Youth Media Lifestyles

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In this article, the concept of “media lifestyles” is adopted in order to develop a comprehensive approach toward youth engagement in communication media. We explore how 503 Dutch eighth grade students with full access to new technology combine a broad range of media by focusing on their engagement with media while taking various contexts of use into account. Four different media lifestyles of media omnivores, networkers, gamers, and low-frequency users are described. Furthermore, we show how the methodology we used is able to provide more insight into how the distinguished media lifestyles were codetermined by particular media, functions and social contexts. Finally, the implications for the Uses & Gratifications theory are discussed.

doi:10.1111/hcre.12033

Young people are often claimed to be different from those born before the advent of the Internet in their familiarity with and use of technologies, and thus referred to with terms as “the Net Generation” or “Digital Natives.” However, to view new media engagement as something that defines a generation runs the risk of oversimplification and obscures the differences that exist among youth in the ways they use and combine different communication media, old and new. This study adopts the concept of “media lifestyles” from Livingstone and Bovill (1999) who have argued that youth differ in the ways they structure their leisure time, balance options and put together meaningful combinations of activities to suit specific interests. A media lifestyle arises from the interplay between possibilities afforded by the medium, access to media, the social context, existing leisure practices and personal preferences. Each young person weaves together a huge diversity of activities in a unique way. While some choices may be more deliberate than others, every choice is meaningful by virtue of its relationship to each of the aspects mentioned above.

The purpose of the present study is to describe the diversity of media lifestyles adopted by youth who have full access to new media while old options remain available to them. We use a more comprehensive and complex methodology than previous investigations in order to study young people’s engagement in a very broad range of media while taking the contexts of use into account. Thus, our study contributes to existing research in three distinct ways. First, we adopt a broad perspective on
engagement with media that is underrepresented in current research, as it includes traditional print-based media as well as new media, typically associated with digital media such as computers and mobile phones. Our study also incorporates face-to-face interaction, which we consider a medium of communication, albeit not a technological medium.

Second, our study was conducted in The Netherlands, where virtually all youth have home Internet access and own a mobile phone (Duimel & De Haan, 2007), in contrast to countries such as the United States where the spread of new media appears to proceed at a slower rate (Rideout, Foehr, & Roberts, 2010). This allows us to explore the question of which media lifestyles youth adopt when availability of mobile phones and computers with Internet access is not at issue.

Third, particularly unique to our study is the design that was drawn upon to systematically relate media engagement to various contexts of use. This approach is relevant to obtaining more insight into how media lifestyles come into existence; namely, whether the use of one medium might be related to another, what the role of the underlying technology is, and to what extent media choices follow from personal preferences.

**Perspectives on the relationship between user and technology**

The issue of how media lifestyles come into existence is rooted in a more fundamental debate regarding the relationship between a technology and its user. Katz (1959) proposed that there are two ways of viewing this relationship, namely to ask oneself *what media do to people* (a techno-centered perspective) or to question *what people do with media* (a functional perspective). He and many with him have advocated the latter position, suggesting that people’s values, interests, associations, and social roles are prepotent; people selectively fashion what they see and hear to their interests (cf. Heath, 1980; Herring, 2008; Hine, 2005). This belief is at the heart of the Uses and Gratifications (U&G) approach, which holds that media use is goal-directed, purposeful, and motivated (Rubin, 1994). In addition, this perspective shifts the focus from the effects of particular media to the connections people make among dispersed media content, since people seek out functional alternatives in the larger media landscape. As Jenkins (2006, p. 2) puts it, audiences “will go almost anywhere in search of the kinds of entertainment experiences they want.”

Several objections have been offered against the assumptions underlying the U&G approach, as well as against how these have worked out in actual research. First, to emphasize the malleability of technology is to understate the importance of opportunities that are created as well as the limits that are set by inherent properties of particular technologies. For instance, Buckingham (2008) argues that technology is not simply a matter of what people choose to make of it; technologies have inherent affordances that make it easier to use them for some purposes rather than others. He, as others before him have (e.g., Williams, 1974), therefore unifies a techno-centered perspective with a functional standpoint, recognizing that technology is both socially shaped and socially shaping.
Second, within U&G a large emphasis is placed on needs, motives, and gratifications rather than on the actual use of technologies. Moreover, the underemphasized “use” component is commonly treated as “media exposure,” which is a very important difference carrying theoretical and methodological consequences, as Petrič, Petrovič, and Vehovar (2011) show. Although it may make sense to speak of exposure when dealing with mass media, a different perspective is required for media that essentially involve social interaction between interlocutors. This is a major point considering the rise of social media, which have come to coexist with and transform mass media uses and have much in common with face-to-face interaction.

Third, that media compete with each other and that people make connections across media that are somehow relevant to them is recognized by those adopting a functional point of view, but actual research mostly focuses on a very restricted range of media and media applications. For example, very little U&G research has addressed the issue of choosing new communication technologies in conjunction with old ones (as argued by Flanagin & Metzger, 2001; Petrič et al., 2011). Others have shown before that, as a result, fundamental continuities and interdependencies between newer and older media are neglected (cf. Bolter & Grusin, 1999; Buckingham, 2008; Lister, Dovey, Giddings, Grant, & Kelly, 2003). Furthermore, in recent critiques it is stressed there has been a tendency within U&G research to focus on entertainment and enjoyment gratifications at the cost of more serious, cognitively demanding media experiences (Oliver & Bartsch, 2010; Wirth, Hofer, & Schramm, 2012). So a broader conceptualization of media use is required to capture fully the different needs and interests driving engagement in old and new technologies.

To summarize, researchers have long established that technologies and the uses to which they are put are intertwined. However, there is a lack of empirical studies with a broad focus showing how people make meaningful combinations of media, old and new, and how different functional and social needs may be related to their choices for particular media. We use the previously mentioned concept of “media lifestyles” from Livingstone and Bovill (1999) to deal with the critiques discussed previously. This approach allows us to recognize that technology may have a shaping influence on a person’s engagement with media along with other factors such as the variety of functions and social relations involved. In order to implement it in research, we adopt a person-centered quantitative approach, thereby shifting the focus from media uses to media users. Results from studies adopting this method are discussed in the next paragraph.

**Media lifestyles and their origins: Insights from research**

A method regularly adopted to investigate how youth combine media, thus revealing different media-use styles, is cluster analysis. This is a technique that groups cases that are more “similar” to each other than they are to cases in other clusters, meaning that subjects with similar responses across variables are grouped together (Fielding, 2007). Results from studies drawing upon cluster analysis to study youth media uses have indicated that there are roughly those who use media infrequently (low-frequency
users), those who regularly use a broad range of media applications (omnivores), and those who are more focused on, often even specialized and intensely committed to, one particular media use (specialist users). Specialist users spend large amounts of time on either books, magazines, computer games, or social media (Brozo, Shiel, & Topping, 2007; Livingstone & Bovill, 1999; Van den Beemt, 2010). Media omnivores combine a range of new media applications (Van den Beemt, 2010), read several types of print-based media (Brozo et al., 2007), or compose a mix of print and screen media (Leino, Linnakylä, & Malin, 2004; Livingstone & Bovill, 1999). Low-frequency users are youth who are not major users of any one medium (Livingstone & Bovill, 1999).

These cluster-analytic studies have in common that their focus is primarily on the technology as the explanatory factor, in most cases on either new technology or print-based media. Moreover, they leave untouched the issues why youth do or do not combine certain media and in which contexts such connections arise. Consequently, the question remains how media lifestyles come into existence, whether the use of one medium might be related to another and what the role of (access to) the technology is.

Taking these issues into account is even more important given that there are indications that an intricate relationship exists between media lifestyles and offline behaviour and preferences. Following-up on their cluster-analytic study, Livingstone and Bovill (1999) found that youth made combinations—of different types of media as well as between media and unmediated actions—that were prompted by a certain interest. For instance, they observed that sports and music featured in a range of media and also stimulated outside events such as football matches and discos.

In a more recent study Ito et al. (2008) showed how youth brought their offline interests and social contacts to their online media activity. Results from this study suggest that the majority of youth used new media to sustain existing relationships, which corroborates previous research findings (also see Boase, Horrigan, Wellman, & Rainie, 2006; Boneva, Quinn, Kraut, Kiesler, & Shklovski, 2006). In this type of engagement existing offline practices of hanging out with friends were largely replicated through new media.

Ito et al. (2008) also observed that there was a minority of “geeks” who were intensely committed to new media and were focused on gaining deep knowledge and expertise in specific areas of interest. These youth were involved in complex forms of gaming, movie making, or writing fan fiction, to name some examples. Their particular interest was often sparked offline and then further pursued online on their own initiative. However, not under all circumstances were youth able to bring offline interests to online media activity. Especially intense forms like “geeking out” required (ongoing) access to media, the time and freedom to explore and experiment, as well as a social network that supported interests and facilitated required skills and knowledge. In other studies access to media and a supportive social environment have been found to be enabling factors as well (Eastin, Greenberg, & Hofschire, 2006; Livingstone & Bovill, 1999; Roberts & Foehr, 2008).

In summary, research findings show that it is meaningful to adopt a perspective on media engagement that includes offline contexts. Given the right conditions, youth
are likely to bring their offline behaviour, interests, and relationships to their media activity. However, the extent to which youth do so is not clear. Do they involve a broad range of media or only particular kinds? Is their media mix directed toward a particular use or are youth more broadly oriented? And how does this differ for particular groups of youth?

The present study
In the present study, we set out to describe the media lifestyles of youth with full access to new technology. Moving beyond the restricted range of media usually incorporated in empirical studies, our study included new media, traditional print-based media, and also face-to-face (offline) interaction. To gain more insight into how these media were used and combined by youth, we designed our study such that we could relate each medium to different contexts of use. This way we methodically explored both the more interest-driven aspects of media engagement (e.g., for entertainment or to gain knowledge) as well as those that were primarily friendship-driven (i.e., involving people known intimately).

To identify media lifestyles, youth using similar media within similar contexts were grouped. This procedure allowed us to distinguish, for instance, a media lifestyle characterized by high involvement in one medium or several media for social reasons (function) with people known intimately (social distance), from a media lifestyle driven by a particular interest (function) involving distanced others (social distance).

The setup of our study enabled us to address not only the role of the technology, but also how a particular function or social distance or a combination between these was represented throughout the broad media spectrum. Compared to the cluster-analytic studies reported upon in the previous paragraph, we expect to obtain more insight into the combinations youth make (or do not make) of a broad range of media while taking various contexts of use into account. As gender is known to strongly influence media preferences (see, for instance, Ünlüsoy, De Haan, Leseman, & Van Kruistum, 2010), we checked whether differences existed between boys and girls with regard to their media lifestyles. Because the present study was performed in The Netherlands, which has a tracked educational system, we also compared the media lifestyles of youth from lower tracks to those from higher tracks. Finally, as we noted earlier, the youth under investigation in this study had ready access to new media. This allowed us to assess whether equal opportunities resulted in equal media uses by boys and girls and youth from lower and higher tracks, respectively.

Method
Sample
The sample consisted of 503 Dutch students in their second year of secondary education (grade 8) with a mean age of 13.7 years. Of these students, 267 (53.1%) attended the lower tracks of secondary education (prevocational secondary education, i.e., the Dutch vmbo) and 236 (46.9%) the higher tracks (senior general secondary education
and preuniversity education, i.e., havo and vwo). There was a discrepancy between the number of boys and girls in both tracks. In the lower educational tracks there were more boys (55.8%), whereas in the higher tracks there were more girls (53.0%).

The sample was representative for schools in urban regions of The Netherlands, including the uneven gender distribution (Centraal Bureau voor de Statistiek, 2009). At the time the research was conducted virtually all students had access to the new media under investigation, as 490 students (97.4%) indicated to own their own mobile phone and 498 students (99.0%) to have home Internet access.

**Procedure**

After a pilot with 46 students from lower and higher educational tracks, data collection took place in the spring of 2009. Students filled out a media activities questionnaire individually via the study’s website. The questionnaire was administered in a school classroom with a researcher or assistant and a teacher present on-site. Username and password were provided by the researcher. Before starting, the researcher gave instructions and monitored whether students were able to log in. On average it took respondents 29 minutes to fill out the questionnaire.

**Design of the questionnaire**

The media activities questionnaire was designed in accordance with Guttmann’s Facet Theory, which offers a systematic approach to the measurement of a complex phenomenon like media engagement (Guttmann & Greenbaum, 1998). First, multiple dimensions, or facets, of that phenomenon are defined and then combinations of the facets are used to guide the construction of the measurement instrument such that each facet combination is represented by at least one questionnaire item. We focused on three facets of media engagement, as mentioned in the introduction. As such, the facets represent rather abstract properties of the broad media engagement concept, but once combined they enable a more fine-grained description of several types of media activities. Here we give a brief description of the facets. For a more thorough discussion as well as more detailed information regarding the procedure we followed, we refer the reader to Van Kruistum, Leseman, and De Haan (2014).

The first facet, medium, was divided into four categories: (1a) *face-to-face contact*, (1b) *print-based media*, (1c) *asynchronous new media*, and (1d) *synchronous new media*. These distinctions roughly follow the historical development of media and communications, moving from oral to printed communication and, more recently, from electronic to digital media (see Rantanen (2005) for an in-depth argumentation). Examples of media incorporated in the questionnaire were real-life conversation (face-to-face), magazines, books, newspapers, notes, letters, postcards (generally print-based, but also including hand-written materials), e-mail, social network sites, photo-editing software, YouTube clips, television (asynchronous new media), Instant Messenger, webcams, and multiplayer online games (synchronous new media).

As we explained previously, these categories are heterogeneous when considered in isolation. However, each of them was systematically combined with subcategories
of other facets, thus providing a very nuanced description of media engagement along multiple dimensions. For example, television and social network sites were both categorized as asynchronous new media, but they were distinguished from each other through the second facet.

By means of the second facet, social distance, we roughly distinguished (2a) a *small social distance*, as between friends or close relatives, from (2b) a *large social distance*, as between a teacher and a student or an author and his audience. Finally, in case of the third facet we contrasted two main function types, namely (3a) an *epistemic* function, and (3b) a *social-entertainment* function. Media engagement could occur to keep in touch (social), to relax (entertaining) and to gain knowledge or creatively express oneself (epistemic). The functions social and entertainment, both aimed at more immediate goals such as seeking enjoyment and intimacy, were combined in order to contrast them with the cognitively more demanding epistemic functions, which are highlighted in recent U&G research (e.g., Oliver & Bartsch, 2010; Wirth et al., 2012).

Systematically combining all facet categories yielded 16 possible combinations (4 × 2 × 2), henceforth labeled “media practices.” In total 33 items were constructed which the pilot study had shown were relevant to and representative of the life world of the youth under investigation, as well as recognizable to them as realistically occurring situations. Typical questionnaire items were “Do you talk to friends or family members about global issues, such as politics or the environment?” “Do you read magazines for enjoyment, for example about fashion or computer games?” “Do you instant-message with friends or family members to keep in touch?” and “Do you browse the web to be informed about current events?”

The complete list of items is included in the Appendix. For each questionnaire item respondents were asked to estimate the frequency and/or duration of engagement, which was measured on a 7-point scale with (1) representing *never*, (2) *less than once a month*, (3) *at least once a month*, (4) *at least once a week*, (5) *almost* every day, (6) *1–2 hours a day*, (7) *more than 2 hours a day*.

**Analysis strategy**

The main goal of the present study was to give a description of youth media lifestyles including contexts of use. We defined a media lifestyle as a group of youth with similar combinations of media practices. In the results section, we will first provide scores indicating frequency/duration of engagement in the media practices. Differences between boys and girls and youth from lower and higher educational tracks are also reported, which were tested by means of two multivariate analysis of variance (MANOVA’s). Next, we will discuss the results of the cluster analysis that was performed to identify media lifestyles. We adopted a procedure outlined in Fielding (2007) in which the commonly used k-means algorithm is combined with a hierarchical clustering method to find the best partitioning, in our case a four-cluster solution. In addition, differences between the clusters are reported, which were tested by means of a MANOVA and followed up by post hoc tests. Finally, an overview is
presented of the number of youth from lower to higher tracks and boys and girls within each cluster, including results from chi-square tests that were performed to examine differences.

Results

Descriptive statistics of the media practices are presented in Table 1 for the entire group and the lower and higher educational tracks and boys and girls separately. These descriptive statistics show the means and the standard deviations of young people’s engagement with a particular medium for a particular function involving a particular social distance, denoted as a “media practice.” The scale that was used ranged from a minimum of (1) never to a maximum of (7) more than 2 hours a day. Also included in Table 1 are results from the MANOVA’s that were performed to compare the tracks and genders, showing how large differences were between boys and girls and youth from lower and higher tracks with respect to their engagement in a particular media practice. Partial eta squared is reported as an effect size.

A cluster analysis was performed to group youth with similar responses across media practices. Four clusters or lifestyles emerged from the analysis, each of which will be characterized in the following subparagraphs. Mean engagement in the media practices and the standard deviations are once again provided, this time for each of the four clusters (see Table 2). Comparisons between clusters are also shown, indicating how large differences were between the clusters with respect to their reported engagement in a particular media practice. The means from Table 2 are graphically depicted in Figure 1.

In Table 3 an overview is presented of the number of youth from lower and higher tracks and boys and girls within each cluster, including results from the chi-square test that show how large differences were between expected and observed numbers. Cramer’s V is reported as an effect size. Finally, in order to provide more detailed descriptions of the clusters in the following subparagraphs, we have included a characterization of the media engagement prototypical of a young person within a certain cluster. We used a score obtained from the cluster analysis indicating distance of a case from its classification cluster center to assess which subjects were most prototypical of each cluster. The mean scores of prototypical cluster members on each media practice are also graphically presented in Figure 1. The names used are fictitious.

We found significant differences between the four clusters for their reported engagement in the media practices, Wilk’s Lambda = .06; $F(39, 1442.86) = 57.58; p < .001$; partial $\eta^2 = .60$. Table 2 shows that the differences between clusters were largest for synchronous new media with distant others for social-entertainment purposes (practice J, i.e., multiplayer online gaming), followed by face-to-face contact with known others for epistemic purposes (practice B, e.g., talking to friends or family members about global issues) and synchronous new media with known others for social-entertainment purposes (practice H, e.g., instant-messaging). As can be seen from Table 3, expected and observed population numbers differed statistically.
Table 1 Frequency/Duration of Engagement in Media Practices With Comparisons Between Lower–Higher Educational Tracks and Boys–Girls

<table>
<thead>
<tr>
<th>Media practices</th>
<th>Track</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Lower</td>
</tr>
<tr>
<td>A. F, small, SE</td>
<td>4.56 (.12)</td>
<td>4.41 (.12)</td>
</tr>
<tr>
<td>B. F, small, EP</td>
<td>2.63 (1.38)</td>
<td>2.36 (1.33)</td>
</tr>
<tr>
<td>C. F, large, SE</td>
<td>2.21 (.77)</td>
<td>2.20 (.80)</td>
</tr>
<tr>
<td>D. F, large, EP</td>
<td>1.37 (.69)</td>
<td>1.25 (.62)</td>
</tr>
<tr>
<td>E. P, small, SE</td>
<td>1.72 (.73)</td>
<td>1.69 (.80)</td>
</tr>
<tr>
<td>F. P, large, SE</td>
<td>2.95 (1.11)</td>
<td>2.70 (1.15)</td>
</tr>
<tr>
<td>G. P, large, EP</td>
<td>2.57 (.99)</td>
<td>2.52 (1.03)</td>
</tr>
<tr>
<td>H. SNM, small, SE</td>
<td>3.48 (1.33)</td>
<td>3.69 (1.26)</td>
</tr>
<tr>
<td>I. SNM, small, EP</td>
<td>2.10 (1.02)</td>
<td>2.17 (1.07)</td>
</tr>
<tr>
<td>J. SNM, large, SE</td>
<td>2.72 (2.04)</td>
<td>2.99 (2.09)</td>
</tr>
<tr>
<td>K. ANM, small, SE</td>
<td>3.67 (1.25)</td>
<td>3.64 (1.27)</td>
</tr>
<tr>
<td>L. ANM, large, SE</td>
<td>3.72 (.94)</td>
<td>3.69 (.98)</td>
</tr>
<tr>
<td>M. ANM, large, EP</td>
<td>2.67 (.85)</td>
<td>2.70 (.96)</td>
</tr>
</tbody>
</table>

Note: ANM = asynchronous new media; EP = epistemic function; F = face-to-face; large = large social distance; P = print; SNM = synchronous new media; SE = social-entertainment function; small = small social distance.

*p < .05. **p < .01. ***p < .001.
Table 2  Frequency/Duration of Engagement in Media Practices and Standard Deviations for Each Cluster

<table>
<thead>
<tr>
<th>Media practices</th>
<th>1: Omnivores (n = 165)</th>
<th>2: Networkers (n = 87)</th>
<th>3: Gamers (n = 146)</th>
<th>4: Low users (n = 105)</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>F(3, 499)</td>
</tr>
<tr>
<td>A. F, small, SE</td>
<td>5.10 (.94)</td>
<td>4.91 (.98)</td>
<td>4.43 (1.27)</td>
<td>3.60 (1.11)</td>
<td>44.46*</td>
</tr>
<tr>
<td>B. F, small, EP</td>
<td>3.83 (1.06)</td>
<td>1.75 (.82)</td>
<td>2.45 (1.35)</td>
<td>1.71 (.75)</td>
<td>116.92*</td>
</tr>
<tr>
<td>C. F, large, SE</td>
<td>2.55 (.73)</td>
<td>2.22 (.66)</td>
<td>2.15 (.82)</td>
<td>1.78 (.58)</td>
<td>25.29*</td>
</tr>
<tr>
<td>D. F, large, EP</td>
<td>1.61 (.79)</td>
<td>1.32 (.62)</td>
<td>1.29 (.73)</td>
<td>1.13 (.69)</td>
<td>11.92*</td>
</tr>
<tr>
<td>E. P, small, SE</td>
<td>1.98 (.77)</td>
<td>1.69 (.66)</td>
<td>1.65 (.76)</td>
<td>1.41 (.48)</td>
<td>15.24*</td>
</tr>
<tr>
<td>F. P, large, SE</td>
<td>3.57 (.89)</td>
<td>2.82 (1.01)</td>
<td>2.96 (1.10)</td>
<td>2.08 (.89)</td>
<td>50.80*</td>
</tr>
<tr>
<td>G. P, large, EP</td>
<td>3.16 (.87)</td>
<td>2.24 (.76)</td>
<td>2.51 (.99)</td>
<td>2.00 (.83)</td>
<td>43.32*</td>
</tr>
<tr>
<td>H. SNM, small, SE</td>
<td>3.09 (1.09)</td>
<td>4.91 (.95)</td>
<td>3.47 (1.38)</td>
<td>2.92 (1.00)</td>
<td>60.60*</td>
</tr>
<tr>
<td>I. SNM, small, EP</td>
<td>2.23 (1.01)</td>
<td>2.32 (.87)</td>
<td>2.08 (1.09)</td>
<td>1.76 (.96)</td>
<td>6.41*</td>
</tr>
<tr>
<td>J. SNM, large, SE</td>
<td>1.53 (.83)</td>
<td>1.48 (.76)</td>
<td>5.51 (1.09)</td>
<td>1.73 (1.15)</td>
<td>566.64*</td>
</tr>
<tr>
<td>K. ANM, small, SE</td>
<td>3.84 (1.12)</td>
<td>4.66 (.83)</td>
<td>3.47 (1.27)</td>
<td>2.86 (1.07)</td>
<td>44.33*</td>
</tr>
<tr>
<td>L. ANM, large, SE</td>
<td>3.78 (.87)</td>
<td>3.45 (.78)</td>
<td>4.23 (.86)</td>
<td>3.13 (.86)</td>
<td>37.86*</td>
</tr>
<tr>
<td>M. ANM, large, EP</td>
<td>2.89 (.72)</td>
<td>2.78 (.84)</td>
<td>2.73 (.98)</td>
<td>2.14 (.60)</td>
<td>20.46*</td>
</tr>
</tbody>
</table>

Note: ANM = asynchronous new media; EP = epistemic function; F = face-to-face; large = large social distance; P = print; SE = social-entertainment function; small = small social distance; SNM = synchronous new media.

*p < .001.
Figure 1 Mean engagement for each cluster (above) and prototypical members (below).
Table 3 Number of Youth in Each Cluster

<table>
<thead>
<tr>
<th></th>
<th>1: Omnivores</th>
<th>2: Networkers</th>
<th>3: Gamers</th>
<th>4: Low users</th>
<th>χ² (3)</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>63</td>
<td>38.8**</td>
<td>49</td>
<td>56.3</td>
<td>92</td>
<td>63.0</td>
</tr>
<tr>
<td>Higher</td>
<td>102</td>
<td>61.8**</td>
<td>38</td>
<td>43.7</td>
<td>54</td>
<td>37.0</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>60</td>
<td>36.4**</td>
<td>18</td>
<td>20.7***</td>
<td>112</td>
<td>76.7***</td>
</tr>
<tr>
<td>Girl</td>
<td>105</td>
<td>63.6**</td>
<td>69</td>
<td>79.3***</td>
<td>34</td>
<td>23.3***</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>87</td>
<td>146</td>
<td>105</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.

significantly for gender and educational track, but the effect was stronger for gender. We also investigated whether the number of youth from lower and higher tracks and boys and girls observed within each cluster deviated significantly from the number expected based on the proportion of youth from lower/higher tracks, and boys/girls in the entire sample. These outcomes will be discussed for each cluster separately.

Cluster 1 — Omnivores: Appropriating all media for multiple functions in diverse social contexts

A girl named Anna was a prototypical member of the first cluster. She indicated that she frequently engaged in oral conversations with friends, not only to talk about events related to daily life (A) but also to discuss global issues (B), for instance about politics or the environment. She read print media such as books, newspapers, and magazines on a regular basis and did so mostly for enjoyment (F) but also to learn something or to be informed about current events (G). Her engagement in these print-based media did not preclude engagement in new media. She used synchronous new media like instant-messaging to keep in touch with friends (H), but not as much as her peers. Furthermore, she used asynchronous new media (K-M) frequently, for example to browse the web for educational information, watch YouTube clips for enjoyment and keep in touch with friends by means of her online profile and text-messaging. However, she was not at all involved in multiplayer online gaming (J).

Anna and others in the first cluster were versatile, all-round media users, meaning that they used a broad range of media for different functions in diverse social contexts. We therefore labeled them omnivores. There were more girls and youth from higher tracks in this cluster than expected based on their count in the entire sample, and fewer boys and youth from lower tracks. Omnivores appeared to be especially adept at appropriating possibilities offered by new technology, but without disconnecting from face-to-face interactions or print-based media and without specializing in a particular media use. A striking exception to this pattern was their disengagement from multiplayer online gaming, which indicates that this media practice did not combine easily with their all-round media lifestyle.
Cluster 2—Networkers: Staying connected with known others across offline and online

A prototypical member of the first cluster, Michelle, often had oral conversations with people she knew well to talk about events of everyday life (A). She reported to use synchronous new media in this particular context (H) almost as much, for instance by instant-messaging or using a webcam. Furthermore, she often drew upon asynchronous new media to keep in touch with friends and relatives (K), for example her online profile and her mobile phone for text-messaging. However, the differences between Michelle and youth from other clusters were smaller for the asynchronous than the synchronous new media. Overall, Michelle’s media engagement was hardly motivated by epistemic goals. For instance, although she frequently engaged in oral conversation, especially with friends and relatives, this conversation typically did not concern global issues (B).

Michelle had a strong preference for one particular media use, namely to keep in touch (social-entertainment function) with friends and relatives (small social distance). We therefore labeled her and others in her cluster networkers. There were more girls and fewer boys than expected in this cluster given their count in the larger sample. Based on expected frequencies, no significant differences were found between the number of youth from lower and higher tracks. Interestingly, networkers stayed connected with known others through face-to-face interaction and new media, but without including print-based media like letters, notes, and postcards. This suggests that besides the functional and social context, the technology was of importance as well.

Cluster 3—Gamers: Specializing in a medium for entertainment within a distant social context

Mark, who was representative of the third cluster, reported spending much of his time engaging in synchronous new media with distant others for social-entertainment functions (J), namely playing multiplayer online games such as Second Life or World of Warcraft. His engagement in online gaming was higher than engagement in any other media practice. Furthermore, he indicated spending a large amount of time on social-entertainment practices involving unknown others accessed through asynchronous new media (L), for instance web based games, YouTube, and television. In comparison to youth from other clusters, Mark was more often engaged in print-based practices that involved social-entertainment purposes and known others (E), examples of which were writing and receiving postcards and keeping a journal. However, in this sense he formed an exception to the general pattern within his own cluster. More than Michelle (a networker), he engaged in oral conversation with friends and relatives about global issues (B). And more than Anna (an omnivore) and Peter (to be introduced), he used synchronous new media like instant-messaging to keep in touch with people he knew (H).

Most distinctive for the media lifestyle adopted by Mark and other members of the third cluster was their high engagement in multiplayer online gaming, and we therefore labeled them gamers. There were more boys and fewer girls than expected in this cluster from their count in the entire sample. Based on expected frequencies,
no significant differences were found between the number of youth from lower and higher tracks in this cluster. Gamers’ high engagement in multiplayer online games—higher than any other media practice and much higher than youth from all other clusters—suggested that this media practice exists on its own right, without having clear connections to other media practices. However, as gamers were (somewhat) less involved in a similar type of usage through asynchronous new media, this indicated that a combination of the medium (new), function (social-entertainment), and social arrangement (large social distance) drove their engagement.

Cluster 4—Low-frequency users: Not bringing offline interests and relationships online
Being a prototypical member of the fourth cluster, Peter reported low engagement in all media practices compared to youth from other clusters. There was one exception to this trend, namely multiplayer online gaming practices (J), which he engaged in more than Anna (a media omnivore) and Michelle (a networker), but less than Mark (a gamer). However, in this regard he formed an exception to the general trend within his own cluster. Peter’s low involvement was especially striking for a number of media practices. In comparison to other youth, he did not engage in oral conversation often with friends and relatives about issues of daily life (A), nor in text-messaging, e-mailing, or using an online profile to keep in touch (K). But Peter’s engagement in these practices, especially face-to-face interaction, was relatively high considering the broad spectrum of his media engagement. Furthermore, Peter read books, newspapers, and magazines for pleasure (F) less often than his peers. Finally, he indicated using asynchronous new media less frequently for knowledge gathering or creative expression (M). Examples of such practices were reading lyrics and poems online, browsing the web to find educational information, and watching television to be informed of current events.

Because of their overall low engagement in media practices, we labeled Peter and others in the fourth cluster low-frequency users. There were more boys and fewer girls in this cluster than expected based on their count in the larger sample, but no significant differences were found between the number of youth from lower and higher tracks. Their low involvement in the broad media spectrum indicated that these youth did not bring their offline interests and relationships into regular use of any medium, be it print-based or new. Of all media practices, they were mostly oriented toward face-to-face interaction with friends and relatives.

In summary, the present study set out to describe youth media lifestyles including contexts of use. We found four clearly different media lifestyles defined in terms of (a) the medium through which a particular media activity took place, (b) the social distance involved between sender and receiver, and (c) the function of the particular activity. We were able to describe the media lifestyles of omnivores, networkers, gamers, and low-frequency users in terms of how they “behaved” across face-to-face activities and a wide spectrum of media activities, including traditional and new media.
General discussion

A deeper insight into media lifestyles
In the introduction we argued that the concept of media lifestyles (Livingstone & Bovill, 1999) may provide a theoretical point of departure for unifying a techno-centered with a functional perspective. In line with the idea that a media lifestyle arises from the interplay among several factors such as possibilities afforded by the technology, as well as personal preferences, the present study set out to investigate how a group of Dutch eighth graders, with full access to new technology, made meaningful combinations of communication media. We moved away from former cluster-analytic studies by including a much broader range of media, including face-to-face interactions, and by systematically exploring the functions and social relations involved.

With respect to the four media lifestyles that were described, our study replicated previous research findings and showed how robust particular profiles of media users are (Brozo et al., 2007; Leino et al., 2004; Livingstone & Bovill, 1999; Van den Beemt, 2010). Yet it provided a more complex picture of the diversity of media users, as it offered insight into how the use of one medium was related to another, in particular what the role of the underlying technology was and to what extent media choices follow from a particular functional or social need.

With respect to the latter, our study suggested that differences in the need or desire to bring offline social connections to online activity play a particularly large role in how media are adopted. Previous studies have shown that the majority of youth use new media to sustain existing relationships (Boase et al., 2006; Boneva et al., 2006; Ito et al., 2008). Although the present study confirmed that this is a relatively important aspect of media engagement within each of the four lifestyles, it also showed that this is not a defining characteristic of the media lifestyle most youth adopt.

That is, in the networkers’ lifestyle, online media activity was most clearly oriented toward intimate others, but the dominant media practices of gamers, for instance, were instead cultivated in a distant social context. Also, the low-frequency media users and the media omnivores were much less oriented toward sustaining intimate relationships compared to networkers. As such, the present study showed that while there are similarities in the relative use youth make of the different media options available to them during leisure time — suggesting that there are needs, desires, attractions, and obligations most, if not all, youth of this particular age share — it is precisely against these broad similarities that significant differences become apparent in the ways youth use and combine media.

Clearly, access to technology is a necessary but not a sufficient condition for youth to incorporate technology in their lifestyles. Our findings pertaining to whether youth bring their social connections online show that a study like ours may contribute to understanding what drives the individual differences that continue to exist.

As we argued in the introduction, technologies have inherent affordances (Buckingham, 2008), meaning that some media are better suited to the type of usage youth...
are inclined to seek. For example, networkers were more engaged in face-to-face interaction and synchronous new media to stay connected to friends and relatives compared to asynchronous new media (as well as print-based media, which was to be expected). This may indicate that technological properties of synchronous new media tap into a basic need these youth have to engage in real-time interaction with significant others—as with face-to-face interaction—and that synchronous new media are therefore preferred over asynchronous alternatives.

Thus, the present study showed how media lifestyles are codetermined by individual preferences and the type of medium involved. In some cases the technology may even intensify a particular type of engagement and recreate or strengthen these preferences, as the most preferred media practice of gamers seems to indicate.

Their online gaming was by far the most frequent practice found in our study in comparison with dominant media practices in other lifestyles. As such, this practice seems to compete with a more balanced media lifestyle, as the broadly engaged media omnivores were not involved in online gaming.

In other cases it appears the technology did not elicit and perhaps even formed an impediment toward engagement, evidenced by the lifestyle of low-frequency media users found in our study. Such findings underscore the added value of investigating media engagement as socially shaped and socially shaping, recognizing that personal preferences may be of influence along with other factors such as those related to the nature of the medium.

There are of course some limitations to the method employed. As in any type of questionnaire research, the categories or “facets” assumed to be present in each media activity represented abstract properties of engagement, which in reality were undoubtedly much more interwoven. We question, for example, whether one can strictly separate social or entertainment functions from epistemic functions. We therefore believe it is vital that in future research the type of data obtained from studies like ours is combined with more in-depth explorations of media practices, which allows us to more clearly determine the form such practices take and the meaning they have for individual users.

Despite its limitations, the design that was drawn upon in the present study proved especially useful to obtain a deeper insight into the variation of media users in a rather large cohort of Dutch youth with full access to digital technology. As such, we believe it provides a promising method for (cross-national) comparisons with different cohorts. It also points to several new avenues for U&G research to explore while staying true to the idea that media use is purposive (Rubin, 1994).

**New avenues for uses & gratifications**

The present study points to two important areas for further research, both of which concern a broader conceptualization of media engagement. A first option to further current research, not only U&G, is to start considering mediated and face-to-face communication together. As Ito et al. (2008) have shown, this allows researchers to
investigate whether youth follow up on their offline interests and social relationships through their media use.

Bridging offline and online in research is important because media users do not necessarily experience a boundary. For example, by including face-to-face interaction the present study was able to show that networkers stayed connected with known others across online and offline and had a clear preference for the type of technology best—though not fully—able to substitute real-life interaction. Furthermore, considering mediated and face-to-face communication together allows researchers to detect when youth do experience a boundary. This appeared to be the case for the low-frequency media users in our study, who showed a low involvement in the broad media spectrum and were perhaps more involved in outdoor activities (e.g., see Trainor, Delfabbro, Winefield, & Anderson, 2010).

A second option to further U&G research in particular is to move beyond the pleasure-seeking motives of mass media that are usually focused on (cf. Oliver & Bartsch, 2010; Petrić et al., 2011; Wirth et al., 2012). Due to the new media advent, many boundaries that previously existed have been blurred, for example, between personal and mass communication and between consumptive and more interactive media uses. The media practices of youth today are multifaceted and need to be investigated as such.

The present study demonstrates a way this can be done, giving equal weight to interpersonal and mass media uses and to entertainment functions as well as applications that are cognitively more demanding. For example, our method allowed us to include activities like watching television or YouTube for fun along with activities such as discussing broader social issues with intimate others through synchronous new media.

There is an urgent need to address media applications like the latter, as youth today have a greater opportunity to learn from their (peer-oriented) networks and thus outside of formal institutions like school. We can conceive that new digital divides arise as a result of these new opportunities.

Differences in media lifestyles: Good or bad?
The present study not only points to some new perspectives to explore in future research, but it also raises new questions regarding the differences that continue to exist between youth in their media-use styles when access to technologies is no longer a basic hindrance. First, we would emphasize that our finding of few differences between youth from lower and higher educational tracks is important. Although the sample was not large enough to draw conclusions regarding the entire student population, our study suggests that three out of the four distinguished media lifestyles—networkers, gamers, and low-frequency media users—are present more or less equally in all layers of society. This is a meaningful finding because in The Netherlands educational track is strongly associated with success in school and in later life. This finding provides further evidence for our argument that differences between youth to a significant extent reflect their personal preferences. In this respect
we would note how persistent gender differences were in our study, suggesting that boys were interested in different things compared to girls.

Assuming media lifestyles are indeed a reflection of individual taste, afforded by particular technologies, what could be the harm in inter-individual differences? To do well in the largely print-centered school environment and to be prepared for the demands placed by modern society on its citizens, young people need to become well-rounded individuals. Through their out-of-school experiences, they may gain familiarity with a broad range of media for different functions within a variety of social settings.

In this sense the profile of media omnivores found in our study epitomizes the ideal of a flexible media user attuned to varied circumstances of media engagement (cf. Ravid & Tolchinsky, 2002). These youth had meaningful interactions with their friends and relatives offline, not only to talk about daily life but also to discuss broader social issues. Furthermore, they were able to bring their offline interests and relationships online and still remain engaged in traditional print-based media. Through their broad and balanced media lifestyle they were seemingly optimally prepared to function in different functions and environments, be it at school, at the workplace, or in a voting booth. Their peers, especially the low-frequency media users, were possibly less prepared for life at school and beyond. The present study hints at the significance of such differences, as the lifestyle of media omnivores was in fact more often found among youth from higher educational tracks. We therefore believe it is of great importance to investigate the consequences of less diversified media lifestyles in future research, for which this study could provide a theoretical and methodological basis.

Appendix

*Items from the Media Activities Questionnaire*

(A) *Face-to-face contact + small social distance + social-entertainment function*

1. Do you talk to people you know well (friends or family members) about your day, for example what you did that day?
2. Do you listen in when friends or family members talk to each other about their day?

(B) *Face-to-face contact + small social distance + epistemic function*

3. Do you talk to friends or family members about global issues, such as politics or the environment?
4. Do you listen in when friends or family members talk to each other about global issues?
(C) *Face-to-face contact + large social distance + social-entertainment function*

5. Do you chat with people you don’t know so well, for example neighbors or shopkeepers?
6. Do you go to musicals?

(D) *Face-to-face contact + large social distance + epistemic function*

7. Do you go to plays?

(E) *Print-based media + small social distance + social-entertainment function*

8. Do you keep a diary?
9. Do you write letters or postcards to keep in touch with friends or family members?
10. Do you receive letters or postcards from friends or family members?

(F) *Print-based media + large social distance + social-entertainment function*

11. Do you read books for enjoyment, like Harry Potter or “Kippenvel”?
12. Do you read magazines for enjoyment, for example about fashion or computer games?
13. Do you read newspapers for news on sports or celebrities (gossip)?

(G) *Print-based media + large social distance + epistemic function*

14. Do you read books at home you can learn something from, for example school books?
15. Do you look up information in dictionaries or encyclopedias when you’re at home?
16. Do you read magazines you can learn something from, for example about psychology or biology?
17. Do you read newspapers to be informed about current events?

(H) *Synchronous new media + small social distance + social-entertainment function*

18. Do you instant-message with friends or family members to keep in touch?
19. Do you use a webcam to keep in touch with friends or family members?

(I) *Synchronous new media + small social distance + epistemic function*

20. Do you use Instant Messenger to explain homework to friends or classmates?
21. Do you use Instant Messenger to talk to friends or family members about global issues, such as politics or the environment?

(J) *Synchronous new media + large social distance + social-entertainment function*

22. Do you play online computer games, for example Second Life or World of Warcraft?

(K) *Asynchronous new media + small social distance + social-entertainment function*

23. Do you write e-mails to keep in touch with friends or family members?

24. Do you use an online profile to keep in touch with friends or family members, for example via Facebook or Myspace?

25. Do you text-message with friends or family members to keep in touch?

(L) *Asynchronous new media + large social distance + social-entertainment function*

26. Do you play games on gaming websites?

27. Do you watch TV for enjoyment, for example soap operas or cartoons?

28. Do you watch movie clips on YouTube for fun?

29. Do you read cartoons in newspapers, magazines or comic books?

(M) *Asynchronous new media + large social distance + epistemic function*

30. Do you enter into debates on an Internet forum?

31. Do you browse the web to find educational information, for example on Wikipedia or infoplease?

32. Do you read websites with poems or lyrics?

33. Do you watch television to be informed about current events, for example the news bulletin?

References


