



The Media Landscapes of European Audiences

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This article provides an overview of findings from a European study of media-use patterns in nine countries and presents a typology of European media audiences. The first section offers a brief review of previous research on audiences' uses of new and old media, individually and in combination, specifying the analytical perspective of the comparative study. The following three sections detail three aspects of the findings: a mapping of the landscape of media in which European audiences move in terms of their choice of and time spent on different media types; a cluster analysis of the distinctive ways in which different sociodemographic groups locate themselves in the media landscape overall; and a further analysis and interpretation of how audiences integrate media into the contexts of their everyday lives. The conclusion notes some theoretical lessons of the project and considers ways of conceptualizing and operationalizing the communicative practices of audiences in future research.

Keywords: audiences, cluster analysis, comparative research, cross-media communication, Europe, users

The advent of digital technologies has greatly expanded the range of available media forms, resulting in changing patterns of media use and communicative practices generally as audiences incorporate these new cultural resources into their daily lives. Key examples include new forms of telephony such as mobile voice communication and messaging (e-mailing and texting, or SMS), new platforms of broadcasting (websites and video on demand), and social media, which allow for new forms of many-to-many communication or group interaction. The scale and depth of these changes is such that research has been struggling to keep up with the rapid development and diffusion of ever more platforms

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and services. A special challenge is to arrive at theoretically solid frameworks for examining the concrete changing practices of media use across social and cultural contexts, including different nations and regions of the world.

The study of European audiences that is reported in this special issue has addressed that challenge with a comparative study of nine countries, departing from a theoretical framework that shifts the focus away from media as delimited texts and institutions and toward the diverse forms of communication that audiences attend to and engage in through a range of media (Jensen & Helles, 2011). This article provides an overview of the findings about media-use patterns in the nine countries and presents a typology of European media audiences. The first section below offers a brief review of previous research on audiences' uses of new and old media, individually and in combination, specifying the analytical perspective of the present comparative study. (The sample and other aspects of the methodology are addressed and summarized in Appendix 1 to the introductory article of this special issue.) The following sections detail three aspects of the findings: a mapping of the landscape of media in which European audiences move in terms of their choice of and time spent on different media types; a cluster analysis of the distinctive ways in which different sociodemographic groups locate themselves in the media landscape overall; and a further analysis and interpretation of how audiences integrate media into the contexts of their everyday lives. The conclusion notes some theoretical lessons of the project and considers ways of conceptualizing and operationalizing the communicative practices of audiences in future research.

Media Preferences and Media Conjunctures

One particular difficulty for research on the changing media environment has been the conceptualization and operationalization of the multiple platforms on which media are increasingly being used. For one thing, digital and mobile devices have proliferated; with the introduction of the smartphone, the availability of media extends across most of users' daily lives. For another thing, legacy media are accessible on these devices and on traditional television and radio sets and in print. The pervasive digitization of media distribution and communication infrastructures has also led to the emergence of entirely new media forms, such as social network sites and blogs, on digital platforms. A variety of media crisscross a range of platforms in an open-ended historical and cultural process.

Contrary to some early projections, empirical research for more than a decade has indicated that new media do not simply replace old or existing media forms (Dimmick, Feaster, & Ramirez, 2011; Lai, 2014; Nguyen & Western, 2006; Ruppel & Burke, 2014). Rather than being subject to categorical preferences, media appear as an array of complementary options from the users' perspective: Media uses are conjunctural and contextual. This general insight has been given various formulations in previous research, such as "cross-media use" (Bjur et al., 2013), "media choice" (Hartmann, 2009), "media repertoires" (Hasebrink & Domeyer, 2012; Hasebrink & Popp, 2006; Taneja, Webster, Malthouse, & Ksiazek, 2012), "figurations" (Hepp, 2013), and a range of other terms (see Carpentier, Schröder, & Hallett, 2013, and Schröder, 2011, for recent overviews).

Despite a growing number of studies that aim to employ a cross-media perspective on current practices of media use, research has often either operationalized media at a generic or abstract level, for instance, by comparing Internet, mobile, and television use in general (Courtois, Mechant, Paulussen, & De Marez, 2012; Westlund & Bjur, 2014); has focused on a relatively few selected genres of communication, for example, news and journalism across media (Hasebrink & Popp, 2006; Kim, 2014; Yuan, 2011); or has restricted the analysis to interpersonal communication in face-to-face and online settings (Baym, 2010). While such studies are valuable in examining key institutions in society and related practices of communication, they may nevertheless tend to reify the media, genres, and practices in question as silos of communication from a top-down or etic perspective (Pike, 1967). At least, such focused studies need to be supplemented by bottom-up or emic studies exploring and mapping users and uses across media and contexts of use (Hasebrink & Hölig, 2013). The European audience study, accordingly, relied on a research design that is communication centric rather than media centric (Jensen & Helles, 2011). Furthermore, whereas some cross-media studies restrict the perspective to specific age groups such as teenagers (Courtois et al., 2012; Westlund & Bjur, 2014) or limited samples (Schröder & Kobbernagel, 2010), the present study covers the full age range from young adults to the elderly in the populations in question in an extensive sample ($N = 10,742$) from multiple countries. The aim was to produce a comprehensive account of audience preferences and practices across the full set of available media. The current span of media types and platforms gives audiences unprecedented degrees of freedom in selecting and combining media for multiple purposes. But, which media do users prefer, in the sense that they actually attend to and use their time on them? And, how do these preferred media enter into specific combinations within the users' everyday lives and as part of particular domains of social activity?

Findings

Media Users, Media Times

One practical challenge in studying the contemporary European media environment—in which a broad array of media are available, in principle, to a large and growing share of the general population—is how to balance potentially relevant details with a general overview. Whereas a few media are used by almost everybody, other media are, in fact, used only by small minorities. Furthermore, media consumption differs substantially among different sociodemographic segments, both when it comes to the uptake and use of different media and when it comes to the amount of time typically spent on a given medium. Figure 1 provides a first overview of the complex relationship between use (or non-use) of central media and communicative practices, along with the time spent on these media. For each medium, the figure joins a representation of its share of users (the proportion of the general population who reported using this medium the day before) with a representation of its share of total time use (as reported by all users for all media combined).¹

¹ The time use for texting (SMS) and voice calls was estimated from the number of transactions reported in the survey, assuming an average call length of 180 seconds and an average time of 40 seconds spent per text message (Helles, 2009).

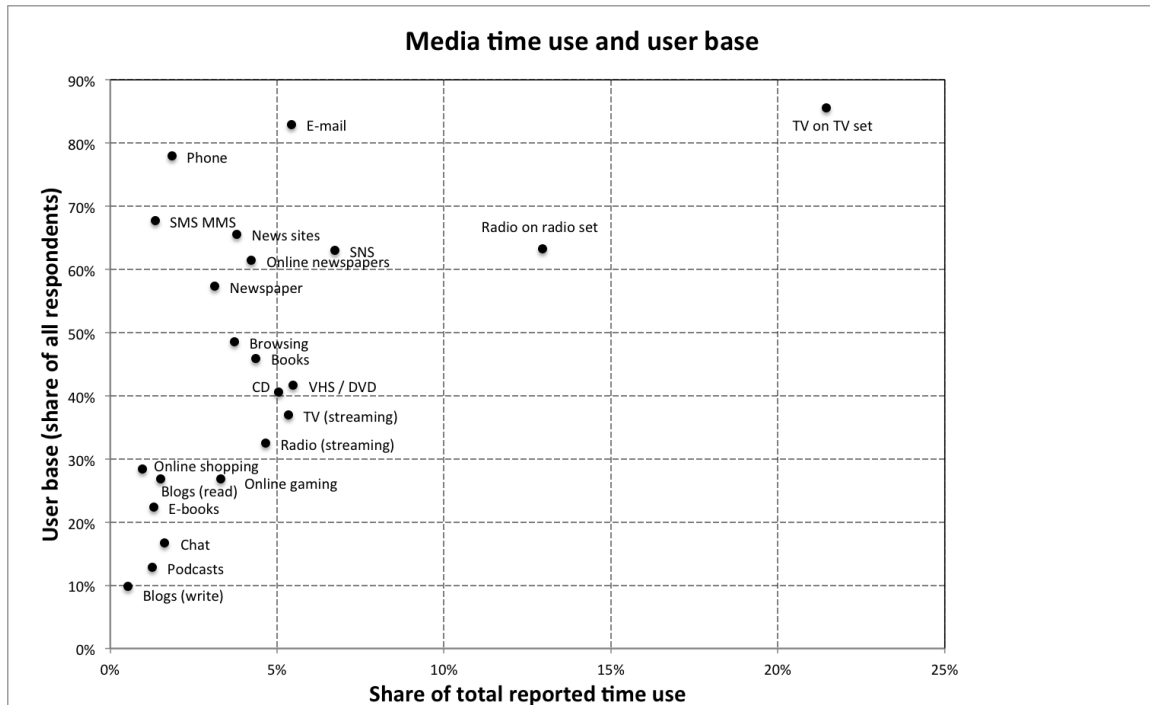


Figure 1. User base for different media and total reported time use by all respondents across all media (N = 10,742).

Perhaps most notably, Figure 1 demonstrates the continued centrality of certain old media: Traditional television viewing on a TV set tops the charts both with respect to the user base and its share of the total time spent on media use. In comparison, new media forms such as blogs and chat come out as practices pursued only by small minorities of the respondents in the full sample. In the middle range, several interesting configurations are evident: Newspapers in print and online attract comparable attention and time use. Similarly, streaming television and the viewing of, for example, feature movies on DVD fall in the same spectrum of Figure 1. And, while Web browsing and book reading can be considered rather different cultural practices, both appear as part of the media habits of about half the population, and their share of total time use on media is comparable to the corresponding shares for print and online newspapers. At an aggregated level, it should also be noted that whereas legacy radio and television use clearly outdistance other single media forms, nearly two-thirds (66%) of the total reported time use on all media is spent on other media than traditional radio and television, suggesting the complex and complementary nature of cross-media practices of communication.

A further interpretation of this empirical overview is suggested by the theoretical model of communication informing the original research design (Figure 2).

Six Communicative Practices		
	Asynchronous	Synchronous
One-to-one	E-mail, text message	Voice, instant messenger
One-to-many	Book, newspaper, audio and video recording, Web 1.0/webpage, download	Broadcast radio and television
Many-to-many	Web 2.0/wiki, blog, social network site	Online chatroom

**Figure 2. Six communicative practices
(adapted from Jensen & Helles, 2011, p. 519).**

The model identifies six prototypical forms of communication—one-to-one, one-to-many, and many-to-many in either synchronous or asynchronous mode—and illustrates in each cell the media that are (currently) characteristic vehicles of each prototype of communication. The typology serves to organize the wide array of media currently in use by grouping them along two dimensions representing sets of structural features that afford different forms of communication: communication involving one or several individuals as senders or receivers, and communication that is accomplished either instantaneously or at a later point in time. In Figure 1, the various media can be seen to enter into similar configurations. First, apart from the special cases of television viewing and, in part, radio listening on a radio set, classic one-to-many or mass communication is centered around the middle of Figure 1, representing a medium user base and moderate time consumption. Second, one-to-one communication is located in the top left corner, combining a large user base with low time consumption. Third, many-to-many communication congregates in the bottom left corner due to a small user base and low time consumption (with social network sites as an exception).

A closer examination of the figures indicates that individual media use is highly differentiated both in the total number of media used and in the time spent on different media. To map the broad contours of respondents' media use, we developed a segmentation model using latent class analysis (Agresti, 2002; Lazarsfeld, 1950).² The use of latent class analysis was motivated by two related concerns: the nature of the survey data on the one hand, and the level of generality of the resulting cluster model on the other.

The first concern was related to the high level of granularity of the data with respect to the many media included in the survey, which meant that most respondents use only a subset of the media they were asked about (cf. Figure 1). As a consequence, the time-use data for most media are zero inflated and therefore violate the assumptions of many common clustering techniques (e.g., *K*-means clustering).

² The analysis was conducted using v. 5 of the LatentGOLD software package.

Latent class analysis is conducted on categorical data and is not sensitive to zero inflation in this way. Latent class analysis (Vermunt & Magidson, 2002) seeks to group (or cluster) cases that share similar characteristics across variables into distinct classes so that an ideal cluster would have as little variance as possible within the group (homogeneity) and as much variance as possible across groups (heterogeneity). Thus, latent class analysis differs from the factor analyses more commonly applied in studies of media combinations (Hasebrink & Popp, 2006; Taneja et al., 2012), which group similar variables rather than similar cases. It is also distinct from other types of cluster analysis (e.g., two-step cluster analyses): Latent class analysis does not assign cases to one cluster or another but, instead, identifies the probabilities of cases belonging to each of the clusters in the full model.

The second concern relates to the level of generality of the analysis, which aims to outline broad trends in the respondents' time-use patterns rather than to provide a detailed map of the many different combinations of media manifested by respondents. For that purpose, we recoded the data to capture the total time use of each respondent for each of the six communicative practices in Figure 2 by summarizing the reported time spent on the media in that particular group.³ So, for example, the time spent on synchronous one-to-many communication was calculated by summing each respondent's reported time use on traditional broadcast radio and television. This allowed the analysis to build on information about respondents' time use across different *categories of mediated communication* rather than across *individual media*. The resulting reduction in the dimensionality of the data in turn meant that the number of clusters in the final model could be lowered, allowing for analysis of the broader trends shaping respondents' time use on mediated communication. After calculating overall time use for the six communicative practices, each practice was divided into four levels indicating different intensities of use (none, low, medium, high). The analysis yielded a profile of the media uses and communicative practices of each respondent, as expressed in a six-dimension score. (The score for synchronous many-to-many communication was divided into three levels only, given the low variation of reported time use in this communicative prototype.)

Table 1 lays out the time-use intervals that define the levels of intensity of use for each of the six communicative prototypes. A latent class analysis was subsequently conducted on these six practices, which were treated as nominal categories. By scoring the practices according to separate metric levels, the approach chosen here avoids the challenges to validity that are associated with zero inflation of data while preserving the sensitivity of the model to the several distinctive communicative practices. The next section reports the results of the latent class analysis.

³ Respondents' time use on each of the six dimensions was calculated from survey questions covering media time use on the following media: one-to-one asynchronous: SMS/MMS, e-mail; one-to-one synchronous: instant messenger, phone conversations; one-to-many asynchronous: books (print, audio, digital), newspapers (print, online), audio and video playback, streaming (television, radio), Web browsing (sites of interest), downloads; one-to-many synchronous: television on TV set, radio on radio set; many-to-many asynchronous: SNSs, online forums; many-to-many synchronous: online games, chatrooms.

Table 1. Intensities of the Six Communicative Practices.

	One-to-one asynchronous	One-to-one synchronous	One-to-many asynchronous	One-to-many synchronous	Many-to-many asynchronous	Many-to-many synchronous
Level	Minutes per day					
None	0	0	0	0	0	0
Low	1-16	1-4	1-90	1-120	1-20	1-45
Medium	17-33	5-9	91-205	121-210	21-60	(undefined)
High	34+	10+	206+	211+	61+	46+

Table 2. Results of the Latent Class Analysis (LCA) (Posterior Probabilities).⁴

Cluster probabilities for indicator variables in the final model of the LCA analysis									
Time use bins (minutes per day)	Total sample	All-rounders (low)	All-rounders (high)	Mixed media socializers	Mixed media interper-sonalists	Traditiona-lists (high)	Traditiona-lists (low)	Occasiona-lists	Non-users
Cluster size (%)	100	22.13	11.73	20.47	18.9	10.16	9.38	5.07	2.16
One-to-one asynchronous									
None	8.5	0.02	0.00	0.03	0.00	0.07	0.00	0.89	0.92
Low	27.8	0.51	0.07	0.26	0.14	0.29	0.48	0.03	0.06
Medium	29.0	0.37	0.15	0.35	0.34	0.37	0.17	0.05	0.00
High	34.6	0.10	0.77	0.36	0.52	0.26	0.34	0.03	0.01
One-to-one synchronous									
None	23.2	0.24	0.03	0.29	0.01	0.35	0.26	0.71	0.87
Low	30.7	0.41	0.13	0.43	0.17	0.39	0.33	0.16	0.08
Medium	17.2	0.20	0.21	0.18	0.19	0.15	0.12	0.05	0.03
High	29.0	0.15	0.64	0.10	0.63	0.11	0.29	0.08	0.01
One-to-many asynchronous									
None	6.3	0.04	0.00	0.05	0.01	0.03	0.12	0.18	0.95
Low	28.4	0.48	0.07	0.21	0.25	0.28	0.35	0.36	0.00

⁴ The final model had an entropy-based $R^2 = 0.516$, suggesting that cluster separation is less than perfect, but as the purpose of the model is descriptive rather than predictive, the level is adequate for further analysis. The final number of clusters (eight) was decided on the basis of the Bayesian information criterion ($BIC = -21,171.5$), and had an L^2 -based $p = 0.16$. Further details about the cluster model are left out for clarity but are available upon request from the first author.

Medium	27.8	0.33	0.14	0.27	0.36	0.27	0.27	0.23	0.01
High	37.4	0.15	0.80	0.47	0.38	0.42	0.26	0.23	0.03
One-to-many synchronous									
None	10.0	0.06	0.10	0.11	0.02	0.01	0.19	0.15	0.96
Low	33.8	0.48	0.26	0.34	0.39	0.00	0.37	0.42	0.02
Medium	20.8	0.26	0.16	0.19	0.27	0.15	0.18	0.16	0.02
High	35.4	0.20	0.47	0.36	0.31	0.84	0.25	0.26	0.00
Many-to-many asynchronous									
None	30.5	0.26	0.09	0.02	0.17	0.61	0.79	0.86	0.97
Low	22.1	0.46	0.03	0.11	0.32	0.22	0.09	0.03	0.02
Medium	26.8	0.25	0.27	0.41	0.39	0.16	0.02	0.07	0.00
High	20.6	0.02	0.61	0.46	0.13	0.00	0.09	0.04	0.01
Many-to-many synchronous									
None	62.9	0.68	0.35	0.46	0.62	0.74	0.90	0.90	0.99
Low	19.1	0.27	0.19	0.19	0.31	0.10	0.00	0.04	0.01
High	18.0	0.06	0.46	0.35	0.08	0.15	0.10	0.06	0.00

N = 10,742

Cross-Media User Profiles

The probabilities in Table 2 point to central differences among the eight clusters. The specific profile of each cluster appears from its combined pattern of probabilities for the intensities of use for the six indicator variables, which correspond to the six prototypical communicative practices conceptualized in Figure 2. The following analysis of patterns identifies and summarizes the distinctive characteristics of the eight clusters. For easy comparability, the probabilities are treated as percentage shares of users in each cluster.

The first cluster is also the largest, comprising about a fifth (22.1%) of the respondents in the survey. The group is characterized by having lower levels of use across the various communication categories than the overall distribution among all respondents. The group has its largest share of members in the low-use categories and the second-largest share in the medium category for all communication types, except in the case of synchronous many-to-many communication. We call this group *low-level all-rounders*.⁵ This group is comparable to yet different from the second cluster (11.7%), which has a clear overrepresentation of users in the high categories for all six forms of communication. We call the second group *high-level all-rounders*. That pattern is particularly pronounced when it comes to asynchronous one-to-one communication and broadcast communication: In both types, almost 80% of high-level all-rounders fall in the high category. Whereas the first two clusters differ in their intensity of

⁵ All reported differences from the average distribution have been tested using multiple chi-squared tests with Bonferroni correction for alpha inflation. All reported differences are significant at or below .001.

media use, they are united by structurally uniform patterns of all-round use across the communication types, which set them apart from the remaining clusters.

The third cluster covers 20.5% of the sample and has an overrepresentation of respondents reporting high levels of use for both kinds of many-to-many communication. We term this group *mixed-media socializers*. Their use of one-to-many communication is either medium (synchronous) or medium to high (asynchronous); they make low use of synchronous one-to-one communication and medium use of asynchronous one-to-one communication. In sum, respondents in this group use all six forms of communication but with an emphasis on many-to-many communication.

The fourth cluster (18.9%) is *mixed-media interpersonalists*. These respondents are characterized by high use of both synchronous and asynchronous one-to-one communication, combined with high use of asynchronous one-to-many, or broadcast, communication. Their use of synchronous one-to-many and asynchronous many-to-many communication is medium to low, and their use of synchronous many-to-many communication is low. In the aggregate, mixed-media interpersonalists have a varied pattern of media use and communication that incorporates all six prototypes, but with an emphasis on one-to-one communication along with asynchronous one-to-many communication.

The two mixed-media clusters—socializers and interpersonalists—are similar to the two clusters of all-rounders (high and low) insofar as all four groups engage in a broad range of communicative practices, predominantly at a medium or high level. The two mixed-media clusters, however, are different from the two all-rounder clusters because they exhibit more varied patterns in their intensity of use across the prototypes of communication. The two mixed-media clusters differ from each other in their preferred constellations of media use and communication: The trend is one of one-to-one interpersonalists and many-to-many socializers.

The fifth cluster (10.2%) has a strong overrepresentation of high-level users of synchronous one-to-many communication: As many as 84% of respondents in this cluster have a high level of broadcast media use, which prompts the term *high-level traditionalists*. Also, for asynchronous one-to-many communication, these respondents exhibit patterns of medium to high use. When it comes to many-to-many forms of communication, this cluster can again be considered extreme, but in a different respect: High-level traditionalists have a distinctive overrepresentation of non-users and low-level users of many-to-many communication. For one-to-one communication, their level of use is either medium (asynchronous) or low (synchronous). As a profile, high-level traditionalists are characterized by a strong emphasis on traditional mass communication (television and radio), a moderate use of one-to-one communication, and a limited use of new many-to-many forms of communication.

The last three clusters are distinguished from the first five partly by overall lower levels of use and partly by smaller degrees of variation in the number of communicative practices that respondents engage in. In fact, these final clusters are defined as much by what the respondents do not do at all as by what they do the most.

Respondents in the sixth cluster (9.4%) display low to medium levels of one-to-many forms of communication, they report next to no use of many-to-many forms of communication, and they indicate use levels for one-to-one communication that are either low (asynchronous) or average (synchronous). We term them *low-level traditionalists*. Favoring broadcast and one-to-one forms of communication, they resemble the high-level traditionalists in cluster five, but with a lower overall intensity of use. In comparison, the respondents in cluster seven (5.1%) have an average use pattern for synchronous broadcast communication and some (low) use of asynchronous one-to-many communication. Along with their indications of no use of either one-to-one or many-to-many forms of communication, these respondents can be considered *occasionalists* in their media uses and communicative practices.

Finally, cluster eight is quite small (2.2%) and is characterized by hardly any use of any of the six prototypes of communication—they are *non-users*. Although they are structurally similar to cluster seven (occasionalists), there is reason to suspect that cluster eight is, in part, a methodological construct or artifact. Since the survey asked about levels of media use the day before, it is conceivable that a proportion of the respondents, for some reason, made very little or no use of media only on the day before, so the status of this last cluster should be interpreted with care.

Sociodemographic Characteristics of the Cross-Media User Profiles

In addition to displaying marked differences in their time use on different media, the eight clusters also differ according to the sociodemographic characteristics of the individual users that constitute them. Table 3 reports the relationship between key sociodemographic variables and the eight media-use clusters, based on a step 3 analysis (Vermunt & Magidson, 2013). The scores reported in Table 3 represent exponentiated beta values from a logistical regression against the per-variable category mean.

The step 3 procedure allows for a more precise description of the cluster through independent variables, as it corrects for the uncertainty of classifying cases. As mentioned above, in latent class analysis, all cases are assigned a probability score for each cluster in the model, and cases are then assigned to the cluster for which they have the highest posterior probability of belonging to. However, some misclassification is to be expected in a basic latent class analysis because a number of cases will not fit perfectly into any one cluster and may fit equally well (or badly) into two or more clusters. Other methods than a step 3 procedure for profiling clusters (such as ANOVA or binary logistical regression) typically rely on cluster membership only and do not take into account this inherent uncertainty of classification.

Table 3. Description of the Cluster Model through Demographic Variables.⁶

Description of the cluster model (exponentiated beta values)								
Cluster name	All-rounders (Low)	All-rounders (High)	Mixed-media Socializers	Mixed-media Interpersonalists	Traditionalists (High)	Traditionalists (Low)	Occasionalists	Non-users
Cluster size (%)	22.1	11.7	20.5	18.9	10.2	9.4	5.1	2.2
Gender (Female)	1.14 ***	1.00	1.24 ***	0.89 **	1.04	0.84 **	0.96	0.95
Age	0.99	0.96 ***	0.97 ***	1.00	1.09 ***	1.01	1.00	0.98 ***
Education								
Secondary school or below	0.92	0.72 **	1.40 ***	0.24 ***	1.39 ***	1.10	1.63 ***	1.81 ***
High school	0.95	1.12	0.96	1.52	0.95	0.91	0.88	0.85
Higher	1.15	1.24 **	0.75 ***	2.78 ***	0.75 ***	1.00	0.70 ***	0.65 ***
Family status								
Single, no child	0.89	1.04	1.43 ***	0.55 ***	0.91	0.89	1.11	1.54 ***
Single, child	0.88	0.95	1.10	1.17	0.65 ***	1.01	1.19	1.18
Married, no child	1.03	0.85	1.08	0.98	1.84 ***	0.99	0.74	0.80
Married, child	1.25 ***	1.19	0.59 ***	1.59 ***	0.92	1.12	1.02	0.69 **

$N = 10,742$, * $p < .05$, ** $p < .01$, *** $p < .001$

The table brings out several sociodemographic patterns. Low-level all-rounders are more likely female (52%) than male and are more likely to be married with children. The category of high-level all-rounders is gender neutral but tends to be younger ($M = 36$, $SD = 13$) compared to the total sample average of 39 ($SD = 14$) and further tends to have a higher level of education. Mixed-media socializers are younger than average ($M = 36$, $SD = 14$), are more likely to be female (55%), do not (yet) have higher education, and are more likely to live alone without children. The demographic profile of the mixed-media interpersonalists, in turn, is quite different: These respondents have an average age distribution ($M = 40$, $SD = 13$), are more likely male (55%), have a strong overrepresentation of people with an education above the high-school level, and are more likely to live in a family with children.

High-level traditionalists are significantly older ($M = 49$, $SD = 14$) than the sample average, have a significant overrepresentation of people with secondary school as their highest level of education, and are more likely to live in a family without children. In comparison, low-level traditionalists come close to the average demographics of the total sample, except that the group has an overrepresentation of males

⁶ The model has an entropy-based $R^2 = 0.093$. Further details about the model are left out for clarity but are available upon request from the first author.

(56%). Occasionalists have a significant overrepresentation of people with secondary school as their highest level of education. Non-users are more likely to live alone and are younger ($M = 35$, $SD = 14$) than the sample average.

The basic demographic characteristics of these clusters suggest wider configurations of media use, as examined in previous theoretical and empirical research. First of all, the two clusters with a significantly younger age profile (the mixed-media socializers and the high-level all-rounders) both tend to have above-average levels of use for many-to-many communication. The high levels of use for asynchronous many-to-many communication predominantly derive from social network media (e.g., Facebook). A similar relationship between youth and intensive use of social media has been documented in other surveys in both Europe (Seybert & Reinecke, 2013) and the United States (Duggan & Smith, 2014, p. 4), and the same pattern is supported by further analyses of data from the present European audience study (Nimrod, Adoni, & Nossek, this special section).

In comparison, the heavy users of traditional broadcast media who constitute the high-level traditionalist category tend to be significantly older than the other clusters, to have less education, and to live in households with a partner and no children. Again, this finding regarding substantial use of traditional television and radio in older age brackets corresponds well to earlier studies (Eurobarometer, 2012, p. 6), as does the reluctance of older media users to integrate new forms of communication such as social network services into their everyday lives (Eurobarometer, 2012, p. 31).

The demographic patterns hold a number of implications beyond the category of age. Regarding gender, both profiles with an overrepresentation of men (mixed-media interpersonalists and high-level traditionalists) tend to engage in many-to-many communication to a more limited extent than the sample average. Interestingly, the two profiles that have an overrepresentation of women suggest a more complex interrelation: The mixed-media socializers make heavy use of many-to-many communication, but the low-level all-rounders engage significantly less than the sample average in many-to-many communication.

Also, educational levels have a general bearing on the patterns of media use. Both high-level traditionalists and occasionalists—two profiles with relatively low levels of education—devote their highest levels of media use to various types of broadcasting, or one-to-many communication. In comparison, the two groups that have significantly higher levels of education—high-level all-rounders and mixed-media interpersonalists—both supplement their use of traditional broadcasting with high or medium levels of use of a range of other communicative practices. Arguably, the mixed-media socializers break with this trend by combining a low level of education with a diverse constellation of communicative practices, specifically many-to-many communication. But, given the young age of this profile, it is likely that these respondents are still in some form of schooling and have not yet reached what will be their highest level of education.

To sum up, the eight media-use profiles, including their sociodemographic specifications, provide preliminary representations of the conjunctures through which specific audiences come to attend to and engage in the use of specific media. Beyond the general affordances of media (Gibson, 1979; Hutchby, 2001) and the social-structural characteristics of their users (Bourdieu, 1979; Inglehart, 2008), the

media-user encounter always occurs in a context and for a purpose. The use or non-use of any given medium is embedded in a larger media environment and in a range of ongoing social practices that may be facilitated through communication. The last set of findings reported here addresses the contexts and purposes of media use and returns research to Elihu Katz's (1959) classic question of what audiences do with media.

Contexts of Media Use

The findings reported so far capture very general aspects of media use: the intensities of use for various media, but not the many contextual factors that also serve to shape media use and communicative practices. Deriving a categorization of users entirely from such intensities might entail media determinism. After all, users employ media to sustain other social practices and patterns. The point is far from trivial; the challenge is to understand how an ever growing range of new media are being integrated into social life and everyday interactions without suffering data death in studying the contextual contingencies of media use.

The following analysis departs from a selection of prototypical social contexts in order to gauge the utility of different media for various mundane activities. The survey asked respondents to indicate their preference for up to three different media in five such contexts. The contexts were chosen to represent an inexhaustive set of generic scenarios that would be recognizable and meaningful to respondents. The questions were:⁷

- Q16: Imagine you have a few hours of free time to yourself—please indicate the three things that you are most likely to do.
- Q17: Imagine that you are going to contact an old acquaintance that you have lost touch with—please indicate the three means of contact that you are most likely to use.

⁷ The following are the possible answers considered in the analysis. Q16: Send SMS (text messages) to friends or family; call friends or family on the phone; chat online with friends or family; write e-mails to friends or family; use social network sites (e.g., Facebook, LinkedIn); read printed books, newspapers, or magazines (on paper); visit websites; watch video or DVD; listen to music on CD, mp3, or similar; listen to radio; watch TV. Q17: SMS (text message); phone call; social network site; posting a letter; e-mail. Q18: Send an SMS (text message) to someone who is likely to have this information; call someone who is likely to have this information; send an e-mail to someone who is likely to have this information; use social network sites (e.g., Facebook, LinkedIn); use a chat program (e.g., MSN Messenger); check websites. Q19: SMS (text message); phone call; social network site; posting a letter; e-mail. Q20: Send an SMS (text message) to someone who is likely to have this information; call someone who is likely to have this information; send an e-mail to someone who is likely to have this information; use social network sites (e.g., Facebook, LinkedIn); use a chat program (e.g., MSN Messenger); look it up via Google or other search engine; look it up at a specific website (e.g., Wikipedia).

- Q18: Imagine that you are in a hurry to get some important information (e.g., the outcome of a political election or who won a soccer game)—please indicate the three sources of information that you are most likely to use.
- Q19: Imagine that you have invited some friends over for dinner or a party next week, and now you need to change the date—please indicate the three means of contact that you are most likely to use.
- Q20: Imagine that you and a friend are discussing an issue, and you need some factual information about that issue (e.g., a historical date or an economic figure)—please indicate the three sources that you are most likely to use.

These situations include both concrete tasks and activities without a specific goal. The implications of the situations range from the potential private entanglements of changing a dinner date to the more pragmatic business of getting access to public news. Moreover, the situations vary in terms of whether some or all of the six prototypical forms of communication (Figure 2) might be credible alternatives. In Q16 and Q18, media from all six categories are relevant alternatives: Both broadcast media and technologically mediated contact to other people can serve as sources of entertainment as well as news. Q20 allows for some types of one-to-many communication as well as all one-to-one and many-to-many forms of communication, whereas Q17 and Q19 do not invite the use of any form of one-to-many communication.

The first step of the analysis was to identify the response patterns, summarized in Figure 3, which indicates the extent to which respondents in the different clusters took advantage of the opportunity to give multiple answers. The survey asked that all respondents indicate from 0 to 3 media as possible alternatives in each of the five contexts of action, thus allowing each respondent a total of 15 answers. Figure 3 shows the distribution of the total number of votes cast (for the use of a particular medium) by cluster members across the five proposed scenarios.

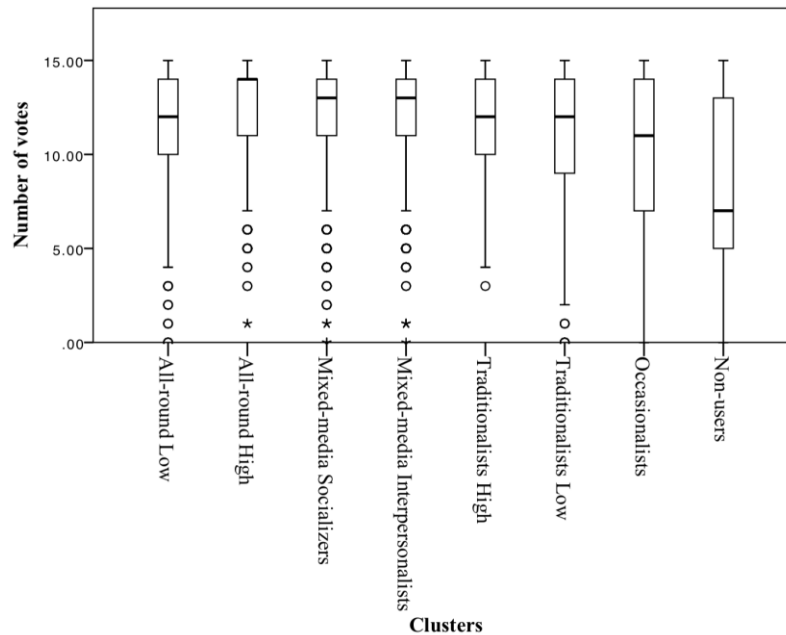


Figure 3. Voting patterns in the eight clusters. N = 10,742.

The differences between the clusters generally reporting high and low intensities of media use, respectively, are clear. The three low-intensity clusters toward the right side of Figure 3 exhibit a much wider range in the total number of votes cast, while the high-intensity clusters (high-level all-rounders, mixed-media socializers, and mixed-media interpersonalists) all report both a more narrow and a higher spectrum of votes. The contrast between the high-level all-rounders and the non-users is particularly clear: The former cluster has a median vote count of 14 (out of a maximum of 15), whereas the latter cluster has a corresponding vote of 7. The overall voting pattern is consistent with the results of the cluster analysis: Respondents who report a high intensity of media use and a broad array of different types of media used can be expected to consider and select more relevant media in each of the five scenarios.

A further analysis of the specific voting patterns substantiates the interrelations between the general clusters of media use and the specific social contexts of communication and action. Table 4 lays out the voting patterns for the total of 34 options for the various scenarios as they relate to the eight clusters.

A general observation is that the perceived utility of asynchronous many-to-many communication (in the form of social network services) differs for, on the one hand, the clusters that reported medium to low levels of use of many-to-many communication and, on the other hand, the clusters that reported low to no use. The four profiles to the left in Table 4 all voted for social network media at a significantly higher level than the four profiles to the right; the latter voted either at a significantly lower level or at an

average level (with the exception of the small groups of occasionalists and non-users). Also, the use of synchronous one-to-many communication (traditional radio and television) as part of the scenarios is in accordance with the general patterns of reported media use: The high-level traditionalist profile (with an exceptional 86% of users falling in the high-use category of mass communication) is the only profile with a significantly positive tendency to vote for these media. And media supporting asynchronous one-to-many communication (using free time to read, listen to music, watch videos, or browse the Web) are among the preferences of the high-level all-rounders and the mixed-media interpersonalists. Whereas these two profiles actively select from three to five of the seven possible uses of asynchronous one-to-many communication, both the occasionalists and the non-users are significantly less likely to engage in this form of communication.

At a more detailed level, Table 4 suggests additional configurations of media preferences that call for further research. High-level traditionalists, for one, in addition to their specific orientation toward synchronous broadcasting, express a marked preference for e-mail: This cluster is significantly more likely to find e-mail useful for re-establishing contact with an old friend, for passing free time, for finding information, and for changing a dinner invitation. This finding is in line with the higher average age of high-level traditionalists: E-mail was among the first digital media to enjoy broad adoption (Purcell, 2011), and it remains one of the few digital media to be used by almost all age groups within the online population (Seybert, 2012, p. 6). The positive orientation of high-level traditionalists to sending a letter as a means of resuming contact with an old friend fits this interpretation of the cluster. In comparison, a different profile toward the more innovative end of the spectrum—high-level all-rounders—exhibit a more even spread of preferences for different media in the various scenarios, which is consistent with their high-level and diverse use of all forms of communication.

Table 4. Situational Media Preferences in the Eight Clusters.⁸

Analysis of the situational media preferences of members of the eight clusters (exponentiated beta values)								
	CLUSTER							
	All-rounders Low	All-rounders high	Mixed-media Socializers	Mixed-media Interpersonalists	Traditionalists high	Traditionalists low	Occasionalists	Non-users
E-mail Contact	0.982	0.941	0.977	1.032	1.168 *	1.008	0.879 *	1.037
E-mail Free Time	1.054	1.326 **	0.948	1.266 **	1.180 *	0.985	0.778 **	0.659 **
E-mail Info	0.868	1.106	0.949	1.12	1.355 **	0.991	0.813 *	0.897
E-mail Invitation	1.010	0.937	1.021	1.079	1.233 **	1.101	1.03	0.686 ***
E-mail News	1.017	1.004	1.042	0.947	0.865	0.905	1.121	1.131

⁸ The regression has an entropy-based $R^2 = 0.203$. Further details about the model are left out for clarity but are available upon request from the first author.

SMS Free Time	0.882	1.162 *	0.864 *	1.256 *	0.844	1.193 *	0.944	0.952
SMS Info	0.966	0.981	1.027	1.097	1.162	1.132	0.996	0.716 ***
SMS Invitation	1.066	1.009	1.008	1.166 **	1.029	0.856 *	0.985	0.913
SMS News	1.032	1.163 *	1.043	1.199 **	0.804 *	1.080	0.952	0.806 *
Letter Contact	1.008	0.894	0.894	0.761 **	1.27 **	1.152	0.951	1.173
Letter Invitation	0.66	0.837	1.362	1.036	0.922	0.931	1.195	1.25
Chat Free Time	0.894	1.445 ***	1.356 ***	0.992	0.832	0.727 *	1.023	0.93
Chat Info	0.908	1.415 **	1.248	1.346 *	1.157	0.659	0.798	0.76
Chat News	1.055	1.308 **	0.909	0.976	0.674 *	0.888	1.2	1.138
Phone Contact	0.989	1.034	0.816 ***	1.144 **	1.070	1.063	1.074	0.858 *
Phone Free Time	1.042	1.297 ***	0.748 ***	1.369 ***	0.925	1.004	0.917	0.849 *
Phone Info	0.873 **	1.076	0.937	1.135 *	1.014	1.158 *	0.97	0.878
Phone Invitation	1.017	1.071	1.025	1.021	1.023	1.106	0.928	0.835 *
Phone News	1.077	1.11 *	0.885 *	1.177 **	0.732 ***	0.954	1.094	1.05
Music Free Time	1.018	1.216 *	1.255 **	1.067	1.179	0.973	0.824 *	0.637 **
Read Print Free Time	1.139 **	1.014	1.028	1.348 ***	0.983	1.062	0.866 *	0.694 ***
Video Free Time	1.076	1.152	1.059	1.062	1.022	0.971	1.014	0.713 **
Web Free Time	1.056	1.253 ***	1.073	1.227 **	0.785 **	1.039	0.814 **	0.865
Web News	0.985	0.919	1.043	1.236 **	1.129	1.167	0.872 *	0.747 **
Web Search Info	1.022	1.119	1.105	1.283 **	1.247	1.044	0.784 ***	0.607 ***
Website Info	0.948	1.223 ***	1.053	1.167 **	1.109	1.053	0.742 ***	0.812 *
Radio Free Time	0.806 **	1.023	0.976	1.066	1.822 ***	0.846 *	0.907	0.833
TV Free Time	1.036	0.852	0.97	1.125	1.749 ***	0.897	0.973	0.681 ***
TV News	1.059	0.871	0.917 *	1.028	1.544 ***	0.761 ***	1.144 *	0.855
SNS Contact	1.235 ***	1.108	1.407 ***	1.236 ***	0.653 ***	0.682 ***	0.937	1.008
SNS Free Time	1.283 *	1.626 ***	1.810 ***	1.320 *	0.571 *	0.348	1.012	0.997
SNS Info	0.877 *	1.317 ***	1.031	1.173 *	0.702 *	0.991	0.981	1.048
SNS Invitation	1.144 *	1.368 ***	1.602 ***	1.083	0.454 *	0.561 *	1.129	1.281 *
SNS News	0.994	1.268 ***	1.395 ***	1.149 *	0.531 ***	0.635 **	1.134 *	1.301 **

$N = 10,742$, * $p < .05$, ** $p < .01$, *** $p < .001$

Conclusion

This article has presented an overview of findings from a comparative study of changing patterns of media use in nine European countries. Departing from previous research on audiences' uses of new and old media, individually and in combination, the article developed a typology of European media audiences with particular reference to their cross-media communicative practices, including their choice and combination of and the time they spent on different kinds of media. A cluster analysis served to identify distinctive ways in which different demographic groups orient to and locate themselves in the current media landscape. A further analysis of the role of media as resources in mundane contexts of action suggested the importance of moving beyond both individual media and individual practices of communication to consider cross-contextual patterns of media use as part of everyday life and the ongoing structuration of societies and cultures (Giddens, 1984).

In empirical terms, the correspondence between the reported levels of use of different media and the expressed preferences for particular media in particular contexts of action supported the validity of the approach outlined here. Having moved from a media-centric to a communication-centric perspective, we proposed a further focus in the next step on media use in context or, to be precise, on media as resources of social interaction in multiple interrelated contexts of action. As mentioned in the introduction to this article, the mapping of changing patterns of media use has become increasingly difficult to accomplish as the number of available media grows and as users creatively integrate and apply several media across diverse domains of their everyday lives. The introduction further noted a tendency in recent research to handle this growing complexity by singling out specific kinds of communicative practice, such as the consumption of news or interpersonal communication, and to track these across media. The present analysis has suggested the viability of a complementary approach to media use and communicative practices that joins studies of time use and of cross-contextual preferences. If a path-dependency exists between the heavy use of specific media and particular contextual preferences, it suggests the importance and relevance of studying not just contextual but also cross-contextual patterns and preferences of media use (Helles, 2012).

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