 2010; Tapscott 1998, 2008). Consequently, 'generation Y' and 'net generation' are different names for roughly the same group of people.

The notion of a TV generation has also been put forth (Bolin and Westlund 2009; Mares and Woodard 2006; Peiser 1999). This generation consists of people who were young during the introduction and spread of television, which means that they were born in the second half of the 1950s. The TV generation is supposed to have a stronger affection for television and to be less inclined to read than previous generations. A cohort analysis by Mares and Woodard (2006) yields some support for the concept of a TV generation. These researchers used six measurement times (1978, 1982, 1986, 1990, 1994, and 1998) from the General Social Survey in the United States in which respondents were asked how many hours they watched television on an average day. Cohorts born before 1905 watched the least television across the six measurement times. Later cohorts watched more, particularly those born between the late 1940s and the 1960s. More recent cohorts showed something of a decline. This finding means that the cohorts that were in their childhood and teens during the introduction and popularization of television seem to have the strongest attachment to this medium. In Germany, a survey also showed that being born in this era had a stimulating effect on television viewing (Peiser 2000). In this study, we therefore define the TV generation as the people born between 1958 and 1977, because they watched television when they were young.

The third generation that we distinguish is the newspaper generation (Bolin and Westlund 2009). This is the oldest age group, born between 1930 and 1957. The defining characteristic is that these people grew up with newspapers as the dominant medium. Indeed, research has shown that the members of the oldest generation are the most frequent readers today (e.g., Malthouse and Calder 2006).

Based on this description of three media generations, we expect that the generations will differ in their media use in the following way:

H1: In all six countries, the three generations differ in the frequency in which they currently use media, in that – compared to the other two generations – (a) the net generation (born between 1978 and 1995) uses the Internet (browsing websites; browsing social media and browsing Internet on mobile phones) most frequently, (b) the TV generation (born between 1958 and 1977) watches television most frequently, and (c) the newspaper generation (born between 1930 and 1957) reads newspapers most frequently.

Media generations and their advertising attitudes and avoidance

Based on previous research, there are two reasons to expect that media generations differ in their advertising attitudes and avoidance. First, studies have shown that media experience relates to advertising experience (e.g., Bronner and Neijens 2006). For example, Bronner and Neijens found that people who experienced negative emotions regarding newspapers as a medium also experienced negative emotions regarding advertising in newspapers. This may imply that generations, in case they indeed differ in their media use, also differ in their attitudes and avoidance of advertising in these media.

Second, research has shown age differences in advertising attitudes (Alwitt and Prabhaker 1994; Hoek and Gendall 1994; Obermiller and Spangenberg 1998; Shavitt, Lowrey, and Haefner 1998; Smit and Neijens 2000) and avoidance (Rojas-Méndez, Davies, and Madran 2009; Speck and Elliott 1997). As a potential explanation for these age differences in attitudes and, particularly, avoidance, Speck and Elliot suggested age differences in media use. The authors suggested that older adults read more newspapers than younger adults do and therefore have a greater opportunity to avoid ads. Additionally, frequent readers may consider repetitive ads ‘old’ and hence not worth paying attention to. For television, these authors argued that older adults avoided television advertising less than younger adults because younger adults were more likely to adopt newer technologies such as, at that time, skip features on VCRs that facilitated avoiding. This argumentation implies that the three media generations that we identify in the current study may also distinguish themselves in terms of their advertising attitudes and avoidance.

However, although generational differences may be expected, contrasting predictions are possible. The net generation may be the generation that is most attached to browsing websites, social media, and Internet on mobile phones, which (in line with Bronner and Neijens 2006) could spill over to positive attitudes regarding advertising in these media, and thus to the least avoidance. In contrast, in line with Speck and Elliot (1997), we could suggest that the net generation is most savvy regarding avoidance methods in newer media and therefore is the generation that most often avoids advertising on websites, social media and mobile phones. The newspaper generation is supposedly the most positive about newspapers, which may transfer to more positive advertising attitudes (as in Bronner and Neijens). However, if the newspaper generation is indeed the generation that reads newspapers the most, this may mean that they avoid newspaper ads more than the other generations, as Speck and Elliot suggested. Therefore, we formulated the following research question to explore what types of generational patterns are apparent:

RQ1: How do the three generations in the six countries differ in their (a) advertising attitudes and (b) advertising avoidance for the five media?

Method

Sample

The data were collected in the second half of July 2012 by the market research agency *MetrixLab* via an online questionnaire that was simultaneously administered in the six countries. A total of 5973 participants aged 16–81 years participated in the research. For each country, a random sample of people 16 years or older was drawn from MetrixLab's Internet consumer panel OpinionBar (MetrixLab 2013). Participants were invited to participate by e-mail and received a small monetary incentive for completing the questionnaire. Within three days after the invitations were sent, data collection was terminated because the desired number of 1000 completed questionnaires had been reached in each country. As a result of this procedure, response rates were artificially low (Germany: 8.1%, Spain: 7.7%, UK: 6.1%, US: 6.6%, France: 5.7%, the Netherlands: 17.7%). Because of missing data, 189 participants were removed from the sample. Our final sample consisted of 5784 participants (Germany: $n = 963$, Spain: $n = 975$, UK: $n = 977$, US: $n = 943$, France: $n = 957$, the Netherlands: $n = 969$). The members of the net generation were aged between 17 and 34 years, the members of the TV generation were 35–53 years, and the age range for the newspaper generation was 54–81 years.

Equivalence

In conducting cross-national surveys, it is important to ensure that measures of constructs are equivalent across countries (Okazaki and Mueller 2007; Taylor 2005). Equivalence was obtained by employing the translation/back-translation method: a process that entails forward- and back-translations of all items (Okazaki and Mueller 2007). In addition, equivalence was ensured by using scoring procedures (i.e., response options) that are commonly used in all participating countries (Okazaki and Mueller 2007).

Measures

Frequency of media use

Frequency of media use was measured for all five media with the question 'Please indicate how many days per week you use the following media' on a scale ranging from 0 to 7 days (browsing websites, excluding e-mail and social media: $M = 6.30$, $SD = 1.48$; browsing social media: $M = 3.92$, $SD = 2.92$; browsing Internet on mobile phones: $M = 2.32$, $SD = 2.86$; television: $M = 6.29$, $SD = 1.46$; newspapers: $M = 3.36$, $SD = 2.70$).

Advertising attitude

Advertising attitude (Smit 1999; Smit and Neijens 2000) was measured for all five media with 15 items measuring five dimensions of advertising attitude: informativeness, entertainment, trustworthiness, intrusiveness, and irritation. These dimensions are latent constructs in advertising attitudes, as extensively discussed in previous literature (e.g., Brackett and Carr 2001; Ducoffe 1996; Smit and Neijens 2000; Tsang, Ho, and Liang 2004). Each dimension consisted of multiple items. Examples for the five dimensions for websites are: 'The advertising on websites contains useful information about special offers,' 'The advertising on websites is attractive,' 'The advertising on websites is credible,' 'The advertising on websites gets in the way of what I want to do,' and 'The advertising on websites is too repetitive.' Response options ranged from (1) *completely disagree* to (5) *completely agree*.

We approached the advertising attitude scales as second-order constructs, and worked in two steps. In the first step, we determined whether the items for each dimension (i.e., informativeness, entertainment, trustworthiness, intrusiveness, and irritation) could be combined into a subscale. We did so for each medium separately (i.e., informativeness of advertising on websites; entertainment of advertising on websites, etc.). For each medium, irritation was measured with four items; informativeness and intrusiveness were measured with three items each; and finally, entertainment and trustworthiness were measured with two items each. For the four- and three-item subscales, we conducted principal component analyses (PCAs) which all resulted in a one-factor solution. In all PCAs, the first component had an Eigenvalue above 1.00. For the two-item subscales, we calculated correlation coefficients to determine the cohesion within the dimension. For both attractiveness and trustworthiness, the correlation between the items was consistently strong (i.e., Pearson correlation coefficients $r > .50$). All 25 dimensions resulted in satisfactory Cronbach's alphas (i.e., $\alpha \geq .70$).

In the second step, we conducted one PCA for each medium in which we determined whether the five subscales could be combined into one overall scale of attitude towards advertising in that specific medium. These five PCAs all resulted in two-factor solutions. However, in all five PCAs, the five dimensions had a sufficient factor loading on the first factor (i.e., $\lambda > .60$). Additionally, in all five PCAs, only the first component had an Eigenvalue above 1.00. This implies the bend in the scree plot to occur between component numbers 1 and 2. It is for this reason, and the high Cronbach's alphas in all five PCAs, that for each medium the five dimensions were combined into one score, resulting in one advertising attitude measure for each medium separately (websites: Cronbach's $\alpha = .81$; social media: $\alpha = .82$; mobile phones: $\alpha = .82$; television: $\alpha = .82$; newspaper: $\alpha = .78$).

Advertising avoidance

The measure for advertising avoidance (Cho and Cheon 2004; Smit 1999; Smit and Neijens 2000) consisted of two items for each medium, measuring both cognitive (e.g., 'When I see advertising while browsing a website, I ignore it') and behavioral/mechanical avoidance (e.g., 'When I see advertising while browsing a website, I close the advertising window'). Response options ranged from (1) *never* to (4) *always* (websites: $\alpha = .74$; social media: $\alpha = .72$; mobile phones: $\alpha = .80$; television: $\alpha = .80$; newspaper: $\alpha = .78$).

Background characteristics

As background characteristics, participants' gender (1 = male, 0 = female), occupation (1 = paid employment, 0 = no paid employment), and household composition (i.e., number of persons in the household) were ascertained.

Results

Descriptive analyses

Table 1 provides a summary of the means of the three dependent variables (i.e., frequency of media use, advertising attitudes and advertising avoidance) for all five media.

Table 2 shows the background characteristics of the total sample and the three generations. The generations differed with regard to gender $\chi^2(2) = 286.54, p < .001$, occupation $\chi^2(2) = 559.81, p < .001$, and household composition $F(2,5781) = 127.31, p < .001$.

Table 1. Descriptive statistics dependent variables: means and standard deviations.

	Websites	Social media	Mobile	Television	Newspapers
Frequency of media use	6.30 (1.48)	3.92 (2.92)	2.32 (2.86)	6.29 (1.46)	3.36 (2.70)
Advertising attitude	2.52 (0.64)	2.40 (0.66)	2.28 (0.67)	2.66 (0.67)	2.82 (0.58)
Advertising avoidance	3.11 (0.77)	3.03 (0.81)	3.34 (0.79)	2.71 (0.80)	2.73 (0.77)

Note. Frequency of media use: scale from 0–7 (days per week); advertising attitude: scale from 1–5 (higher scores reflect more positive attitudes); advertising avoidance: scale from 1–4 (higher scores reflect higher levels of avoidance).

Table 2. Background characteristics of the total sample and the three generations.

	Total	Net generation	TV generation	Newspaper generation
Gender				
Male	57.1	41.5	57.8	71.2
Female	42.9	58.5	42.2	34.7
Occupation				
Paid employment	68.0	70.1	80.5	45.6
No paid employment	32.0	29.9	19.5	54.4
Household composition	2.80 (1.34)	2.95 (1.44)	2.98 (1.30)	2.36 (1.18)

Note. For gender and occupation, percentages are presented. For household composition, the mean number of persons in the household and standard deviations are presented.

Specifically, women were overrepresented in the net generation, while men were overrepresented in the TV and newspaper generation. Additionally, in the newspaper generation, more people did not have paid employment than in the other two generations. Finally, the newspaper generation lived together with fewer people in the household than the other two generations.

Hierarchical regression analyses

For each of the three dependent variables (i.e., frequency of media use, advertising attitudes and advertising avoidance), two sets of hierarchical multiple regression analyses were conducted. In the first set, we conducted hierarchical regression analyses for the combined sample from the six countries to identify the effect of generation. For each of the three dependent variables, we performed five of these analyses, one for each medium. In addition to generation, we included the three covariates (gender, occupation, and household size) and country as independent variables, to test whether the effect of generation still holds when the effect of the covariates and country are controlled for.

The independent variables were grouped into three separate blocks. The control variables were entered in the first block, and the dichotomized variables ‘TV generation’ (TV generation = 1, and the two other generations = 0) and ‘newspaper generation’ (newspaper generation = 1, and the two other generations = 0) were entered in the second block. Additionally, dichotomized country of residence variables were entered in the third block. The results are presented in Table 3. Due to space limits, we only present the beta coefficients and *R* square values of the total regression models (including all blocks). However,

Table 3. Hierarchical multiple regression explaining frequency of media use, advertising attitude, and advertising avoidance (combined sample).

	Frequency of media use	Advertising attitude	Advertising avoidance
<i>Websites</i>			
R^2 control variables	.004***	.010***	.006***
β Gender	.064***	.011	-.032*
β Occupation	-.012	.010	-.014
β Household composition	.000	.066***	-.053***
ΔR^2 generation	.005***	.007***	.001
β TV generation	-.004 ^a	-.047 ^{a**}	-.022
β Newspaper generation	-.069 ^{b***}	-.101 ^{b***}	-.036*
ΔR^2 country	.018***	.049***	.030***
β Spain	.006	-.005	.001
β UK	.015	.046**	-.002
β US	-.001	.172***	-.134***
β France	.037*	-.039*	.057**
β Netherlands	-.121***	-.098***	.068***
<i>Social media</i>			
R^2 control variables	.032***	.012***	.005***
β Gender	-.096***	-.037*	-.014
β Occupation	.030*	.007	-.001
β Household composition	.015	.072***	-.046**
ΔR^2 generation	.087***	.010***	.000
β TV generation	-.228 ^{a***}	-.072 ^{a***}	-.017
β Newspaper generation	-.358 ^{b***}	-.109 ^{b***}	.001
ΔR^2 country	.024***	.048***	.030***
β Spain	.147***	.087***	-.063**
β UK	.041**	.079***	-.035
β US	.099***	.221***	-.141***
β France	.029	.001	.049*
β Netherlands	-.028	-.028	.043*
<i>Mobile</i>			
R^2 control variables	.049***	.011***	.007***
β Gender	.058***	-.026	-.027
β Occupation	.132***	.025	-.018
β Household composition	.053***	.061**	-.065**
ΔR^2 generation	.121***	.014***	.006***
β TV generation	-.309 ^{a***}	-.093***	.069**
β Newspaper generation	-.416 ^{b***}	-.100***	.051*
ΔR^2 country	.019***	.045***	.049***
β Spain	.089***	.116***	-.93***
β UK	.050**	.113***	-.035
β US	.046**	.258***	-.200***
β France	.044**	.040	.041
β Netherlands	-.077**	.036	.039

(continued)

Table 3. (Continued)

	Frequency of media use	Advertising attitude	Advertising avoidance
<i>Television</i>			
R^2 control variables	.002**	.019***	.007***
β Gender	-.051***	-.012	.012
β Occupation	-.010	.056***	-.037**
β Household composition	-.016	.079***	-.069***
ΔR^2 generation	.020***	.005***	.000
β TV generation	.136 ^a ***	-.022 ^a	-.033*
β Newspaper generation	.176 ^b ***	-.081 ^b ***	-.021
ΔR^2 country	.003**	.093***	.017***
β Spain	.019	-.003	.008
β UK	.044*	.134***	.027
β US	.029	.242***	-.065***
β France	.050**	-.028	.053**
β Netherlands	-.001	-.107***	.093***
<i>Newspapers</i>			
R^2 control variables	.025***	.010***	.004***
β Gender	.103***	.035*	.009
β Occupation	.063***	.046**	-.040*
β Household composition	.047***	.058***	-.058***
ΔR^2 generation	.042***	.002*	.000
β TV generation	.066 ^a ***	-.030	-.020
β Newspaper generation	.251 ^b ***	-.041**	-.020
ΔR^2 country	.027***	.046***	.024***
β Spain	-.059***	-.080***	.032
β UK	-.148***	.003	.072***
β US	-.142***	.093***	-.021
β France	-.185***	-.114***	.148***
β Netherlands	-.097***	-.145***	.093***

Note. Significant differences between the TV and the newspaper generation ($p < .05$) are indicated with different superscripts in the same column.

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

R square change values (ΔR^2) of the individual blocks are depicted as well to provide insight in the added variance of the different groups of variables.

These analyses allowed for conclusions regarding how the TV and the newspaper generation differed from the net generation (since the net generation was the reference group). In order to test whether the TV and newspaper generation also differed from each other, we conducted the same set of analyses, but now used the TV generation as the reference group. That is, in the second block of the hierarchical regression analyses, the dichotomized variables 'net generation' (net generation = 1; and the two other generations = 0) and 'newspaper generation' (newspaper generation = 1, and the two other generations = 0) were included. The difference between the TV and newspaper generation can be deduced from the beta values for the newspaper generation: a significant beta value

indicates a significant difference between the two generations. These significant beta values are presented in Table 3 with different superscripts (a,b).

In the second set, we conducted country-specific hierarchical regression analyses to determine whether the effect of generation on the dependent variable as found in the combined sample is the same in all six countries. Again, the control variables were entered in the first block. Results are presented in the Appendices 1–3.

Frequency of media use (Hypothesis 1)

Hypothesis 1a predicted that the net generation uses the Internet (browsing websites, social media, and Internet on mobile phones) more frequently than the other two generations. In the combined sample, the finding for browsing websites was not entirely in line with the hypothesis: the net generation indeed browsed websites more frequently than the newspaper generation (as indicated by the significant and negative beta for the newspaper generation (Table 3, first column)), but not more frequently than the television generation. In agreement with the expectation, the net generation browsed social media and Internet on mobile phones more frequently than the other two generations (as indicated by the significant and negative beta values for the TV generation and the newspaper generation). These patterns were the same in all six different countries, except that the difference between the net generation and the newspaper generation in browsing websites was only found in Germany and the Netherlands (see Appendix 1). Thus, Hypothesis 1a was confirmed for social media and Internet on mobile phones, but not for websites.

Hypothesis 1b predicted that, compared to the other two generations, the TV generation watches television most frequently. The findings in the combined sample were not entirely in agreement with the prediction: the TV generation indeed watched television more frequently than the net generation (as indicated by the significant and positive beta for the TV generation for television in Table 3), but not more frequently than the newspaper generation. This pattern was also found in the six countries (see Appendix 1); therefore, Hypothesis 1b was not confirmed.

Hypothesis 1c stated that, compared to the two other generations, the newspaper generation reads newspapers most frequently. The results in the combined sample (Table 3) as well as in all six countries (Appendix 1) show that the newspaper generation reads newspapers more frequently than the net generation (as indicated by the significant and negative beta value) and the TV generation (as indicated by the different superscripts). This is in agreement with the hypothesis.

Advertising attitudes (Research question 1a)

Research question 1a asked how the three generations differ in their advertising attitudes for all five media. For all media, the regression analyses for the combined sample revealed a significant effect of generation (i.e., significant ΔR^2). For advertising on websites and social media, the net generation was the most positive generation, the TV generation took the middle ground, and the newspaper generation was the most negative. All three generations differed significantly from each other, as indicated by the significant beta values and the superscripts in Table 3 (second column). For mobile advertising, the net generation was more positive than the TV and newspaper generation (as indicated by the significant and negative beta values in Table 3). For advertising on television, the newspaper generation was more negative than the net generation (as indicated by the significant and negative beta value) and the TV generation (as indicated by the different

superscripts). No differences were found between the attitudes of the net and the TV generation. For advertising in newspapers, the newspaper generation also was more negative than the net generation, but they did not differ from the TV generation. Again, no differences were found for the attitudes toward newspaper advertising between the net and the TV generation. Thus, overall, the newspaper generation was the most negative group.

For each medium, the advertising attitudes patterns from the combined sample were found in maximum two countries (Appendix 2). For websites and social media, the pattern in the combined sample (i.e., the net generation being more positive than the TV generation, and the TV generation being more positive than the newspaper generation) was found in the UK and the US. In the Netherlands, the net generation was more positive about website advertising than the newspaper generation, and more positive about social media advertising than the other two generations. For mobile phones, the exact pattern from the combined sample (net generation more positive than the other two generations) was not found in any of the countries. The four countries that revealed generational differences (Spain, UK, US, the Netherlands) had in common that the net generation was on the positive end. For television, the pattern from the combined sample (i.e., the newspaper generation being the most negative) was found in the UK and the US. In the Netherlands, the net generation was the most positive, with the TV generation taking the middle ground, and the newspaper generation being the most negative. For newspapers, none of the countries showed the same pattern as the combined sample did. Only France showed significant generational differences, with the net generation being more positive than the TV generation and the newspaper generation.

In sum, when generational patterns occurred in the individual countries, the net generation was on the positive end, whereas the newspaper generation was usually the most negative.

Advertising avoidance (Research question 1b)

Research question 1b asked how the three generations differ in their advertising avoidance for all five media. The regression analyses for the combined sample (Table 3 – third column) displayed a significant effect of generation only for advertising avoidance on mobile phones: the net generation avoided advertising on mobile phones less than the TV and the newspaper generation. For the other four media, there was no significant effect for generation (i.e., non-significant ΔR^2); however, for websites, the net generation avoided more than the newspaper generation, whereas for television, the net generation avoided more than the TV generation.

This exact pattern for mobile phones was also observed in the UK (Appendix 3). In the US and the Netherlands, the net generation avoided mobile advertising less compared to the TV generation, but not compared to the newspaper generation. In contrast to the combined sample, in France, the net generation (and the television generation) avoided advertising on mobile phones more than the newspaper generation. For websites, France and the Netherlands showed the same generational difference as the combined sample (i.e., the net generation avoided more than the newspaper generation). For television, none of the countries showed generational differences, except for Germany in which the net generation avoided more than the TV and the newspaper generation. For newspapers, Germany showed a generational pattern, also with the net generation avoiding more than the other two generations. In sum, for advertising avoidance, there were fewer generational effects than for frequency of media use and advertising attitudes, and the effects were small and inconsistent.

Conclusions and discussion

This study examined generational differences in media use, advertising attitudes and avoidance for five media (websites, social media, mobile phones, television, newspapers) in six countries (Germany, Spain, United Kingdom, United States, France, and the Netherlands).

The first aim was to investigate whether it is appropriate to characterize age groups as *media generations* that differ in their media use. The survey revealed that the net generation and the newspaper generation clearly distinguished themselves in terms of the frequency of their media use in all six countries. As expected, the net generation was the generation that browsed social media and Internet on mobile phones most frequently, and the newspaper generation distinguished itself by reading newspapers more frequently than the other two generations. Interestingly, the TV generation did not distinguish itself as the generation that watched television most frequently. These findings imply that the notions of the net generation and the newspaper generation are adequate at this point in time, but the label 'TV generation' turned out to be unjustified because they did not watch more television than the newspaper generation. This is in line with the finding in previous research that older adults (here, the newspaper generation) spend more time on television viewing than younger adults, partially because life changes such as retirement encourage them to watch more television (e.g., Mares and Woodard 2006; Van der Goot, Beentjes, and Van Selm 2006, 2012).

The second aim of the study was to investigate whether media generations differ in their advertising attitudes and avoidance. Overall, there are generational differences in people's attitudes toward advertising, but not for all media in all countries. Interestingly, when we did find generational differences for advertising attitude, the *net generation* was on the positive end. This occurred not only for advertising in the online media, but also for advertising on television and in newspapers. This finding is not in line with the argumentation (based on Bronner and Neijens 2006) that the net generation, who grew up with the Internet and who browses it most frequently, has positive attitudes towards the Internet which transfer to positive attitudes regarding advertising on websites, social media and mobile phones. A better explanation for the findings seems to be that the youngest generation – more than the other two generations – grew up in an environment that is so saturated with advertising that it is normal and not unpleasant for them. Thus, they are more positive regarding advertising, regardless of the media that it is in.

In case generational differences were found, the *newspaper generation* was usually the most negative generation regarding advertising. In the US, they were the most negative generation for all media except for newspapers, which is in agreement with the reasoning based on Bronner and Neijens (2006): the newspaper generation reads newspapers most frequently; they are most positive about this medium and therefore more positive about advertising in this medium than about advertising in other media.

However, overall, the negative attitudes of the newspaper generation seem more a representation of their attitudes towards advertising in general than of their stance towards certain media. Arguably, the newspaper generation had its formative years in another era than the younger generations, which influences their values and opinions later in life (e.g., Mannheim 1952). They remember the time with much less advertising, they have witnessed the rise of the consumer society, and may therefore be more critical about advertising than the youngest generation for whom advertising is a natural part of life.

Additionally, the age differences in attitudes may also be a result of lifespan changes. A potential explanation could be that older adults are more negative about 'everything'

and therefore also about advertising. However, we do not deem this reasoning convincing because a growing body of psychological research shows that people experience fewer negative emotions as they grow older (e.g., Charles, Mather, and Carstensen 2003; Mather and Carstensen 2005). Because earlier research also showed that older adults had more negative attitudes about advertising than did younger adults (e.g., Alwitt and Prabhaker 1994; Shavitt, Lowrey, and Haefner 1998; Smit and Neijens 2000), we have the impression that it is specifically something in advertising that does not appeal to older adults' tastes. It is possible that people like advertising when they are younger, but distance themselves from it when they grow older because they feel that it is not targeted to them and is therefore unappealing. Future research should delve into the question of why older adults dislike advertising, focusing on the content and form features of advertising that may be detrimental for older adults' appreciation (Van der Goot, Van Reijmersdal, and Kleemans 2015).

For advertising avoidance, the survey did not reveal clear generational patterns. This is surprising in light of the generational differences in advertising attitudes. Because the newspaper generation was typically the most negative about advertising, we would expect them to avoid advertising the most. An explanation for not finding this outcome is that the newspaper generation might use other ways than avoidance to resist advertising. A typology of resistance strategies shows that consumers can resist not only by avoidance, but also by contesting or empowering (Fransen et al. 2015). Contesting includes counterarguing the content and dismissing the source, whereas empowering implies reassuring one's existing attitude (Fransen et al. 2015). Future research should investigate whether the three generations differ in their use of resistance strategies. Additionally, future research could explore whether generations differ in their understanding of advertising (i.e., persuasion knowledge; Friestad and Wright 1994), particularly with regard to online advertising formats. It is assumed that persuasion knowledge is an important predictor of people's level of resistance (Friestad and Wright 1994). Therefore, generational differences in persuasion knowledge might explain potential generational differences in the use of advertising resistance strategies. We recommend future research to start with a qualitative study that maps how different generations judge, understand, and respond to different forms of (online) advertising (Ham, Nelson, and Das 2015).

A limitation of the current study is that it is cross-sectional, which means that the three age groups simultaneously represent three generations (the net generation, TV generation and newspaper generation) as well as three life stages (emerging adults and younger adults, middle-aged adults, and older adults). Only cohort analyses can disentangle generational and lifespan effects. To conduct a cohort analysis, data have to be available for multiple generations in a variety of life stages. It is necessary to have longitudinal studies and/or cross-sectional surveys with consistent variables on media use and advertising that have been conducted at different measurement times across decades. These data are difficult to find, and therefore cohort analyses regarding communication are relatively scarce (e.g., Mares and Woodard 2006; Peiser 1999). In light of these practical hindrances in conducting cohort analyses, this study is insightful because it shows generational differences at this point in time. Longitudinal studies that start now and are continued for decades can reveal whether the net generation stays positive about advertising in the media they grew up with or they become more negative as they grow older, for example because they feel advertising is not targeted at them anymore.

Another suggestion for future research is to delve further into the cross-national differences in generational patterns. The current study expected that generational patterns would be similar in all six countries. For frequency of media use, this was indeed the

case; however, for advertising attitudes and avoidance, cross-national differences were found. An explanation for these cross-national differences may be that the nature of advertising substantially varies between countries due to government regulation and self-regulation (e.g., Rojas-Méndez, Davies, and Madran 2009). For example, in the United States, advertising broadcasting times are less closely restricted than in the Netherlands. Advertising regulations may lead to differences in advertising content and executional styles. In addition to the varying nature of advertising, there are differences in the amount of advertising expenditures (e.g., Durvasula et al. 1993). For example, ad expenditures in the United States are among the highest in the world, whereas in European countries, ad expenditures are lower. Moreover, differences between European countries exist as well. For instance, regarding online advertising, the United Kingdom scores much higher on ad expenditures than Spain and the Netherlands, while France and Germany score in between (IAB Europe 2015). This diversity in the nature of advertising and ad spending, combined with the cultural diversity of the countries (e.g., House, Quigley, and de Luque 2010), could lead to country differences in the generational patterns for attitudes towards advertising and advertising avoidance.

These potential explanations need to be investigated in further research. We recommend the use of available large-scale cross-cultural surveys such as the World Value Survey or the Eurobarometer that not only include measurements of media use and attitudes, but also of advertising regulations, advertising expenditures and cultural dimensions that may help explain the cross-national differences (for an introduction in cultural dimensions and an extensive overview of available data sources, see De Mooij 2014).

Practical implications

In the introduction, we stated that in case our study shows that the three generations indeed differentiate in terms of their (current) media use, the respective media could be used to specifically reach a certain generation. Based on the finding that the net generation browses social media and Internet on mobile phones more frequently than the two other generations, advertisers, media planners and other practitioners who aim to reach the net generation are advised to use social media and mobile phones. In this way, they are able to reach this specific generation, without unnecessarily reaching too many members of the other two generations. The TV generation, on the other hand, is more difficult to reach exclusively and selectively, because they do not clearly distinguish themselves in the use of television. This study points out that television is a mass medium that can be used to reach the general audience, not to reach one generation exclusively. The newspaper generation was indeed the group who read newspapers most frequently, implying that newspapers are an appropriate medium to reach this generation rather selectively.

Although avoidance levels do not seem to differ across generations – avoidance is common for all generations – our results do show clear generational differences for advertising attitudes. The findings show that overall the net generation is on the positive end of the spectrum, compared to the other two generations, which is obviously good news for practitioners who identify this generation as their target group. However, it needs to be kept in mind that the net generation is not more positive about advertising in all media in all countries.

The fact that the television generation and especially the newspaper generation are generally most negative about advertising may concern practitioners. Extra efforts need to be taken to make advertising also appealing for these generations who are above-averagely turned off by advertising. Practitioners are encouraged to take into consideration

that older adults are an increasingly important target group for advertising because of the size of the group and their purchasing power (Ahmad 2003; Moschis 2012; Simcock and Sudbury 2006; Yoon, Cole, and Lee 2009), which means that additional effort is necessary to make advertising relevant for the ageing population. In case these generations are the target group, practitioners need to carefully consider which content and form features are appropriate for this group.

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No potential conflict of interest was reported by the authors.

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References

- Ahmad, R. 2003. Benefit segmentation: A potentially useful technique of segmenting and targeting older consumers. *International Journal of Market Research* 45, no. 3: 373–88.
- Alwitt, L.F., and P.R. Prabhaker. 1994. Identifying who dislikes television advertising: Not by demographics alone. *Journal of Advertising Research* 34, no. 6: 17–29.
- Bolin, G., and O. Westlund. 2009. Mobile generations: The role of mobile technology in the shaping of Swedish media generations. *International Journal of Communication* 3: 108–24.

- Brackett, L.K., and B.N. Carr. 2001. Cyberspace advertising vs. other media: Consumer vs. mature student attitudes. *Journal of Advertising Research* 41, no. 5: 23–32.
- Bronner, F., and P. Neijens. 2006. Audience experiences of media context and embedded advertising: A comparison of eight media. *International Journal of Market Research* 48, no. 1: 81–100.
- Charles, S.T., M. Mather, and L.L. Carstensen. 2003. Aging and emotional memory: The forgettable nature of negative images for older adults. *Journal of Experimental Psychology: General* 132, no. 2: 310–24.
- Cho, C., and H.J. Cheon. 2004. Why do people avoid advertising on the internet? *Journal of Advertising* 33, no. 4: 89–97.
- De Mooij, M. 2014. *Global marketing and advertising: Understanding cultural paradoxes*. 4th ed. Thousand Oaks, CA: Sage.
- Ducoffe, R.H. 1996. Advertising value and advertising on the web. *Journal of Advertising Research* 36, no. 5: 21–36.
- Durvasula, S., Andrews, J.C., Lysonski, S., and Netemeyer, R.G. 1993. Assessing the cross-national applicability of consumer behavior models: A model of attitude toward advertising in general. *Journal of Consumer Research* 19, no. 4: 626–36.
- Fransen, M.L., P.W.J. Verlegh, A. Kirmani, and E.G. Smit. 2015. A typology of consumer strategies for resisting advertising, and a review of mechanisms for countering them. *International Journal of Advertising* 34, no. 1: 6–16.
- Friestad, M., and P. Wright. 1994. The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research* 21, no. 1: 1–31.
- Gumpert, G., and R. Cathcart. 1985. Media grammars, generations and media gaps. *Critical Studies in Mass Communication* 2, no. 1: 23–35.
- Ham, C.D., M.R. Nelson, and S. Das. 2015. How to measure persuasion knowledge. *International Journal of Advertising* 34, no. 1: 17–53.
- Hargittai, E. 2010. Digital na(t)ives? Variation in internet skills and uses among members of the “Net generation”. *Sociological Inquiry* 80, no. 1: 92–113.
- Hoek, J., and P. Gendall. 1994. Wishful thinking or hard core hostility? Viewers’ support for a reduction in television advertising. *International Journal of Advertising* 13, no. 1: 65–76.
- House, R.J., N.R. Quigley, and M.S. de Luque. 2010. Insights from Project GLOBE: Extending global advertising research through a contemporary framework. *International Journal of Advertising* 29, no. 1: 111–39.
- IAB Europe. 2015. *European online advertising report*. <http://www.iabeurope.eu/research-thought-leadership/press-release-european-online-advertising-surpasses-tv-to-record-annual-spend-of-e36-2bn/>.
- Jones, C., R. Ramanau, S. Cross, and G. Healing. 2010. Net generation or digital natives: Is there a distinct new generation entering university? *Computers and Education* 54, no. 3: 722–32.
- Malthouse, E.C., and B.J. Calder. 2006. Demographics of newspaper readership: Predictors and patterns of US consumption. *Journal of Media Business Studies* 3, no. 1: 1–18.
- Mannheim, K. 1952. The sociological problem of generations. In *Essays on the sociology of knowledge*, ed. K. Kecskemeti, 276–322. New York, NY: Oxford University Press.
- Mares, M.L., and E.H. Woodard. 2006. In search of the older audience: Adult age differences in television viewing. *Journal of Broadcasting and Electronic Media* 50, no. 4: 595–614.
- Mather, M., and L.L. Carstensen. 2005. Aging and motivated cognition: The positivity effect in attention and memory. *Trends in Cognitive Sciences* 9, no. 10: 496–502.
- MetrixLab. 2013. Our global consumer panel OpinionBar. <http://metrixlab.com/company/global-consumer-panel>.
- Moschis, G.P. 2012. Consumer behavior in later life: Current knowledge, issues, and new directions for research. *Psychology and Marketing* 29, no. 2: 57–75.
- Obermiller, C., and E.R. Spangenberg. 1998. Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology* 7, no. 2: 159–86.
- Oblinger, D., J.L. Oblinger, and J.K. Lippincott, eds. 2005. *Educating the net generation*. Washington, DC: Educause.
- Okazaki, S., and B. Mueller. 2007. Cross-cultural advertising research: Where we have been and where we need to go. *International Marketing Review* 24, no. 5: 499–518.
- Okazaki, S., and C.R. Taylor. 2013. Social media and international advertising: Theoretical challenges and future directions. *International Marketing Review* 30, no. 1: 56–71.

- Palfrey, J., and U. Gasser. 2008. *Born digital: Understanding the first generation of digital natives*. New York, NY: Basic Books.
- Peiser, W. 1999. The television generation's relation to the mass media in Germany: Accounting for the impact of private television. *Journal of Broadcasting and Electronic Media* 43, no. 3: 364–85.
- Peiser, W. 2000. Cohort trends in media use in the United States. *Mass Communication and Society* 3, no. 2–3: 185–205.
- Prensky, M. 2001. Digital natives, digital immigrants. Part 1. *On the Horizon* 9, no. 5: 1–6.
- Rojas-Méndez, J.I., G. Davies, and C. Madran. 2009. Universal differences in advertising avoidance behavior: A cross-cultural study. *Journal of Business Research* 62, no. 10: 947–54.
- Shavitt, S., P. Lowrey, and J. Haefner. 1998. Public attitudes toward advertising: More favorable than you might think. *Journal of Advertising Research* 38, no. 4: 7–22.
- Simcock, P., and L. Sudbury. 2006. The invisible majority? Older models in UK television advertising. *International Journal of Advertising* 25, no. 1: 87–106.
- Smit, E.G. 1999. *Mass media advertising: Information or wallpaper?* Amsterdam: Het Spinhuis.
- Smit, E.G., and P.C. Neijens. 2000. Segmentation based on affinity for advertising. *Journal of Advertising Research* 40, no. 4: 35–43.
- Speck, P.S., and M.T. Elliott. 1997. Predictors of advertising avoidance in print and broadcast media. *Journal of Advertising* 26, no. 3: 61–76.
- Strauss, W., and N. Howe. 1991. *Generations: The history of America's future, 1584 to 2069*. New York: William Morrow.
- Tapscott, D. 1998. *Growing up digital: The rise of the net generation*. New York: McGraw-Hill.
- Tapscott, D. 2008. *Grown up digital: How the net generation is changing your world*. New York: McGraw-Hill.
- Taylor, C.R. 2005. Moving international advertising research forward: A new research agenda. *Journal of Advertising* 34, no. 1: 7–16.
- Taylor, C.R. 2007. Overcoming barriers to publishing international advertising research in top journals. *International Journal of Advertising* 26, no. 4: 557–60.
- Terlutter, R., S. Diehl, and B. Mueller. 2010. The cultural dimension of assertiveness in cross-cultural advertising the perception and evaluation of assertive advertising appeals. *International Journal of Advertising* 29, no. 3: 369–99.
- Tsang, M.M., S.C. Ho, and T.P. Liang. 2004. Consumer attitudes toward mobile advertising: An empirical study. *International Journal of Electronic Commerce* 8, no. 3: 65–78.
- Van der Goot, M.J., and J.W.J. Beentjes. 2015a. Media use across the life-span. In *The concise encyclopedia of communication*, ed. W. Donsbach. Oxford: Blackwell.
- Van der Goot, M.J., and J.W.J. Beentjes. 2015b. Media use across the life-span. In *The international encyclopedia of communication (update)*, ed. W. Donsbach. Oxford: Blackwell.
- Van der Goot, M.J., J.W.J. Beentjes, and M. Van Selm. 2006. Older adults' television viewing from a lifespan perspective: Past research and future challenges. In *Communication yearbook 30*, ed. C.S. Beck, 431–69. Mahwah, NJ: Lawrence Erlbaum Associates.
- Van der Goot, M.J., J.W.J. Beentjes, and M. Van Selm. 2012. Meanings of television in older adults' lives: An analysis of change and continuity in television viewing. *Ageing & Society* 32, no. 1: 147–68.
- Van der Goot, M.J., E.A. Van Reijmersdal, and M. Kleemans. 2015. Age differences in recall and liking of arousing television commercials. *Communications: The European Journal of Communication Research* 40, no. 3: 295–317.
- Volkmer, I., ed. 2006. *News in public memory: An international study of media memories across generations*. New York: Peter Lang.
- Westlund, O., and L. Weibull. 2013. Generation, life course and news media use in Sweden 1986–2011. *Northern Lights: Film and Media Studies Yearbook* 11, no. 1: 147–73.
- Yoon, C., C.A. Cole, and M.P. Lee. 2009. Consumer decision making and aging: Current knowledge and future directions. *Journal of Consumer Psychology* 19, no. 1: 2–16.

Appendix 1. Hierarchical multiple regression explaining frequency of media use (six countries separately)

	Germany	Spain	United Kingdom	United States	France	The Netherlands
<i>Websites</i>						
R^2 control variables	.002	.002	.015**	.004	.003	.015**
β Gender	.047	.038	.122***	-.049	.053	.137***
β Occupation	-.032	-.024	.027	.020	.009	-.033
β Household composition	-.037	.026	-.011	.000	.005	.007
ΔR^2 generation	.006*	.003	.001	.002	.000	.013**
β TV generation	-.032 ^a	.003	.000	.020	.022	-.029 ^a
β Newspaper generation	-.105 ^{b*}	-.051	-.039	-.028	.004	-.138 ^{b***}
<i>Social media</i>						
R^2 control variables	.026***	.047***	.069***	.081***	.023***	.023***
β Gender	-.050	-.132***	-.114***	-.079*	-.100**	-.093**
β Occupation	.058	-.051	.062	.079*	.030	.014
β Household composition	-.023	.021	.021	.098***	-.004	-.022
ΔR^2 generation	.107***	.071***	.080***	.072***	.064***	.084***
β TV generation	-.311 ^{a***}	-.244 ^{a***}	-.150 ^{a***}	-.192 ^{a***}	-.246 ^{a***}	-.235 ^{a***}
β Newspaper generation	-.456 ^{b***}	-.315 ^{b***}	-.359 ^{b***}	-.355 ^{b***}	-.286 ^{b***}	-.381 ^{b***}
<i>Mobile</i>						
R^2 control variables	.037***	.023***	.066***	.118***	.053***	.025***
β Gender	.129***	.028	.077*	.002	.064*	.071*
β Occupation	.135***	.121***	.134***	.197***	.130***	.103**
β Household composition	-.014	.029	.079**	.098**	.049	.053
ΔR^2 generation	.139***	.108***	.135***	.123***	.088***	.085***
β TV generation	-.374 ^{a***}	-.311 ^{a***}	-.326 ^{a***}	-.279 ^{a***}	-.260 ^{a***}	-.302 ^{a***}
β Newspaper generation	-.517 ^{b***}	-.383 ^{b***}	-.430 ^{b***}	-.461 ^{b***}	-.354 ^{b***}	-.364 ^{b***}
<i>Television</i>						
R^2 control variables	.001	.002	.003	.002	.009	.025***
β Gender	-.022	-.026	-.051	-.033	-.079*	-.092**
β Occupation	.007	-.006	-.033	-.021	.052	-.066*
β Household composition	-.035	.041	.040	.004	-.066	-.092**
ΔR^2 generation	.031***	.022***	.021***	.016***	.012**	.034***
β TV generation	.202***	.094 ^{a*}	.162***	.111**	.103**	.190***
β Newspaper generation	.233***	.185 ^{b***}	.127**	.164***	.126**	.232***
<i>Newspapers</i>						
R^2 control variables	.022***	.052***	.022***	.035***	.021***	.023***
β Gender	.072*	.167***	.098*	.125***	.109**	.093**
β Occupation	.039	.065*	.064	.112**	.020	.053
β Household composition	.076*	-.039	.014	.087**	.080*	.060
ΔR^2 generation	.072***	.020***	.031***	.018***	.035***	.116***
β TV generation	.182 ^{a***}	.089 ^{a*}	.060 ^a	-.049 ^a	.020 ^a	.139 ^{a***}
β Newspaper generation	.371 ^{b***}	.176 ^{b***}	.220 ^{b***}	.114 ^{b**}	.224 ^{b***}	.432 ^{b***}

Note. Significant differences between the TV and the newspaper generation ($p < .05$) are indicated with different superscripts in the same column.

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

Appendix 2. Hierarchical multiple regression explaining advertising attitude (six countries separately)

	Germany	Spain	United Kingdom	United States	France	The Netherlands
<i>Websites</i>						
R^2 control variables	.002	.008	.050***	.026***	.003	.001
β Gender	.037	.024	-.049	.033	.029	.015
β Occupation	.005	-.001	.045	.021	-.013	-.001
β Household composition	-.016	.084**	.129***	.122***	.037	.010
ΔR^2 generation	.001	.001	.033***	.017***	.001	.005
β TV generation	.027	.004	-.091 ^{a*}	-.080 ^{a*}	-.013	-.062
β Newspaper generation	-.006	-.031	-.230 ^{b***}	-.170 ^{b***}	-.049	-.091*
<i>Social media</i>						
R^2 control variables	.001	.015**	.049***	.028***	.010	.004
β Gender	-.008	-.023	-.095**	.002	-.037	-.041
β Occupation	.012	.002	.029	.006	-.056	.042
β Household composition	-.024	.116**	.131***	.113***	.071	-.026
ΔR^2 generation	.001	.004	.034***	.032***	.001	.012***
β TV generation	.009	-.049	-.131 ^{a**}	-.129 ^{a*}	.028	-.123**
β Newspaper generation	-.029	-.070	-.210 ^{b***}	-.225 ^{b***}	-.014	-.097*
<i>Mobile</i>						
R^2 control variables	.003	.019*	.037***	.019*	.003	.010
β Gender	.059	-.038	-.115**	.040	-.040	-.040
β Occupation	.039	-.017	.021	.045	.044	.054
β Household composition	-.010	.109**	.117**	.103*	.012	-.083
ΔR^2 generation	.004	.014*	.019**	.038***	.000	.035**
β TV generation	-.077	-.074	-.141**	-.113 ^{a*}	-.004	-.202**
β Newspaper generation	-.042	-.131**	-.100*	-.215 ^{b***}	-.001	-.107
<i>Television</i>						
R^2 control variables	.004	.008	.046***	.033***	.011*	.018**
β Gender	-.039	-.003	-.052	.006	-.014	.031
β Occupation	.052	.014	.091**	.088**	.049	.063
β Household composition	.028	.085**	.101**	.091**	.088**	.074**
ΔR^2 generation	.003	.001	.017***	.017***	.003	.019***
β TV generation	.071	.031	-.017 ^a	.006 ^a	-.065	-.114 ^{a**}
β Newspaper generation	.072	-.001	-.154 ^{b***}	-.143 ^{b**}	-.054	-.183 ^{b***}
<i>Newspapers</i>						
R^2 control variables	.004	.010*	.033***	.016*	.010	.011*
β Gender	.048	.035	-.013	.001	.028	.082*
β Occupation	.021	.013	.140***	.044	.056	.026
β Household composition	-.012	.092**	.040	.095*	.079*	.055
ΔR^2 generation	.002	.001	.005	.006	.019**	.005
β TV generation	.045	.003	-.007	.065	-.160***	-.064
β Newspaper generation	.062	.042	-.083	-.021	-.113*	-.100

Note. Significant differences between the TV and the newspaper generation ($p < .05$) are indicated with different superscripts in the same column.

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

Appendix 3. Hierarchical multiple regression explaining advertising avoidance (six countries separately)

	Germany	Spain	United Kingdom	United States	France	The Netherlands
<i>Websites</i>						
R^2 control variables	.009	.014**	.011*	.015**	.003	.004
β Gender	-.082*	-.051	-.029	.005	-.021	-.041
β Occupation	.003	-.003	-.045	-.063	.013	.018
β Household composition	-.020	-.103**	-.072*	-.101**	.004	.002
ΔR^2 generation	.003	.004	.003	.000	.008*	.005
β TV generation	-.068	-.041	.026	-.018	-.067	-.031
β Newspaper generation	-.057	-.075	.071	-.003	-.109**	-.092*
<i>Social media</i>						
R^2 control variables	.001	.009	.009	.012*	.003	.001
β Gender	-.027	.023	.019	-.031	-.028	-.015
β Occupation	.014	.027	-.033	-.011	.040	-.047
β Household composition	.025	-.083*	-.072	-.088*	-.011	-.002
ΔR^2 generation	.005	.001	.002	.005	.003	.004
β TV generation	-.082	-.030	.030	-.024	-.060	.028
β Newspaper generation	-.017	-.035	.054	.060	-.039	-.046
<i>Mobile</i>						
R^2 control variables	.012	.011	.017*	.018*	.005	.002
β Gender	-.107*	-.039	-.015	-.022	-.034	.028
β Occupation	-.038	-.029	-.020	-.045	.033	-.027
β Household composition	.036	-.096*	-.103*	-.123**	-.003	.023
ΔR^2 generation	.005	.002	.022**	.011	.016*	.029*
β TV generation	.085	.012	.092*	.096*	-.014 ^a	.181**
β Newspaper generation	.035	.044	.164***	.097	-.135 ^{b**}	.024
<i>Television</i>						
R^2 control variables	.001	.010*	.021***	.013**	.001	.010*
β Gender	.036	.023	-.014	.025	.019	-.021
β Occupation	-.033	.023	-.096**	-.074*	-.026	-.033
β Household composition	.001	-.096**	-.086**	-.084*	-.039	-.083*
ΔR^2 generation	.006*	.004	.001	.002	.001	.001
β TV generation	-.093*	-.074	.021	-.059	-.023	-.013
β Newspaper generation	-.104*	-.060	.049	-.031	-.044	.016
<i>Newspapers</i>						
R^2 control variables	.001	.010*	.025***	.013*	.001	.005
β Gender	.011	-.022	.012	.056	.034	-.025
β Occupation	.006	-.046	-.134**	-.061	.009	-.012
β Household composition	-.028	-.091**	-.083*	-.072	.006	-.057
ΔR^2 generation	.012**	.000	.002	.004	.000	.001
β TV generation	-.147**	-.002	.055	-.078	.008	-.021
β Newspaper generation	-.139**	.024	.020	-.039	.007	.014

Note. Significant differences between the TV and the newspaper generation ($p < .05$) are indicated with different superscripts in the same column.

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