7 Teens and the new media environment

Challenges and opportunities

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Researchers interested in the impact of media on the adolescent audience often use content analysis as a first step in assessing the kinds of messages available in mainstream media. These content-analytical studies typically sample from prime-time television programs, blockbuster movies, or top-selling video games. But do these samples accurately reflect the media content to which teens are exposed? The sheer increase in the number of media types and information sources available to teen audiences has opened up a wide variety of options to choose from. This proliferation of media technologies has brought about dramatic changes to when, where, and how adolescents access media content.

In this chapter, we provide an overview of our efforts to assess teens' exposure to media content and the challenges we have encountered in developing our measures. Specifically, we present data from an exploratory study which illustrates that adolescents are growing up in a multiple-media environment, much of adolescent media use is idiosyncratic, and their media encounters are increasingly "interactive." Content analysis methodology needs to adapt and adjust to these revolutionary changes in the media ecology. We propose an audience-centered, media-ecological approach to content analytical research in response to this emerging interactive new media scenario.

A media-ecological approach to content analysis

There is no doubt that the media environment today's teens experience is very different from that of any past generation. With the rapid explosion of media technologies, virtually limitless media sources are available to audiences. Given the availability of a variety of media choices, it is not surprising that teens are spending more time with the media in general, often engaging with more than one medium simultaneously (Roberts, Foehr, & Rideout, 2005). According to research conducted by the Kaiser Family Foundation in 2005, among 8–18-year-olds, average daily media use is almost six hours when single medium use is considered. The average exposure time increases to eight hours per day when more than one medium is taken into account (Roberts et al., 2005).

The convenience of wireless, portable, miniaturized media gadgets has made it easier for adolescents to access information outside conventional media access

venues such as homes and schools. Because of increased niche marketing, customization, and interactivity, we can no longer talk about adolescents as one "mass audience" that shares similar media experiences. In many senses, distinctions between print media such as magazines and newspapers, audio-visual media such as television and movies, and interactive "new" media such as video games, computers, and the internet have become less meaningful because of the growing convergence of media types.

The changing media landscape brings into question traditional conceptualizations of terms such as "content," "exposure," and "audience" from a media-centric, technology-focused approach to content analysis. In response, we argue that content analysis needs to shift to a more audience-focused, ecological approach. Such a media-ecological approach to content analysis takes into consideration the complex relationships between media *content* and media *environments*.

In our own research, conducted at the Annenberg Public Policy Center, on assessing sexual content across various teen media, we find that media consumption patterns of teens have changed dramatically in recent years. Below, we present findings from a preliminary study that was conducted among adolescents to understand what types of media teens are exposed to, how they typically engage with media, and what types of formats they use to access media content.

A preliminary study on media consumption patterns among teens

Participants

We conducted 19 focus groups (n = 196 participants) in 2003 and 2004 with teens in a metropolitan Northeastern city to explore issues related to sexual behavior and sex in the media. The study surveyed a convenience sample of 196 12–19-year-olds. The sample was diverse (by gender and race). Of the 191 respondents for whom demographic information was available, 118 were females and 73 were males. While most of the participants were Black (n = 98), there were a considerable number of Hispanics (n = 45) and Whites as well (n = 33).

Methods

Upon arrival and completion of general instructions, youth were given a background and media diary form. First, youth were given a paper and pencil measure to collect demographic information, as well as length of time and type of media youth used the previous day. Next, youth were shown one of two five-minute media clips from *The OC* or *Boston Public* and given a checklist of behaviors with instructions to put a check next to each item on the list that they thought was present in the scene. Then the youth listened

to and read lyrics to a song by the artist Fabolous and were given the same behavior checklist they completed after the media clip. Upon completion of the behavior checklist there was a brief open-ended questionnaire covering beliefs about sex, followed by a group discussion about sexual behavior and sex in the media. Youth were then asked to complete a media log of their media use on the previous day in half-hour increments between 6:00 and 10:00 p.m. in a closed-ended format. They were asked: "What was your main media activity? (Fill in at least one)" and given the following choices: reading magazines, listening to music (radio/CD player), using computer chat room/instant messenger, playing computer games/video games, surfing the web, other computer (excluding word processing), watching television, watching videotaped TV program, going to the movies (in theater), watching a video or DVD, or no media. If participants indicated media use, they were then asked the name or title of the media. Following the media log, youth rated 11 behaviors to indicate how sexual and intimate they were and the different dating contexts in which they were likely to occur. Participants were then asked to "highlight the shows they watched for at least ten minutes yesterday" on an actual copy of a TV guide for that day. They were also asked to list the programs that were sexy or sexual and to rate the "sexiness" of each show listed.

Results

This study surveyed 196 12–19-year-olds about their average weekday and weekend day use of a variety of media, as well as their favorite media titles and their typical consumption patterns (e.g., whether they read magazines "cover to cover" or whether they "flip through" for interesting articles). Participants indicated their media use patterns for six media types that are popular amongst teens: television, music, movies, internet, video games, and magazines.

The lack of consensus among respondents on their favorite media titles was evidence for the growing fragmentation of "mass" audiences and the increase in customization of media selection. Even the most popular media titles were not reported as favorites by more than 15–20% of the participants. For instance, *The Simpsons* and *Friends* were mentioned as one of the top three favorite television shows by only 39 and 30 respondents respectively. Similarly, magazines such as *Seventeen* and *Vibe, which* are typically known to be very popular with teens, were not seen as favorites by very many respondents (only n = 23 each). Music artists and favorite music videos showed a high degree of diversity in what were considered favorites by listeners, with each given music video being mentioned by only a handful of respondents at best.

More than half (53%) of teens indicated they had downloaded music from the internet, which may be important as teens may be exposed to different content depending on where they obtain their music and how they listen to

music (internet vs. radio vs. CD purchased in a store). Teens varied in the sources from which they downloaded music lyrics as well. A majority say they used the internet (65%) but CD covers were only slightly less popular as a source for lyrics (50%).

Respondents showed significant variations in the time spent with various media types. For instance, average time spent per week on listening to CDs (M = 28.5 hours) and watching television (M = 27.8 hours) was more than twice the time spent with video games (m = 11.8 hours) and on the web (M = 10.8 hours). Reading magazines took up the least amount of time (M = 4.9 hours) per week.

Moreover, the way in which magazines were "read" differed significantly within this seemingly homogeneous group of teen magazine readers. Almost equal numbers of respondents indicated that they typically read certain sections of the magazines (38%), flipped through the magazine (36%), and read it from cover to cover (23%). Therefore, it seems that while some teens might pay careful attention to printed materials in magazines, others simply browse through quickly, stopping to read only what really catches their attention.

Another notable observation that emerged during the course of conducting this preliminary survey was that adolescents in this sample often listed TV channels instead of specific TV shows, search engines (such as Google.com) for favorite websites, and music artists instead of the CD titles when asked to indicate their favorite CD. These details provided insights about the ways in which teen audiences categorize their media exposure. It seemed that they often classified media content information in terms of generalized media units (such as TV channels and music artists) rather than specific units (such as scenes from a TV episode or songs from a particular CD). Such information is helpful in making decisions related to unitization of media content, especially when we need to make comparisons across various types of media.

Overall, the findings from this preliminary study showed that teens accessed a variety of media sources in many different ways that in turn influenced the manner in which they experienced media content. There was very little overlap in the media channels and media titles considered favorites in this group, acting as further evidence for the increase in customization in media selection. This study illustrates that teens are living in a dynamic multiple media, niche media marketing environment where media use is fairly idiosyncratic. The implications of these dramatic changes in teen media environment for the media-ecological approach to content analysis are discussed below.

Interactivity in media encounters: implications for content analysis

Interactivity can be conceptualized as a process-related variable that describes the iterative, dialogical manner in which meanings are created in communication contexts. It is defined as "the extent to which communication reflects back on itself" (Newhagen & Rafaeli, 1996, p. 2). In the new media context,

conceptualization of "audiences" in the traditional uni-directional linear information flow from source to destination is now being replaced by terms such as "users" to indicate their more active participatory role in producing media content. As a variable, interactivity can range on a spectrum from one-way mass-mediated communication to "simultaneous and continuous exchanges" resembling face-to-face conversations involving complex forms of interruptions and turn-taking, as seen in web environments (Rafaeli & Sudweeks, 1997). Media interactivity has been classified into three types: user to system, user to document, and user to user (McMillan, 2002). Each of these types of interactivity has different implications for content analytical research.

User-to-system interactivity

This type of interactivity involves human-computer interaction such as that found in video games and search engines. Because digital data are represented numerically, it becomes easily possible for researchers to input mathematical formulas to search for specific types of data within a larger pool of available information. Internet search engines such as Yahoo, newspaper databases such as *LexisNexis*, and online versions of the *TV Guide* have greatly reduced the time it takes to identify media units of relevance to a given study. Indeed, defining the sampling frame for a study based on media units generated from "keyword searches" is becoming a popular sampling technique within content analysis (Weare & Lin, 2005). An audience-centered approach to sampling would recommend that a preliminary observational study be conducted to understand the "routes" that users are most likely to take while navigating a webpage, followed by analyses of these identified access patterns.

For example, Keller and colleagues (2002) used an audience-oriented sampling technique for studying health messages online where they asked young people to report the search terms that they would use while looking up sexual health information online. These researchers later analyzed the top 100 hits that came up in three popular search engines upon entering the search terms provided by participants. They used the "one-click rule" by including the homepage and links available directly from the homepage that lead to unique content (and not just to another external site). Other researchers such as Hong and Cody (2002), who studied pro-social websites online, have used the entire website as the unit of analysis by examining all the pages linked to a given domain name.

Taking the highly interactive world of video games as an example, situations experienced during gameplay could vary vastly from one gamer to another within the same media unit. The way a game proceeds may be contingent upon the type of game being played, the skill level of the player, the type of platform, and familiarity with the game. Decisions regarding units of analysis are also complicated when it comes to interactive media. For example, while studying video games, researchers have to decide if they will analyze each level of the

game, every encounter that the player has with a character, or a time-bound segment within the game.

Content analyses of video games are often based on arbitrarily determined durations of play as coding units, making it difficult to compare findings across studies. For example, Beasley and Standley (2002) analyze characters from the first 20 minutes of gameplay, Haninger and Thompson (2004) indicate that at least one hour of play was coded, while Dietz (1998) does not mention the duration of the analyzed segments.

To further complicate matters, many action games have several "avatars" of the same character. Researchers have to decide whether to code these as distinct characters or the same character. In the context of first-person shooter games, the character is the player himself/herself. To deal with this challenge, Smith, Lachlan, and Tamborini (2003) define an interaction as the number of times a player starts over within the first 10 minutes of gameplay. Under such circumstances, it might be helpful to take a user-oriented approach in determining the ways in which the audiences themselves categorize content, which could then guide researchers in deciding what units would be most meaningful to study.

User-to-document interactivity

Non-linear access to information is another unique characteristic of new media (Newhagen & Rafaeli, 1996; Weare & Yin, 2005). This non-linear access is typical of user-to-document interactivity experienced while navigating hypertextual content on the internet. User-to-document interactivity in new media allows for inclusion of variables such as navigability, download speed, and availability of non-English-language translation, which are not meaningful in the context of traditional media (Bucy, Lang, Potter, & Grabe, 1999; Musso, Weare, & Hale, 2000).

Unlike television programs, magazines, and movies that have a definite beginning and a definite end, media such as internet and video games do not have rigid fixed boundaries, thus creating problems in defining the population of interest in content analyses. This endless web of interconnected sites with no identifiable beginning or end becomes extremely tedious to analyze (Mitra & Cohen, 1999). Defining a sampling frame to choose from in this ever-growing, non-linear repository of information becomes tough. Although it has been estimated that the world wide web has over 800 million websites (Lawrence & Giles, 1999), this figure is increasing exponentially, making it is impossible to know exactly how many sites are available on the internet at any given point in time (Stempel & Stewart, 2000; Weare & Lin, 2005). Whereas the Audit Bureau of Circulation keeps track of all the newspapers available, there is no such entity that keeps a catalog of all of the websites available on the internet. According to Lawrence and Giles (1999), only 42% of available sites are catalogued and any given search engine indexes only 16% of the sites found in the web. Moreover, every minute new material is being added, deleted, and edited from various websites all across the world by millions of users.

These aspects of new media have several implications for content analytical research. It becomes important for content researchers to keep track of when they retrieved information from a given website, because website content can change rapidly. Researchers should ensure that all coders have access to the same content using similar monitors, internet connections, and browsers in order to improve inter-coder reliability (Bucy et al., 1999). Archiving the contents of the websites being analyzed allows for researchers to save the contents for future reference (Weare & Yin, 2005).

From an audience-centric perspective, search engine-based sampling is emerging as a useful tool in new media content analysis because it provides information on the sites that a typical teen user is likely to encounter on the web. By using meta-search engines or multiple search engines, researchers can hope to map a larger portion of the web than through a single search engine. While some researchers have explored other sampling techniques such as selecting a random sample of most popular sites online (Bucy et al., 1999), this approach is not helpful for public health scholars interested in a specific audience segment such as adolescents.

User-to-user interactivity

E-mail, Instant Messaging, web logs (blogs), peer-to-peer file sharing networks, and chat spaces are examples of locations where user-to-user interactivity can be observed. Teens are especially likely to engage in such user-to-user interactive content, using social networking sites such as Myspace.com and Facebook.com. More than half of teens (51%) aged 13 to 18 report visiting a social networking site in the past week compared to only 6% of tweens aged 8 to 12 (Harris-Interactive, 2006). Thirty-four percent of teens and seven percent of tweens report spending more than a half an hour on a typical day sending and receiving messages on a social networking site (HarrisInteractive, 2006). Consumer-generated media consists of blogs, discussions, recommendations, and word of mouth online. It is providing a new avenue of media to sample and companies such as Nielsen Buzzmetrics are doing just that to gather current information, referred to as "buzz" regarding a given company, brand, or trend.

In such avenues, communication is typically conversational in tone, resembling face-to-face interactions in social settings. Thus, analyzing user-to-user interactive new media might be closer to conversational analysis than analysis of "mass-mediated" texts. Shank (1993) categorizes conversation into monologue, dialogue, discussion, and multilogue. Monologue is the one-way communication typical of mass media, dialogue is a more reactive stimulus-response type of communication, discussion involves one-to-many communication where the initiator continues to maintain control as a moderator, and finally multilogue is similar to discussion except that the initiator does not retain control over the conversation. E-mail and Instant Messaging often involve dialogical conversations. Blogs tend to be discussion-oriented, where the primary blogger initiates conversations on a given

topic of interest. Chat rooms are typically multilogue-oriented, with multiple participants expressing their thoughts and opinions, often challenging traditional notions of turn-taking in dialogical conversations. Therefore, depending on the type of user-to-user interactivity, the techniques of content analysis will also vary considerably.

Media proliferation: implications for content analysis

The proliferation of media technologies has brought about dramatic changes to when, where, how much, and to what types of media adolescents have access. The sheer increase in the number of media types and information sources available to audiences has opened up a wide variety of options from which to choose. It is not just that the proliferation of media technologies has changed *what* media content teens are consuming, but *how* and *where* these audiences are receiving such content. It is important for researchers to apply a media-ecological approach in analyzing teen media content by considering how these various new media formats and multiple access locations affect media content.

Younger audiences have been known to be early adopters of new and interactive technologies and are often more media-savvy than adults. In fact, children start learning to use the computer mouse, video game consoles, and television remote at a very young age, making it easy for them to operate media equipment without assistance from older family members. A little more than half (55%) of tweens and teens see their computer knowledge as better than most people or at an expert level (HarrisInteractive, 2006). Often, youth take the role as the experts in the household in regards to technology, with 41% of teens aged 13–18 reporting that their parents have gone to them for help with the internet (HarrisInteractive, 2006).

The multiplication of media technologies has implications for content analysis because content can be accessed in multiple media formats at different times and various locations. In such instances, the content itself could vary slightly from one media source to another. Even if the content is the same across media formats, the meanings derived can vary depending on the physical and social environment in which content is accessed.

While analyzing movies, for example, content analysts should be conscious that movies might be modified when they are broadcast for general television audiences. Similarly, people who watch movies on DVD might have a chance to view additional materials beyond just the movie itself. Extra-featured content could include previously unseen footage, interviews with crew members and cast, commentary from experts, and behind-the-scene perspectives on the efforts which went into the making of the film. Along the same lines, when it comes to analyzing songs listed to by adolescents, crucial decisions have to be made regarding whether to sample from radio stations that typically carry "cleaner" versions of songs, or from unedited versions of the songs from CDs, or use both versions of the song lyrics from iTunes.

In the context of public health messages, such decisions become even more

Table 7.1 Media in the home of 8–18-year-olds

Does anyone in your home own ...?	% Yes
TV	92
Computer	92
DVD player	91
Computer printer	87
VCR	86
Cell phone	86
Cordless telephone	83
Digital camera	75
Video game system	74
Stereo system	72
Portable CD player	72
CD burner	69
Scanner	59
Camcorder or video camera	56
Digital music player(portable MP3 player, iPod)	45
DVD burner	40
Fax machine	37
Digital photo printer	26
Digital TV/video recorder (TiVo, Replay)	20
Personal digital assistant	16
Digital/satellite radio	14
Pager	9
E-book	5

Source: HarrisInteractive YouthPulse[SM], July 7–29, 2006; n = 1,693 8–18-year-olds.

important when the object of the study is to examine sensitive topics (such as sexuality, violence, or illicit drugs), whose prevalence could vary greatly from one media format to another. Exposure to such topics may depend on the explicit and implicit access restrictions that are inherent to the media formats through which teens access information. For instance, accessing the internet at a public library versus a coffee shop, in solitude versus while hanging out with friends, outdoors or indoors, may have profound effects on what type of content will be viewed, the duration of exposure, the frequency of access, and the level of attention paid to the content.

Multiple media environment: implications for content analysis

With the steady drop in prices of digital technologies, more and more sophisticated media equipment are finding their way into the homes of average Americans (Roberts et al., 2005). Not only are people willing to buy the latest media gadgets, but they are also likely to own multiple units within the same household. Youth aged 8–18 report that their bedrooms contain the following media: a television set (69%), a DVD player (42%), a video game system (40%),

a VCR (38%), a computer connected to the internet (24%), a telephone (29%), a computer not connected to the internet (12%) (s*ee Table 7.2)*.

The ready availability of multiple media units under the same roof suggests that media exposure has likely become a personalized rather than a family activity. In general, greater personalized time for children with media might imply that there is less parental supervision. The lack of parental monitoring of children's media habits could mean that children are more likely to be exposed to topics that are typically restricted by parents, such as sexuality, violence, and substance abuse depicted in the media. Exposure to such topics has been shown to affect children by increasing aggressive behaviors (Anderson & Dill, 2000), sexist thoughts (Dorr & Rabin, 1995), smoking (Strasburger & Donnerstein, 1999), and drinking alcohol (Austin, Pinkleton, & Fujioka, 2000). For example, Ybarra and Mitchell (2004) found that among otherwise similar youth internet users infrequent parental monitoring was associated with 54% higher odds of being a harasser of others online.

While conducting content analyses, researchers have to take into account the discrepancies between intended and actual audiences. Although adolescents are not the intended audiences for shows and games rated for mature audiences, in reality they often have access to such content, especially when adolescent media use is not closely monitored by parents. While studying public health messages in the context of adolescents, it becomes crucial to use an audience-centered approach to document the types of content that media users are being exposed to, including content not intended for their consumption. Parents are often unaware or confused about media ratings such as the V-chip or video game ratings, thus allowing their children to play games or see television shows meant for older audiences (Walsh & Gentile, 2001). Forty-five percent of youth aged 8–12 have no parental limits put on the shows they watch (HarrisInteractive, 2006). Parental supervision of online activity falls

Table 7.2 Media in the bedrooms of 8–18-year-olds

Which are in your bedroom …?	8–12-year-olds % Yes	13–18-year-olds % Yes	Total 8–18-year-olds % Yes
TV	70	68	69
Video game system	42	38	40
DVD player	40	44	42
VCR	40	35	38
Telephone	18	38	29
Computer with internet access	12	35	24
Computer without internet access	10	13	12
Answering machine	2	6	4

Source: HarrisInteractive YouthPulse[SM], July 7–29, 2006; n = 831 8–12-year-olds; n = 802 13–18-year-olds.

precipitously after the age of 12 *(see Figure 7.1)*. Youth aged 13–18 and older report that fewer parents know or care what sites they visit online.

Multi-tasking and multiple media use: implications for content analysis

Multi-tasking has become the norm rather than the exception, with countless media messages vying for the attention of teenagers. Multi-tasking may include the use of a medium along with a non-media activity such as eating or hanging out with friends. Or it could involve multiple media use where the user is interacting with more than one medium at a time. In response to increasing multi-tasking and multiple media exposure, content analyses should shift from a media-centric approach of examining a single medium
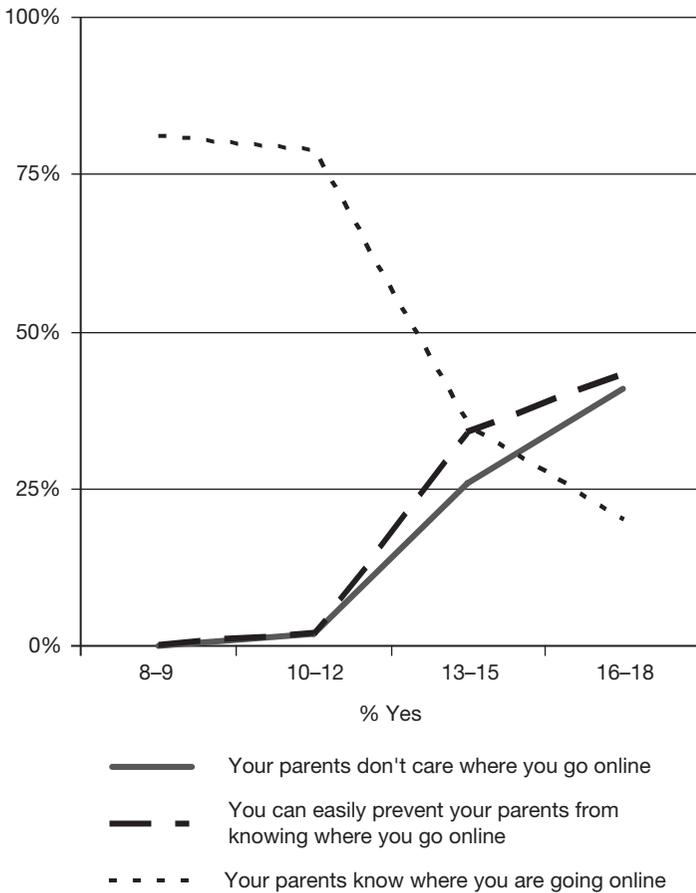

*Figure 7.1* Parental involvement in 8–18 year olds' online media consumption

Source: HarrisInteractive YouthPulse[SM], July 7–29, 2006; n = 1,766 8–18-year-olds.

in isolation towards an ecological approach by examining the entire multiple media environment experienced by audiences.

While watching television, for instance, youth can be experiencing a multitude of other media (*see Figure 7.2*). The same phenomenon can be seen online, as most young people engage in a number of activities, from reading and homework to eating and listening to music. Older youth are more adept at multi-tasking, with only 12% saying they do nothing else while online compared with over half of 8–12-year-olds (HarrisInteractive, 2006). The most common time for multi-tasking to occur in those aged 8–18 is after dinner and before bedtime (HarrisInteractive, 2006).

As human beings, we have a limited capacity for processing multiple sources of information concurrently (Lang & Basil, 1998). With a significant amount of time being spent with more than one medium, the ability to attend to each individual source is reduced. Under these circumstances, it is very likely that during multi-tasking, one medium becomes the primary activity and the other is pushed to the background as the secondary activity. Whereas old media such as television, magazines, and music are often pushed to the background for passive, habitual consumption alongside non-media activities, when new media are introduced in a household, they are consumed in a more involved, instrumental fashion (Livingstone, 2002; Neuman, 1991, Rubin, 2002).

While conducting content analytical research, the distinctions between habitual and instrumental media use might mean that differential emphases
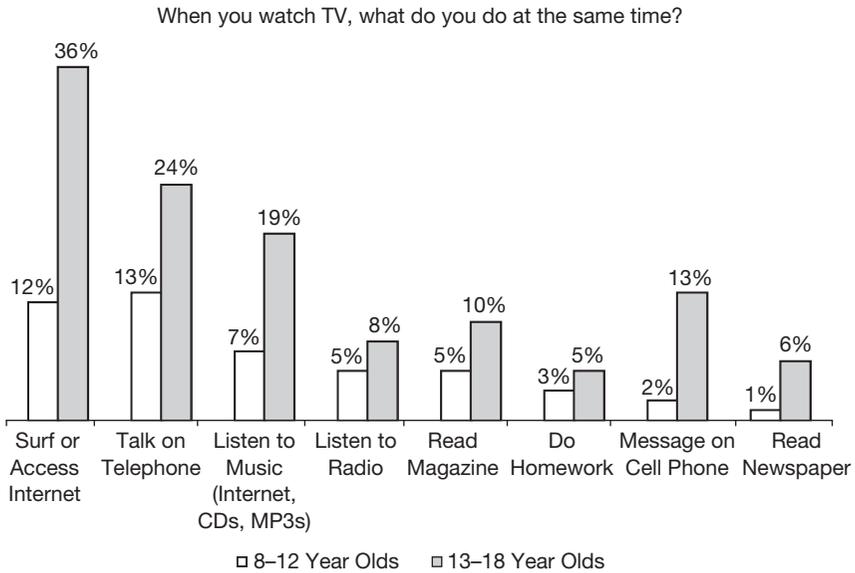
Figure 7.2 8–18 year olds' media use while watching television

Source: HarrisInteractive YouthPulse[SM], July 7–29, 2006; n = 741 8–12-year–olds; n = 671 13–18-year-olds.
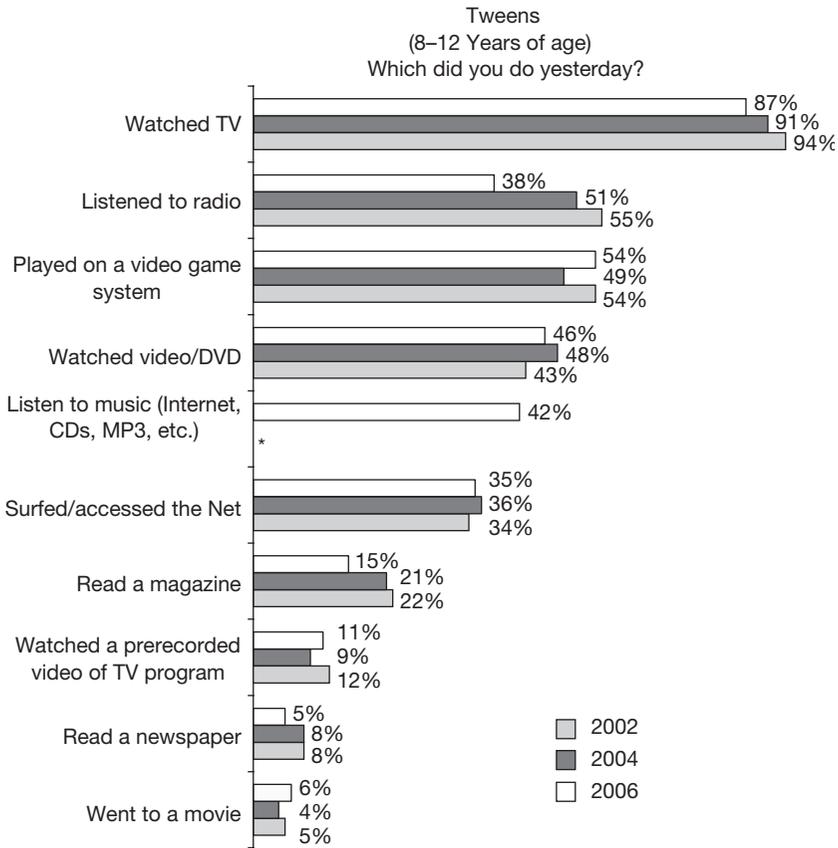
have to be placed on different types of content such as text, images, audio, and video. For instance, if magazines are browsed in a habitual fashion, then it might mean placing greater emphasis on visual content such as photographs and graphics rather than on textual information. Even though self-reports of media exposure might indicate that there is an overlap between old media use and new media use, further investigations are often required to understand the variations in the level of attention paid to each medium in comparison to the other.

Niche segmentation and customization: implications for content analysis

Media scholars suggest that new media rarely displace old. Relatively well-established media such as music and television typically continue to be popular among audiences despite the presence of new media such as computers and video games, suggesting that audiences find new ways to fit in old media into their everyday life. Traditional media typically reinvent themselves by offering more customized and specialized content rather than mass audience generalist content (Livingstone, 2002; Neuman, 1991). Interactive television, TiVo systems, and direct-to-home television provide an increased level of customization such that viewers have the freedom to decide when they would like to view their favorite programs instead of being constrained by the prime-time slots defined by television channels. From the perspective of a media-ecological approach to content analysis, media exposure is no longer confined to a uniform "prime-time" period where everyone watches the same content at the same time in their living-room.

Upon examination of tween media behavior from 2002–6 we see that traditional media use has not declined significantly with the increase of media choices *(see Figure 7.3)*. In the case of television watching, media consumption is not in a major decline. In fact, new ways to consume television are entering the media landscape. Youth are now able to view full episodes of network shows on their computers;indeed, one quarter of tweens aged 8–12 report watching television shows on the internet (Davis, 2006; Siebert, 2006).

In response to niche segmentation and personalization, we recommend more genre-based, audience-oriented sampling techniques while conducting content analyses. Considering the high degree of fragmentation in teen media content, it may not be realistic to expect a great degree of overlap in media exposure amongst the seemingly homogeneous adolescent group of viewers. Despite the presence of adolescent-oriented niche magazines, video games aimed at teenagers, and television channels focused on youth, there is a marked lack of uniformity in the types of content that are popular within this set of people. Research indicates that older adolescents especially have a more varied, fragmented media diet in comparison to their younger counterparts. This is evident in their consumption of online media. When looking at the types of websites visited in the last week we see that tweens visit websites less often, with a much smaller variety of websites, than do teens *(see Table 7.3)*

Tweens
(8–12 Years of age)
Which did you do yesterday?

	2002	2004	2006
Watched TV	94%	91%	87%
Listened to radio	55%	51%	38%
Played on a video game system	54%	49%	54%
Watched video/DVD	43%	48%	46%
Listen to music (Internet, CDs, MP3, etc.)	*		42%
Surfed/accessed the Net	34%	36%	35%
Read a magazine	22%	21%	15%
Watched a prerecorded video of TV program	12%	9%	11%
Read a newspaper	8%	8%	5%
Went to a movie	5%	4%	6%

Figure 7.3 Media consumption of 8–12 year olds in the previous day 2002, 2004 and 2006

Source: HarrisInteractive YouthPulseSM, July 18–31, 2002; n = 842 8–12-year-olds, June 4–17, 2004; n = 849 8–12-year-olds, July 7–29, 2006; n = 877 8–12-year-olds.

Note: * Did not ask the question in 2002 or 2004.

This is especially crucial when analysis of teen media content is considered. Instead of sampling from the most popular, top-selling media content viewed by this entire group, as is traditionally the case, we recommend using an audience-centered approach to content analysis such that this mass audience is further categorized into narrowly defined sub-groups. Typically these niche segments are defined demographically, based on factors such as gender, race, and social class. However, some researchers have also used media-related variables to classify youth into categories such as traditional media users, audio-visual media users, low media users, computer-savvy, music fans, and book enthusiasts (Livingstone, 2002).Once the adolescent audience has been thus segmented, a stratified sampling approach representing content popular within each of the

Table 7.3 Types of websites visited last week by 8–18-year-olds

Last week, which types of sites did you visit?	*8–12-year-olds % Yes*	*13–18-year-olds % Yes*
Kid sites	63	13
Interactive game sites	48	45
Video or computer game sites	23	30
Music sites	18	41
Search engines	13	50
Entertainment sites (to look up information, show times, etc.)	9	32
Sports sites	7	16
Community sites/Social networking sites	5	48
Celebrity websites	4	13
Library sites	4	11
School or university site	2	26
News	2	22
Car sites	2	8
eCommerce sites	2	8
Financial services	<1	7
Health sites	<1	7

Source: HarrisInteractive YouthPulseSM, July 7–29, 2006; n = 877 8–12-year–olds; n = 889 13–18-year-olds.

audience sub-categories might be more representative of media exposure as compared to simple random sampling of general teen media content. Another strategy that might be useful is to use genre-based sampling. For example, while studying teen movies, researchers could sample from genres such as action or horror that are particularly popular within this given section of the audience.

Conclusion

In summary, there has been a tremendous increase in the number of media types and the range of entertainment options available in every given medium in the last decade. In the multi-media environment, adolescents are extending media use to locations beyond the home and are learning to multi-task with more than one medium at a time. Audiences have tremendous freedom in deciding what types of content they would like to view, what times they would like to interact, and in what environments. Niche media segments focusing on small sections of the population imply that we cannot envision the audiences as one mass but have to account for differences in media choices. Technology such as on-demand TV, video games, and the internet have increased interactivity such that users of the same medium encounter totally different scenarios depending on their choices and preferences. It is against this changing, dynamic new media environment that effective strategies related to sampling, unitizing, and conceptualizations of variables in content analyses have to be developed to overcome the challenges and utilize the opportunities that such media present to researchers.

Preliminary findings from the exploratory studies presented in this chapter suggest that researchers who wish to link content with potential effects must consider audiences as differentially constructed. They must sample content accordingly (e.g., by including content that might be more heavily used by one gender or by minority teens), and orient content-analytic strategies to the audiences they assume will be affected. We conclude by arguing that content analysis remains a useful tool for those interested in tracking media messages received by teens, but that researchers must nuance their methodological strategies in order to give greater recognition to the audiences' ability to shape their media environment.

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