

1. INTRODUCTION

Few would deny that media play a central role in the lives of today's children and adolescents. Their homes, indeed their bedrooms, are saturated with media. Many young people carry miniaturized, portable media with them wherever they go. They comprise the primary audience for popular music; they form important niche audiences for TV, movies, video games, and print media (each of these industries produces extensive content targeted primarily at kids); they typically are among the early adopters of personal computers (indeed, of most new media) and are a primary target of much of the content of the World Wide Web.

Clearly, attention to the role of media in the lives of children and adolescents is not new. Plato spoke of the role of messengers from outside in *The Republic*, the Brothers Grimm edited their fairy tales with children in mind (cf. Roberts, 2003; Starker, 1989), and by mid-20th century, social scientists were studying children and media empirically (cf. Himmelweit, Oppenheim & Vince, 1958; Peterson & Thurston, 1933; Schramm, Lyle & Parker, 1961). Nevertheless, substantial and ongoing changes in the media environment witnessed in recent years have led to increased public perceptions that media are important in young people's lives, and that their role is both growing and evolving. That the media environment has changed is inescapable. For example, consider the following:

- At roughly the mid-point of the 20th century, the U.S. media landscape included TV, radio and records, movies, and print media. Fewer than five years into the 21st century, the media landscape encompasses broadcast, cable, and satellite TV, the TV remote control, the VCR, the DVR, print media (books, magazines, newspapers), various audio media (broadcast, satellite, and cable radio, tapes, CDs, digital recordings – all of which are now highly portable), personal computers and the various on-line activities they allow (e.g., World Wide Web, e-mail, instant messaging, gaming, music and video streaming), video games (both TV-based and handheld), and portable telephones

that connect to the Internet and do most of what any digital screen will do.

- When Wilbur Schramm and his colleagues conducted their early study of TV in the lives of U.S. children (Schramm, et al., 1961), color motion pictures (“Technicolor”) were about 20 years old, TV was black and white, audio was “hi-fi,” and “dropping a line” to a friend required postage and several days. Today, computer animation enables movies to transport us to other worlds, TV signals arrive in high-definition color, digitized audio surrounds us with sound, and instant messaging makes “dropping a line” instantaneous.

- At the end of the 1950s, seven of eight U.S. homes (87%) had a TV set and personal computers and video game consoles had not been invented. As the century came to a close, 99% of children 2- to 18-years-old lived in homes with a TV set (60% lived with three or more TVs, and over half had a TV in their bedroom), 70% had video game consoles, and 69% lived in homes with a personal computer (Roberts, Foehr, Rideout & Brodie, 1999; also see Roberts & Foehr, 2004).

And the media environment continues to change. In the past five years, the proportion of 8- to 18-year-olds with computers in their home has increased 13 percentage points (from 73% to 86%), and the proportion with Internet connections has grown from 47% to 74% (see Chapter 3). Instant messaging, a computer activity that barely existed in 1999, has now become one of the most popular things to do online (see Chapter 4). Video game devices have become more sophisticated, video game content has become more realistic, and the video game industry has become more profitable. The ability of computers to stream both audio and video information, file sharing programs, and the development of highly portable digital music and video recorders and players, all appear to be reshaping the structure and behavior of both the music and movie industries. And finally, each of the various media are devoting more resources (time, money, research, attention) to producing content explicitly

targeting children and adolescents than ever before (Pecora, 1998; Roberts, Christenson, & Strange, 2004); indeed, entire TV networks are now dedicated to young audiences.

What do all these changes mean for kids? Has the amount of time they spend with media increased? Are they changing the way they distribute their time across the many different media? Are changes in media accessibility – for example, greater penetration of personal computers and/or high speed Internet connections, or the miniaturization of and price decreases in almost all media – affecting the nature of young people’s media exposure? In short, to what extent does an environment saturated with new and evolving media influence their lives?

The previous study

This is the second time we have posed questions such as these. In 1999, the Kaiser Family Foundation conducted the first *comprehensive* examination of U.S. young people’s media exposure. *Kids & Media @ the New Millennium* was comprehensive in that it examined most of the various media used by children at the end of the 20th century; in that it included questions about amount of exposure, kinds of content used, and conditions of use; and in that it employed a large, representative sample of U.S. 2- to 18-year-olds, (Roberts, et al., 1999; Roberts & Foehr, 2004). A primary motive for that study was a growing body of research attesting to the importance of media in the socialization of today’s youth, coupled with the absence of a comprehensive examination of their overall media behavior as the 20th century drew to a close. Until the 1999 Kaiser study, generalizations about media use were based on data drawn from numerous, often limited studies, no single one of which had ever provided a complete picture.

Of course, research conducted prior to 1999 examined children’s media use. However, many of those studies predated the dramatic changes in the media landscape of the past 20 years, only a few attempted to examine *all* media, and most were based on nonrepresentative samples – for example, school kids from Northern California and the Rocky Mountain states (Schramm, Lyle & Parker, 1961) or Los Angeles (Lyle & Hoffman, 1972a), 6th and 10th graders from Michigan (Greenberg, Ku & Li, 1989), high school students from the San Francisco Bay Area (Roberts & Henriksen, 1990), and so on. A few surveys of kids’ media use had used national samples, but none that we have located gathered data on *all* media available at the time of the

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study. Rather, they tended to focus on one, two, or three – usually TV and sometimes computers, print, radio, or VCRs (e.g., Bower, 1985; Horatio Alger Foundation, 1996; Kaiser Family Foundation & YM Magazine, 1998; Stanger, 1998; Stanger & Gridina, 1999). Most typical were studies that looked at only a few media *and* that used nonrepresentative samples (e.g., Brown, Childers, Bauman, & Koch, 1990; Chaffee, McLeod & Atkin, 1971;

Christenson, 1994; Greenberg & Dervin, 1970; Greenberg, Ku & Li, 1985; Kuby & Larson, 1990; Maccoby, 1954; McLeod, Atkin & Chaffee, 1972; Medrich, Roizen, Rubin & Buckley, 1982; Morgan, Alexander, Shanahan & Harris, 1990; Murray, 1972; Wartella, Heintz, Aidman, & Mazarella, 1990). In short, prior to the 1999 Kaiser study, our general picture of young people’s media behavior was constructed from an array of studies that typically focused on a few media, and that more often than not depended on relatively small, nonrepresentative samples (see also Comstock 1991; Comstock, Chaffee, Katzman, McCombs & Roberts, 1978).

The 1999 survey responded to a perceived need to establish valid, comprehensive baseline data characterizing young people’s media behavior as we entered the 21st century. After years of debate, there appeared to be growing consensus that media do, indeed, play an important role in the socialization of our youth (although the nature of that role often remains at issue). The explosion of new communication media, the kinds and amounts of information they made available, the different forms that digital information can take, and emerging evidence that young people are often among the early adopters of new communication technologies seemed to have caught people’s attention in ways that even the TV revolution, some 50 years earlier, had not. Given the rate and nature of change in both media and media systems that society was experiencing,¹ an accurate description of how much of which media young people use, and under what conditions use occurs, seemed imperative to inform future research and policy.

The findings reported in *Kids & Media @ the New Millennium* (Roberts, et al., 1999), as well as in subsequent analyses of the data (Roberts & Foehr, 2004), then, represented a substantial step forward on several fronts:

- They were based on a large, representative sample of U.S. young people (2- to 18-year-olds);
- African American and Hispanic youths were over-sampled, enabling comparisons among racial and ethnic groups usually

precluded in prior, mostly smaller studies (see Brown, et al. 1990, for an exception);

- Questions pertained to almost all of the media typically used by U.S. youths at the end of the 20th century – TV, VCRs, video game consoles, radio, audio CD/tape players, movies, print media (newspapers, magazines, books), and computers (including use of games, Internet Web sites, e-mail, and chat rooms);

- Questions explored amount of exposure, kinds of content or activities engaged, and conditions of exposure, as well as various demographic and personal characteristics.

The body of information produced by a large, nationally representative sample provided an opportunity not only to describe young people's media use at the beginning of a new century, but also to test various earlier generalizations about media behavior using a current, nationally representative sample. And perhaps most important, it offered the means to describe young people's *overall* media behavior (as opposed to TV behavior, computer behavior, etc.). In other words, in addition to providing information about use of various individual media, the study enabled characterization of overall media behavior and total media budgets, for the first time enabling examination of the relative roles played by each of the various media available to U.S. youth.

Many of the findings that emerged from the 1999 study were simultaneously expected and unanticipated. We expected a substantial proportion of U.S. kids to have their own, personal media; we did not anticipate that more than half would have a TV in their bedroom (two-thirds of 8- to 18-year-olds). We expected to find a great deal of media use; we did not anticipate average daily media use among 8- to 18-year-olds to exceed six hours (nor did we anticipate that the use of two or more media simultaneously would push exposure to media content to nearly eight hours).² We expected that some children would be particularly heavy users of one or another medium; we did not anticipate that more than 20% of 8- to 18-year-olds would report in excess of five hours of daily TV viewing, nor that extremely heavy users of one medium would also be heavy users of most other media. We expected that TV would still be the dominant medium among young people; we did not anticipate that TV would account for over 40% of all media exposure (over 50% when videos and movies were folded in) even when including time spent with music, print media, video games, and computers, and we certainly did not anticipate that computer use would account for less than 5% of the average 8- to 18-year-old's media time.

We did not know what to expect about such issues as media multitasking or the phenomenon of young people spending a

great deal of time using media content tailored especially for them and often in the absence of any adult presence, but were fascinated to discover that children used two or more media simultaneously at least 16% of their media time, and that media use in the presence of parents was more the exception than the rule. We were also interested to see that some of the negative relationships between the amount of TV viewing and various measures of children's happiness or contentment reported in early studies (e.g., Himmelweit, Oppenheim & Vince, 1958; Johnstone, 1974; Maccoby, 1954; Schramm, Lyle & Parker, 1961) continued to hold at the end of the century. That is, kids who spent more time watching TV still tended to report being less contented. In short, while many findings from the 1999 study supported earlier research, many raised new questions, new issues, and new concerns.

New questions and concerns, then, form one reason for updating the 1999 study. Another is that it makes sense – indeed it is viewed as “good science” – to replicate earlier research. As long as we must depend on drawing inferences from samples (even large, nationally representative samples) rather than directly characterizing full populations, and as long as our measures of any kind of human behavior are error-prone (How many minutes of radio were you exposed to yesterday? Are you certain?), there can't be a definitive study of young people's media behavior. We must live with error, estimates, and inferences. Confidence in social science findings, then, depends not only on how well any single study is executed, but also on the degree to which its findings are replicated. When different studies, using different samples and sometimes different questions, produce similar patterns of results, confidence in our knowledge increases. Thus, we envision the current research as confirming the results of earlier work at the same time that it extends our knowledge about changes in young people's media behavior.

The current study

Many of the same issues that led to the 1999 study, in combination with questions and concerns raised by the findings reviewed above, motivated this new research. As far as we can see, there has been no slowing of the “changing media environment,” and change raises new questions. Decreases in the prices of personal computers, growing use of high-speed Internet connections, developments in size and definition of TV screens, rapid diffusion of DVD players, the introduction of affordable digital TV recorders (DVRs), the emergence of digital music recorders and music file-sharing – all such developments continue to reshape the media environment...and thus, we believe, to reshape children's

media behavior. For example, at about the time the 1999 study was completed, American kids were just beginning to use instant messaging, a computer activity not even considered in our original questionnaire. But as we will see, in just five years instant messaging has emerged to become one of the most popular of all computer activities among kids, changing the way they distribute time when engaged in computer activities.

Clearly, such ongoing changes in the media environment raise new and important questions. For example, are today's kids devoting more time to media or are newer media simply displacing older ones? Do the new media affect how children prefer to get information (e.g., passively or interactively)? Are there different kinds of media users (e.g., vid-kids, gamers, computer geeks), and if so, what are their different characteristics? Are young people really becoming "media multitaskers," and if so, how does this affect the overall patterns of media behavior?

In short, the pace of change in almost all communication media continues to call "old" information into question (even, it seems, redefining our conception of "old") and to raise new issues. For a generation now documented as devoting more than a quarter of each day to media (Roberts, et al., 1999), it is vitally important to update our information and address the new questions.

The following pages present a brief introduction to the survey methodology (Chapter 2). The following chapters turn to presentation of the results. Chapter 3 describes the media

environment inhabited by today's young people in the U.S. Chapter 4 describes young people's exposure to different individual media. Here we look at noninteractive screen media (i.e., TV, videotapes, movies), print media (newspapers, magazines, books), audio media (radio, CDs/tapes, MP3s), and interactive media (computers, video games), in that order. Chapter 5 merges the data from individual media to look at young people's overall media budgets. Chapter 6 looks at the same data from several different perspectives, including various psychological and social characteristics of young viewers (e.g., school grades, levels of contentedness, heavy or light media use) and characteristics of the homes within which they live (e.g., degree of TV orientation, presence of media rules). Finally, Chapter 7 presents a brief summary of our findings.

Each of the chapters focuses primarily on the results for 2004. However, where interesting and appropriate, we also present comparisons with results from the 1999 study. More often than not, such "over-time" comparisons are presented in sidebars to the primary discussion.

Tables within the text present highlights of the data, and more complete results are included in appendices that correspond with each chapter, which can be found at the back of this report. These appendices often include the over-time comparisons as well, along with detailed results by age, gender, race, and socioeconomic group.