March 2007

Reducing Children's TV Time to Reduce the Risk of Childhood Overweight: The Children's Media Use Study

Highlights Report

Prepared for

Centers for Disease Control and Prevention Nutrition and Physical Activity Communication Team (NuPAC) 1600 Clifton Road Atlanta, GA 30333

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CDC and the Association for Prevention Teaching and Research (ATPR)

[Cooperative Agreement No. TS-8046]

RTI Project Number 8680.006



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^{*}RTI International is a trade name of Research Triangle Institute.

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ACKNOWLEDGMENTS

This study was conceived and funded by the Nutrition and Physical Activity Communication team in CDC's Division of Nutrition and Physical Activity. The study was conducted by RTI International, James Hersey, Ph.D., Principal Investigator (P.I.), and the Annenberg Public Policy Center of the University of Pennsylvania, Amy Jordan, Ph.D., Co-P.I., under a cooperative agreement with the Association for Prevention Teaching and Research (Cooperative Agreement No. TS-8046). The Technical Advisor for this study was Judith McDivitt, Ph.D.

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CHAPTER 1 STUDY BACKGROUND, OBJECTIVES, AND APPROACH

1.1 Study Background

Although there is a long history of public concern over the impact of mass media on children's psychosocial development (Center on Media and Child Health 2005; Lowery and DeFleur 1995), it is only in the past two decades that researchers have begun to uncover the link between media use and the physical health of youths. Data from large-scale national surveys conducted during the 1980s and 1990s reveal a correlation between the prevalence of overweight and the number of hours youths spend watching TV (Andersen et al. 1998; Dietz and Gortmaker 1985). More importantly, subsequent longitudinal studies (Gortmaker et al. 1996) and field experiments (Robinson1999) have indicated a potential causal connection between obesity/overweight and heavy TV use.

The parallel increase in the amount of media available to children and the prevalence of overweight in America's children is probably not coincidental. A national survey by the Annenberg Public Policy Center (APPC) (based on 1,235 parents of 2- to 17-year-olds and 416 children and adolescents aged 8- to 16.) indicates that today's homes are saturated with media (Woodard and Gridina, 2000). The majority of the families in these studies have three TVs, access to cable or satellite channels, at least one VCR, a videogame system, and a computer with online access. Children's bedrooms themselves have become multimedia centers: more than half (57 %) of 8- to 16-year-olds have a TV in their bedroom; 39 % have videogame equipment; 30 % have a VCR; 20 % have a computer; and 11 % have access to the Internet.

Although 39 percent of parents in the APPC national survey said that they have limits for how much time their child can spend watching TV, significantly more said they had rules about completing chores or homework before watching (68 %) and the kinds of programs their child can watch (50 %). Indeed, parents are much more likely to say that they are concerned about what their child watches on TV (64 %) than they are to express concern over how much time their child spends watching TV (21 %).

It is perhaps not surprising—given easy access and a general lack of parental concern about the amount of TV use—that the average child on an average day will spend 4.5 hours looking at a screen of some type (APPC 2000). Although the amount of time children spend watching TV has remained fairly constant over the past decade, children have supplemented this time with additional sedentary media activity, including time spent online and engaged in videogame play.

Similarly, a 2003 national survey of children, sponsored by the Kaiser Family Foundation, indicates that the average child between the ages of 8 and 18 watches 3 hours of TV a day, and the averages are even higher among younger age groups (8- to 14-year-olds watched an average of 3 hours and 16 minutes). Total in-home screen time rises to 4 hours and 15 minutes when videos and DVDs are included. The addition of computers and videogames raises total exposure to more than 6 hours (Roberts, Foehr, and Rideout 2005).

Gortmaker et al. (1996) point out that the factors associated with the substantial hours of TV viewing are not well understood, and, in their analysis of a nationally representative sample of 6- to 11-year-olds with a 4-year follow-up, they write that "very little predicts TV viewing in this sample" (p. 360). Other studies, however, have linked high levels of media use to low socioeconomic status, heavy parental media use, and ethnic minority status (Gorley, Marshall, and Biddle 2004; Roberts et al. 1999; Woodard and Gridina 2000).

At the same time that media have proliferated in children's lives, public health experts and organizations, including the Centers for Disease Control and Prevention (CDC), have raised alarms over the steady increase in the prevalence of child overweight and obesity (Institute of Medicine 2005). Results from the 1999 to 2002 National Health and Nutrition Examination Survey (NHANES) indicate that 16 percent of children and adolescents aged 6 to 19 years are overweight. This figure represents a 45 percent increase from the overweight estimates of 11 percent obtained from NHANES III (1988 to 1994) (Hedley et al. 2004). Being overweight during childhood has been shown to be more than a cosmetic issue. Mossberg (1989), for example, followed 500 overweight children over the course of 40 years at 10-year intervals and found that, in addition to obesity in the family, the degree of overweight in puberty was the most important predictor of adulthood body weight. These studies found an association between overweight in childhood and adult morbidity and mortality.

The problem of obesity has hit children in racial and ethnic minority groups especially hard. Strauss and Pollack (2001), examining data from the National Longitudinal Survey of Youth (1986 to 1998), found that the prevalence of overweight increased fastest among these groups. By 1998, 21.5 percent of African American, 21.8 percent of nonwhite Hispanic, and 12.3 percent of white children were deemed to be overweight. Adolescent females, perhaps because they are less likely to participate in sports teams or physical play, are also at greater risk for overweight than are adolescent males and appear to be more negatively affected by heavy TV use (Anderson et al. 1998).

The association between TV use and overweight in children may result from (1) displacement of more active pursuits and/or decreased energy expenditure and (2) increased caloric intake resulting from greater snacking opportunities and poorer food choices. Several authors, including Crespo et al. (2001), Gortmaker et al. (1996), and Robinson (1999) posit that TV use may displace physical activity but also increase caloric intake during viewing and increase interest in purchasing the high-fat, high-sugar, nutritionally empty products children see advertised. Surveys that track children's eating habits and nutritional choices suggest that TV influences both how much and what children eat (Crespo et al. 2001; Signorelli and Staples 1997). More research is needed to explain the causal mechanism between TV use and overweight. Moreover, we do not know the extent to which use of non-TV media, such as videogames, might have similar consequences. For example, Signorelli and Staples (1997) argue that children not only are sedentary while viewing but are tempted to overeat because they see food advertisements and have free hands to engage in snacking behaviors.

Nonetheless, there is mounting experimental evidence that reducing TV use can have a positive impact on children's weight. Researchers at Stanford University designed an intervention that targeted media use alone, without substituting alternative behaviors such as physical activity. In the intervention schools, third- and fourth-graders were exposed to a media

literacy curriculum that emphasized choice of TV programs to watch, and were encouraged to limit their TV, videotape, and videogame use. The children in this intervention group had statistically significant relative decreases in body mass index (BMI) when compared with matched children in a control condition (Robinson, 1999). Similarly, Robinson et al. (2003) found that, among low-income 8–10 year old African American girls, an after-school dance class coupled with family intervention to reduce TV use, resulted in a lowering of BMI among the intervention group compared with a control group. A study in Massachusetts of a school-based intervention with children aged 6-8 that included a TV reduction component found a significant reduction in obesity among girls, though not among boys, and found that this reduction was mediated by changes in TV viewing (Gortmaker et al., 1999).

These findings have influenced the American Academy of Pediatrics to recommend "no more than 1 to 2 hours of quality TV and videos a day for older children and no screen time for children under the age of 2" (American Academy of Pediatrics 2005). The U.S. Department of Health and Human Services (US DHHS) has established a national objective for 2010 to "increase the proportion of adolescents who view television 2 or fewer hours on a school day" (US DHHS 2000). The quantitative target for this objective is to increase this proportion of adolescents who watch 2 or fewer hours per school day to 75 percent (compared to 57 % in 1999 in the Youth Risk Behavior Surveillance System).

1.2 Study Objectives

A primary objective of this study, learning how to persuade families to adopt and adhere to the recommendation to limit children's TV viewing to 2 or fewer hours per day, is a challenge. Although parents have come to understand and express concern over the effect media use has on academic achievement as well as its social and behavioral consequences, such as aggressive behavior, parents may be less aware of the link between their child's weight and his/her media use. With the problem of childhood obesity escalating and definitive links between childhood obesity and media use by children firmly established, it is critical for researchers to begin to understand the factors that shape the amount of time children spend in front of the TV and whether the choices they make with other media contribute to or ameliorate the problems of childhood obesity.

This study explored the individual and familial forces, and parents' perceptions of community forces that shape children's television viewing with the goal of understanding the barriers and opportunities for reducing TV time to 2 hours per day or less. A diverse sample of 180 parents and their 6- to 13-year-old children participated in open-ended, small group discussions in 2003 and 2004. Participants described their typical media use patterns, their rules and strategies for limiting TV viewing, and their perspectives on the impact that reducing TV viewing would have on their children and families. In this Highlights Report, we describe points of confusion and concern expressed by parents with regard to the recommendation, along with the barriers to change that families identified. We then suggest several promising strategies to reduce TV time and media time, strategies that might ultimately reduce the risk of childhood overweight.

The study was designed to help (1) understand the forces that influence children of both sexes and of various ages and racial/ethnic backgrounds to use TV and other media involving

sedentary behavior; (2) explore the challenges of and opportunities for limiting children's television viewing to 2 hours per day; and (3) develop strategies for reducing TV use that might work for families. By accomplishing these goals, we hoped to contribute to the achieving the national objective that 75 percent of adolescents will watch 2 or fewer hours of TV per school day (US DHHS 2000, Objective 22-11).

1.3 Study Methods and Approach

1.3.1 Site Selection

Data were collected between October 2003 and March 2004 in three locations: Philadelphia, PA, Chicago, IL, and Richmond, VA. These locations were chosen to capture distinct population demographics (race/ethnicity, urban/suburban area, and socioeconomic structure).

Participants in Philadelphia were recruited through elementary and middle schools and community-based organizations. Participants in Chicago and Richmond were recruited through focus group facilities (with the stipulation that families could not have participated in any other focus group during the past 12 months). Recruitment materials indicated that children and their parents would participate in a small group discussion about how children spend their out-of-school time, particularly their television viewing habits. Families were offered an honorarium for their participation in the project. The study, its protocol, and its consent/assent forms were approved by the Institutional Review Boards of the University of Pennsylvania and RTI International (Federalwide Assurance Number 3331, project 8680).

1.3.2 Sample Selection

The study recruited pairs of a parent and his/her child (aged 6 to 7, 9 to 10, and 12 to 13) to participate in the study. In all, 180 parents and their children participated in this research. To compare differences in ages, we included children in the research if they were aged 6 to 7, 9 to 10, or 12 to 13. These groupings were chosen to reflect ages that shape children's interests and abilities, as well as their decision-making autonomy. Roughly one third of the children fell into each age category. More than three quarters of the parent participants were mothers (77 %), less than one-quarter were fathers (21.1 %), and the remainder were another caregiver, such as a grandparent. The respondents were approximately evenly divided between boys and girls. In Chicago and Richmond, the groups were constructed to be homogeneous in terms of race/ethnicity (African American, white, or Hispanic), although groups were mixed in terms of sex. The overall distribution of the sample is shown in *Tables 1 and 2*. The socioeconomic circumstances of the families varied considerably. Although the study did not entail a random sample, the families were similar to national samples in their access to media and their patterns of media use (see Section 2.1).

Table 1. Structure of Discussion Groups by Age Group

	Chicago	Richmond	Philadelphia	Total	
6 to 7 years					
Parents	8 groups (n = 27)	4 groups (n = 15)	6 groups (n = 19)	18 groups $(n = 61)$	
Children	27 interviews	15 interviews	19 interviews	61 interviews	
9 to 10 years					
Parents	8 groups $(n = 28)$	4 groups $(n = 15)$	6 groups (n = 17)	18 groups $(n = 60)$	
Children	8 groups $(n = 28)$	28) 4 groups (n = 15) 6 groups (n = 17)		18 groups $(n = 60)$	
12 to 13 years					
Parents	8 groups $(n = 25)$	4 groups $(n = 15)$	8 groups (n = 19)	20 groups (n = 59)	
Children	8 groups $(n = 25)$	4 groups $(n = 15)$	8 groups (n = 19)	20 groups (n = 59)	
Total					
Parents	24 groups (n = 80)	12 groups (n = 45)	20 groups (n = 55)	56 groups (n = 180)	
Children	16 groups and 27 interviews $(n = 80)$	8 groups and 15 interviews (n = 45)	14 groups and 19 interviews (n = 55)	38 groups and 61 interviews (n = 180)	

1.3.3 Data Collection Procedures

Each parent/child pair came to an identified location within their community, such as the child's school, the university, or a focus group center. Each parent was asked to fill out a household media Inventory (HMI). The HMI asked about the number and location of media (i.e., television, computers, cable and Internet access, and videogame consoles) throughout the home. Parents and children also filled out background forms (BFs), which gathered socioeconomic data and information about behavior. BF questions on sedentary use of media assessed children's daily and weekly time with television, computers, and videogames; parents were asked about their child's time with the same media and about their own television use.

Table 2. Race/Ethnicity and Sex of Children by Age Group

	Male	Female	Total
6 to 7 years			
African American	7	16	23
White (non-Hispanic)	10	10	20
Hispanic	11	5	16
Other	1	1	2
Subtotal	29	32	61
9 to 10 years			
African American	10	7	17
White (non-Hispanic)	10	13	23
Hispanic	7	9	16
Other	3	1	4
Subtotal	30	30	60
12 to 13 years			
African American	10	12	22
White (non-Hispanic)	9	12	21
Hispanic	11	4	15
Other	0	1	1
Subtotal	30	29	59
Total			
African American	27	35	62
White (non-Hispanic)	29	35	64
Hispanic	29	18	47
Other	4	3	7
Total	89	91	180

Next, parents and children engaged in separate child or adult open-ended small group interviews led by trained moderators. Discussions were held with groups of three or four parents while, in another room, discussions were conducted with groups of three or four 9- to 10-year-olds or 12-to 13-year-olds. Children aged 6 to 7 were interviewed individually. Because we learned in the pilot test that it was hard for young children to stay focused on a discussion or provide their individual responses rather than repeat each other's answers, we conducted one-on-one, open-ended interviews with the 6- to 7-year-olds. In both the children's groups and the parents' groups, participants were asked about the child's typical day, the child's media use on weekdays and weekends, rules about television and other media, the benefits and costs of television viewing, reactions to a 2-hour per day limit on TV time, and strategies for reducing TV time.

Each child also was asked to draw her or her favorite activity. Parent group discussions lasted an average of 90 minutes, children's group interviews lasted approximately 60 minutes, and one-on-one interviews lasted 30 minutes. The children were supervised by an adult in a room with play activities during the time they were not involved in the interviews.

Interviews and discussions with children were conducted in English. Hispanic parents were offered the choice of participating in a focus group discussion that was conducted in English or Spanish. Approximately one-third of the discussions with Hispanic parents were held in Spanish, and transcripts of these discussions were translated into English for analysis.

1.3.4 Data Analysis

Data from the HMIs and BFs were entered into SPSS software (version 11.5) and analyzed to provide an overview of the media use patterns of this sample and to allow for comparisons both within the sample and to media use patterns of national samples of children. Transcripts were generated from interview groups and one-on-one interviews. Whenever possible, speakers were identified by the transcriber and tagged for age, sex, race/ethnicity, and interview location (all names were replaced with ID numbers). Transcripts were thematically coded using the qualitative software program ATLAS.ti 5.0. Themes were developed on the basis of input from the investigators who moderated and observed the parents' and children's interviews.ATLAS software was used to sort quotations (demarcated by numeric IDs) by age (6 to 7, 9 to 10, 12 to 13), race (white, African American, English-speaking Hispanic, Spanish-speaking Hispanic, and other), and sex (boy, girl; mother, father). After demographic sorts were run, analysts generated MS Word documents summarizing themes and MS Excel spreadsheets summarizing numeric trends.

CHAPTER 2 HIGHLIGHTS OF STUDY FINDINGS

2.1 Media Availability and Use

2.1.1 Media in the Home

For most children in this sample, media are ubiquitous. The HMIs reveal that the average family in this study had four working television sets in the home. Most children (64 %) had a bedroom TV, and a large proportion of the families in this sample (46 %) reported that they had a television set in an eating space such as a dining room or kitchen. The HMIs also reveal that the children in this sample lived not only in a multiple-TV environment but also in a multiple-media environment. Virtually all households (99 %) had a DVD or VCR; the vast majority had a videogame console (88 %) and a computer (85 %); and more than half had Internet access (56 %).

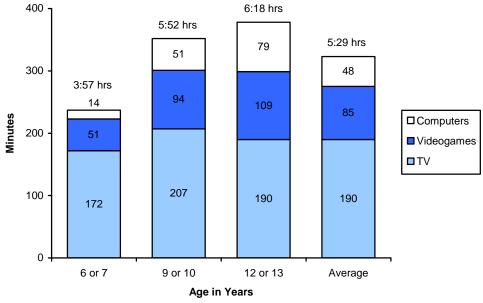
2.1.2 Children's Viewing Patterns

We assessed children's TV viewing from the BFs and discussions with parents and children. Parents described the children's day and the children's time with television throughout the course of an average day. Children provided this information by reporting on the television shows that they watched on the previous day. As has been reported by others (e.g., Robinson 1999), parents in this study indicated that their children watched less television than the children themselves reported (parent mean, 116 minutes; child mean, 189 minutes).

The study did not determine whether the children or the parents were more accurate reporters of the children's time with television. The children, especially younger children, had a widely varying sense of time, but they were general fairly confident in describing the specific shows they watched the prior day. In contrast, parents admitted that they found it difficult to keep track of children's time with media, and this was particularly the case with videogame use. In addition, during discussions parents asked the interviewers for clarification about what "counts" as television viewing. For example, while children may have included watching a videotaped movie with their father in their viewing estimates, the fathers may have classified that activity as time spent with their child. Moreover, several parents indicated that they considered weekdays (or school nights) and weekends (or nonschool nights) separately and that they had a better sense of some days than others

Children reported watching, on average, more than 3 hours of TV on the previous day; and only 30 percent of children watched less than 2 hours on the previous day. The amount of viewing increased by an hour or more when computers and videogames were included (see *Figure 1*).

Figure 1. Screen Time, by Age—Child Reports by Mean Hours and Minutes Spent "Yesterday"



Source: RTI/APPC 2004.

Highlights of the findings on media use included the following:

- Parents in this study reported that their children watched, on average, fewer than 2 hours per day in an average week; however, children themselves reported that they watched more than 3 hours per day.
- Videogame and computer use brought children's total daily "screen time" to nearly 5 and one half hours per day—a time that parallels national data trends (APPC 2000).
- Children's reports of their media use were higher than parents' reports. The levels of the differences were similar to those observed by Robinson (1999).

2.2 Beliefs and Attitudes about Media Use

2.2.1 Children's Attitudes

The majority of the children in the study had a strong affinity to media. Even children as young as age 6 could identify their favorite TV shows, and boys expressed strong affinity for videogames.

Favorite Activities

Children were asked to provide a drawing of their favorite thing to do when they were not in school. The most striking finding was that 57 percent of the children in our study identified in-

home screen media (TV, videogames, or computers) as a favorite activity (see *Table 3*). All age groups had a similar proportion (between 54 % and 60 %) across all age groups of children. By comparison, only about a quarter (27 %) of children featured sports or physical activities in their drawings.

Among boys, the most popular activity was videogames. Videogames were featured as a favorite activity by more than half (56 %) of boys; by comparison, TV was featured by less than a quarter (22 %) of boys. Videogames appealed to boys in a variety of ways. A particular appeal of videogames is the challenge of mastering new levels:

A 7-year-old boy drew himself with a PS-2 hooked up to a TV screen playing Mario Party 4 because "You get to pick Mario, Luigi, or anyone you want to be on your team. If you win, you go to another game." (7-year-old Hispanic boy)

Among girls, TV was featured more than twice as often as videogames (27 % vs. 13 %):

A 9-year-old girl drew a picture of herself watching a TV with the word "NICK" on the screen, while the girl said, "Yea! Nick!" and her mom came in "bringing cookies." (9-year-old White girl)

Among girls (in contrast to boys), computers were similar in popularity to videogames (each was featured in about 13% of the drawings). Younger girls often liked the cartoon features on the computer games. Older girls featured the appeal of talking to their friends through instant messaging.

Table 3. Percent of Children whose Drawings of "Favorite Activity When Not in School" Featured Various Elements

		Activities in the Home				Outside the Home		
•		Media Activities						
Group	N	TV	Video- games	Computer	Any Media	Nonmedia Inside Activities	Sports/ Physical Activity	General Outside
Age Group								
6 to 7								
%	56	18	36	7	54	13	20	21
9 to 10								
%	57	25	33	12	58	32	20	5
12 to 13								
%	48	33	31	17	60	19	44	19
Sex								
Female								
%	84	27	13	13	45	30	26	19
Male								
%	77	22	56	12	70	12	29	10
Race/Ethnicity African American								
%	53	20	25	11	49	25	23	17
White								
%	57	30	37	12	58	21	40	14
Hispanic								
%	41	34	44	12	73	17	17	12
Total								
%	161	25	34	12	57	21	27	15

NOTE: If a child's drawing featured more than one activity, each of these activities was coded. Thus, for each type of activity, the percentage represents all children whose drawing included that activity. As a result, total percentages equal more than 100.

2.2.2 Parent Attitudes

Parents described both positive and negative effects of TV and other media. One mother expressed her ambivalence this way:

I wish she'd watch less, but my double-edged sword is if she's watching less and she has no friends, I'd become the entertainment [laughter] or the entertainer. And I just feel like I'd, you know, you juggle a whole lot during the day and of course, but the time she's bored, I'm fixing dinner. So it's still a baby-sitter at this age. (White mother of a 12-year-old girl)

Parents reported features that they liked and disliked about TV, computers, and videogames. These likes and dislikes are shown below.

What Parents Liked

Keeping children safely occupied. About half of parents in our groups mentioned that they liked the fact that TV and media helped to keep their children safely occupied (particularly for younger children). For instance:

I've used it as an electronic babysitter sometimes. I need to get something done, and I know that I'll have at least a half hour if they're watching at the top of or the bottom of the hour. (White mother of a 6-year-old boy)

Yes, unfortunately, yes, it's helpful. It helps me by keeping her busy while I'm cooking or grocery shopping. It's helpful, but perhaps we take too much advantage of it. We depend too much on that distraction, and that's wrong. (Spanish-speaking Hispanic mother of a 9-year-old girl)

Because I work at night, so a lot of times in the day I'm asleep, so unless my husband is home or whatever, [my child] will play the Play Station or TV, and he won't be out in the street, or stuff like that. (African American mother of a 12-year-old boy)

Media help children learn new skills or information. About a third of parents mentioned that TV provided educational benefits for children:

Yeah, they have a lot of stuff on cable, like, as far as history, civil rights struggle, all stuff like that. You know, they might ask questions about, "Well, this is what Martin Luther King done." So, it can be very helpful. (African American mother of a 13-year-old boy)

Computers were often viewed favorably in terms of the educational content they may provide. Even videogames were viewed favorably in light of their positive impact on eye-hand coordination.

Media improve communication between parents and their children. About a quarter of parents mentioned that they liked watching TV together to share in a common activity or that TV provided interesting things for parents and children to talk about:

See, my son's the type you have to drag things out of him as far as what happened in school or, you know, what's going on. He never says anything. Now if we're watching a show or something and something comes up, you know, he may mention, oh, that happened, you know, the other day. So it kind of keeps me abreast of what's going on with that age group, you know. (African American mother of a 10-year-old boy)

Well, we share things with each other about the TV. And she'll come and say, "I'm going to tell you what just happened," even though it's right in the middle of something I'm watching... and we laugh. (African American mother of a 7-year-old girl)

Media help parents regulate their children's behavior. Parents mentioned that they liked the ability to use television as a reward for desired behavior, such as completing chores or

homework. In addition, in some families, parents used television as a tool to help children relax and ease the transition to bedtime:

It's really a very simple way to just get them to sit down and relax because, you know, my children are very active. [My son is] very active and to me, it's nice, it's very pleasant for me when he's sort of like fed, cleaned, you know, teeth are brushed, and he's going to just sit down for a while and watch TV. It's a calm, nice thing. Now, you know, I could do other things with him at that point. (White mother of a 12-year-old boy)

What Parents Disliked

Parents also expressed concerns about the possible negative effects of TV and videogames on children. There appeared to be three sets of concerns:

Opportunity cost. Parents commonly evaluated children's media use in terms of whether the children ought to be doing something else more valuable or useful. In other words, overuse of a medium might deprive a child of more beneficial experiences and social activities, but the media themselves were not considered innately harmful:

I don't see it affecting her, but I feel like she could be doing something more productive. (English-speaking Hispanic father of a 6-year-old girl)

But also—his creativity—he does not develop it because he just sits watching television. He does not look for other ways to entertain himself like reading or doing things or going outside. (Spanish-speaking Hispanic father of a 13-year-old boy)

Since boys are, especially when they are younger, more socially challenged than girls—it hurts them or it can hurt them... You can become a hermit just by playing these games all day. (White father of a 10-year-old boy)

Psychological effects of harmful content. A minority of parents also worried that the content of TV and in particular the violence of videogames might be a bad influence on their children:

Day by day the games become more violent.

It affects their psyche.

They [videogames] are very real... the blood gushes out... (Spanish-speaking Hispanic mothers of 9- to 10-year-old boys)

In addition, several parents objected to the commercialism of television:

One of the things that I do not like about television and one of the areas that I think affects them is consumerism. If there are some tennis shoes that are in fashion, they will see them there; if there is a shirt that is in fashion, they see it there; if there is a drink that is in... And they are the wrong messages, for example, my son now that he is wrestling says, "No, I have to drink Gatorade because they say it is better than water." Those type of things that in my opinion are harmful to them. (Spanish-speaking Hispanic father of a 12-year-old boy)

In addition to their concerns about potential consequences of media use, some parents had directly observed behaviors related to media use that they disliked:

So we had to stop them from watching, because it was really—we'd be talking to them, and they'd start talking in these funny voices, and you'll ask them something, "Can you pass me that?" and they'll make a funny noise. And I said, "See, that's it, no. You're not watching, no, because it's too much." They lose their identity in the TV. (African American mother of a 7-year-old girl)

Several parents mentioned that their children became moody or aggressive after using electronic media:

[My son] is a pill on the days that he watches TV. (White mother of a 6-year-old boy)

You know, so, um, he gets, um, zoned when he watches TV. Hypnotized. And he can't hear and he can't think, he can't do anything, so I cut it, turn off the TV. So you know it's not helpful, it's just something that he does to occupy his time. (African American mother of a 12-year-old boy)

Physical health consequences of long-term use. A few parents were concerned about the potential negative health consequences of media use on overweight.

I could just see him getting bigger watching TV, and he'd eat and go lay down and watch TV all day... I just feel that later he might gain a lot of weight by just laying down watching TV, because he'll eat and go lay down. So I tend, I really don't like him to watch it. I'd rather he did some activities or something besides that. (African American mother of a 12-year-old boy)

She would just watch it. She just sits there and eats. She'll just finish eating something and she'll get up to get something else. It's like, "You just ate a whole bag of chips. Why are you going to get more?" I mean, she just doesn't realize what she's doing and how much she's eating and how much she's watching. (White mother of a 9-year-old girl)

He does not have activities. He finishes a program and he goes to the refrigerator to look for something. And when that is over he goes to the refrigerator to see what else he can take to the living room to keep eating. And that is all day long. It affects his health. (Spanish-speaking Hispanic mother of a 12-year-old boy)

2.3 Reactions to Recommendations for Limiting TV to 2 Hours per Day

In the discussion groups, we used several approaches to elicit reactions to the recommendation that children should watch no more than 2 hours of television a day. First, we asked parents to discuss what they thought was the right amount of time for their children to spend watching TV. Next, we asked parents for their reactions to recommendations that children should watch no more than 2 hours or less (US DHHS 2000, Objective 22-11). We then asked parents and children for the reasons for limiting TV. Finally, we talked about barriers to limiting TV use.

2.3.1 Parent Perceptions of the Appropriate Amount of TV

When asked, two thirds of the parents in our study thought that the right amount of TV for their children to watch was less than 2 hours a day. Yet, while most parents said that children's television viewing on a school day should be limited to 2 hours or less, they were more generous on weekends, with the majority saying that they would allow 3 or more hours a day of viewing on weekends.

2.3.2 Reactions to the Recommendation of Limited TV

Responses to the recommendation that children watch no more than 2 hours of television a day were generally positive:

I think it's a good recommendation. It's just going to be a task, you know, to enforce it, but it's worth giving it a try. (Hispanic mother of a 9-year-old girl)

Well, it's in line with what we try to keep and maintain at home, but, I mean, I'd like to know where he came up with the 2 hours. (White mother of a 9-year-old boy)

I do not think it would be easy...but I believe it would be better because it would give us more time for our children. (Hispanic mother of a 10-year-old girl)

Although the majority of parents agreed in theory with 2 hours or less of TV per day, they had a number of concerns about their ability to put this into practice. They expressed concerns about their ability to get their own work done and keep their child safe and about the implication that they would have to reduce their own TV watching to avoid being hypocritical:

I'd like to say that I could limit [my son] to 2 hours a day. I think that would be perfect. But that would also mean that I would channel his interest in other areas and be with him throughout that time. And I can't always commit to that because of the other obligations that I have including cooking dinners, chores, and doing other things that kids require. So I think 2 hours is a perfect time. It doesn't always work. (African American mother of a 9-year-old boy)

The majority of parents also made a distinction between their ability to adhere to the recommendation during weekdays and on the weekend, when their children's viewing was

higher and the perceived need to limit it was lower. Many parents talked about how their children did not watch much during the week but watched a lot on the weekend.

Parents also asked the moderator (if he/she had not already clarified this) if the 2 hours a day included other media, such as DVDs they might rent or videogames they might play on the TV. Several parents said that they thought their child's alternative would be another electronic medium:

It depends on, does that mean videogames too? Because they'll be like [laughter], "Okay, I don't need to watch TV, Mom, just let me play." You know? (English-speaking Hispanic father of a 12-year-old boy)

2.3.3 Parent Understanding of Reasons for Limiting TV

We also asked parents what they thought were reasons that the experts might make a recommendation to limit TV viewing. Parents were most likely to say that the recommendation stems from concern over children's sedentary lifestyle and the growing problem of childhood obesity:

And I know that they're saying that they're eating more when they're sitting and sedentary, so, although mine don't, but I know that they do. (White mother of a 9-year-old girl)

I have a 25-year-old nephew who's obese because he was allowed unlimited access to the TV. (White mother of a 9-year-old girl)

Parents who listed the concern over sedentary lifestyle/childhood obesity as a reason to limit media use were not different in age or race/ethnicity from other parents. Parents of boys, however, were more likely than parents of girls to say that the recommendation is based on concern over overweight/physical inactivity.

Parents also frequently cited concern over children's cognitive development as a reason why health authorities might recommend limits on TV viewing. Interestingly, while parents of boys were more likely to list concern over the sedentary nature of TV viewing, parents of girls were more likely to list concern over how it might affect their daughter's school performance. Parents of 9- to 10-year-olds were the most likely to talk about TV and school performance, and, as the following quote below illustrates, the concern was not limited to parents of girls. This woman, in addition to describing concern over her son's weight, echoed the sentiment of other parents of 9- to 10-year-olds:

I mean, yeah, the education part of it because, well, I mean, when they're younger, I mean, I'm not saying their schoolwork was easier but they had better grade averages before. And now [my son's] below average, so I think... It has an effect on him and I think it comes from the parent too, you know, if I go to work and I come home and use the excuse that I'm too tired or whatever and I don't take more time out with him. So I think

if I monitor that television watching or videogame playing and spend more time doing that then it would help. (English-speaking Hispanic mother of a 9-year-old boy)

The third most commonly cited belief about the reasoning behind the recommendation was concern over content. This issue was more often discussed by African American parents, parents of older children, and parents of boys. These parents described mainly the deleterious effects of viewing sex and violence:

That's how kids today, you know, they're learning how to do so much evil, you know, because there's a whole lot of evil on TV, too, you know, and everything people make, you know, has got killing in it, you know, or you got sex in it, you know? So I think that that might be the reason why he said 2-hour limit, you know? ... So that they won't hey, just sit there and that's the only thing that turns them on is what's on TV, you know? (African American mother of a 12-year-old girl)

2.3.4 Children's Perceptions of Reasons for Limiting TV

We also asked children what they thought about a 2-hour limit on TV time and what they thought were the reasons that parents might want to limit the amount of TV they watched. As might be expected, more children than parents said that 2 hours a day was too little. The 9- to 10-year-olds tended to be more fervent in arguing against it:

I'd go insane. [Moderator: "So what would you ...?"] Put up a big protest. (9-year-old white boy)

Boys were primarily concerned about the effects of limiting TV on their videogame playing:

When you say that, do you include like watching TV and videogames too? 'Cause most videogames you gotta hook up to the TV. (9- to 10-year-old mixed-race boy)

The 6- to 7-year-old children were more compliant:

I've been on a train with my mother, and I told her, "Mommy, I'll do anything for you." (6-year-old Hispanic girl)

It was interesting that even 6- to 7-year-old children could articulate the reasons for limiting TV. The most salient to the children was the impact of television on their cognitive development. They talked about the potential effect of TV on their brains, on their homework, and on their school performance:

Because she wants me to learn, learn the hard way, not just by watching TV. Not that she's being mean, but she wants me to learn by hard work and concentration. (6-year-old mixed-race boy)

Because I think they believe the thing is, you watch too much TV, your brain turns into mush—your brain turns to mush, and then we have to spend money getting you a new brain. (9-year-old African American boy)

Children could also cite reasons associated with their behavior. One group of 9- to 10-year-old children listed the following reasons why parents might want to limit the amount of time children spend watching TV; these comments reflect the reasons given by many children:

They get dumb.

They get in trouble with school.

They don't get fun to play with.

They start swearing too much.

2.4 Current Rules for Limiting Media Use

Parents and children were asked what rules or practices they had about TV use. Responses were analyzed by age, sex, and ethnicity. In general, both parents and children were specifically asked if they had any rules about media time or content, but parents were much more descriptive and tended to spontaneously elaborate on their media practices. Hence, much of the analysis here focuses on the perceptions of parents.

Nearly all the parents in our groups reported practices or rules to restrict their children's television viewing. These practices fall under four broad categories: content restriction or monitoring, activity or behavior contingency, duration, and availability.

2.4.1 Rules about Content

Most parents in our study reported rules that restricted the content of TV that they would allow their children. Parents were often concerned about exposure to sexual content, violence, or foul language.

The nature of these rules ranged from limiting access to specific shows or channels, to allowing only certain types of programs (namely, educational), to allowing "no talk shows" or only shows that depicted characters of the same age as the child. Other rules included not allowing a child to touch the remote control and requiring the child to ask permission before watching a particular show. A small number of parents (less than 10 %) controlled content with practices that limited access to TV, such as not putting a TV in a child's bedroom, not installing cable TV, or using a V-chip to limit the channels a child could watch.

Even young children could explain the practices their families had about content. Interviews with African American 6- to 7-year-olds produced reports of the following practices:

No grown-up shows.

No nasty talk.

No swearing on it.

2.4.2 Rules regarding Homework and Chores

About half the parents reported that they allowed TV only if certain activities were completed. About a third of these parents reported that their child must finish homework before watching television. Parents generally had the attitude that as long as their children's homework was complete, they could and should be allowed to watch TV or play with other media. A handful said that their children could watch television provided that all their chores, such as cleaning their room and doing their homework, were complete. Children generally accepted these practices or rules as a part of their daily routine.

2.4.3 Practices Limiting the Duration of TV Viewing

Almost half of parents described rules limiting media time, but at least half of these appeared to be understood family practices rather than clearly articulated rules such as only 2 hours of TV. These family practices were often dependent on a parent's sense that his or her child had watched too much television.

Behavioral Monitoring

About a quarter of parents reported that they knew when their child had watched too much TV and it was time to shut the TV off:

I guess when you, you know, you look at the clock and you're like, "Gosh, it's been an hour and they've been sitting there the whole hour. Isn't there anything else, you know, that they could...," you know, I'll say, "Is your room clean? Are your chores done?" And then if everything's, "Yeah, yeah, yeah," then its like, "Okay, well, that's enough." You know, there's, you know, "The TV's been on long enough." I guess I mean, for me after an hour it's like, if I'm in the kitchen and I can hear it, you know, it just gets on my nerves. [Laughter] I'm like, "Okay, that's enough, you know, go outside, get out and do something." (White mother of a 13-year-old boy)

Some parents said they allowed their child to watch some TV and after a certain time or number of shows, parents would tell the children to take a break and engage in another activity. The reasoning behind this strategy stems from the parents' desire to prevent kids from zoning out before it's too late, to distract the child with another activity, and reduce the child's desire to watch more television—in other words, to prevent TV from becoming a default activity:

It's not like any concrete rules, um, if he's not listening or in tune to what I'm saying, the TV goes off, 'cause I see he's in a zone with the TV, and then he'll, um, he'll come back to earth (laughter), and he'll do what he's supposed to do. (African American mother of a 13-year-old boy)

She gets very unhappy if I turn it off after a period of time and she doesn't know what to do with herself. I call that TV brain. So I stop it after a certain period of time when I notice that she's zoning out. (White mother of a 12-year-old girl)

Clear Rules about the Duration of TV Viewing

Only about a quarter of families reported clear rules about the duration of TV viewing. The most common practice with younger children involved not allowing TV viewing past a certain time of day. Among parents of 9- to 10-year-old children, the most common practice was not allowing TV viewing during weekdays. Among the parents of 12- to 13-year-olds, the most common practice to limit TV use was to establish a specific amount of allowable TV use. In most instances where rules existed about the duration of TV viewing, the limits were less than 2 hours. However, only a minority of families had these types of rules.

Clear practices to limit the duration of TV viewing are slightly more common among younger children than older children and among white and Hispanic parents than among African American parents. There were no appreciable differences by sex.

Another challenge is that rules about the duration of TV viewing were generally relaxed on weekends. And many parents think that their children have a right to relax on the weekend.

It would not be good to set a time...I believe the weekend is for them to do as they please. (Spanish-speaking Hispanic mother of 6- to 7-year-old boy)

Go ahead. Do your thing. You wanna sit with the computer, play games, and watch TV all day that's all right, so long as you spend the other 4 days, the other 5 days without it. (African American parent of 9- to 10-year-old girl)

2.5 Barriers to Reducing TV Time

The next portion of our discussion explored barriers to reducing children's TV time. It was apparent that in order to get children to watch less TV, parents need to support this reduction. This study identified a number of barriers to limiting TV use by parents.

2.5.1 Failure to Recognize a Problem

In general, the parents did not have a problem with the amount of TV their child watched. They commented that they would become concerned if their child started having problems in school or had behavioral problems. Parents noted:

As long as he's doing OK in school and he can keep up his grades, he can keep his TV. (Hispanic mother of a 12-year-old boy)

They've always done homework in front of the TV or with the stereos on, and they get good grades so how can I tell them it's not good if they're getting As and Bs? (Mother of a 9-year-old)

But if a note arrives from school that he misbehaved or whatever, then he is punished the next day... The next day he does not watch television. (Spanish-speaking Hispanic mother of a 7-year-old boy)

As long as he handles his responsibilities and gets done what he needs to get done, everything is okay. (Mother of a 9-year-old boy)

While parents recognized, in principle, the relationship between TV and overweight, they did not see the risk as applying to their own children. For instance, one mother said:

A lot of kids are overweight for they are couch potatoes. I feel bad for them, because they've got weight they can't take off. But not my kids. (Hispanic mother of a 12-year-old boy)

2.5.2 Reliance on TV as a Babysitter and Concern about Becoming an Entertainer

Parents also indicated reluctance to give up the use of TV as a babysitter to keep their children entertained as the parents did housework, cooked, or found time for themselves. For instance, several mothers commented:

Oh, it's just a phenomenal babysitter. If everybody in the house needs to be doing things, it's just fabulous. (White mother of a 9-year-old girl)

No TV? How would I cook? (African American mother of a 7-year-old girl)

Other parents expressed concerns about needing to become an entertainer if they limited TV.

I can't entertain him all day. (African American mother of a 9-year-old boy)

If she watches less, I become the entertainer. And I'm cooking dinner. (White mother of a 12-year-old girl)

Ironically, parents may perceive a bigger barrier in this area than may actually be the case. When parents were asked what they would do as an alternative to TV, parents described themselves as needing to be actively involved with their children, while the children typically described alternative activities in which they entertained themselves.

2.5.3 Hassle and Conflict

Other parents expressed concern that limiting TV would create additional hassles in their home; this was more often the case when there were several children. For instance, one mother explained:

I would give them the cartoons to stop the commotion. I would prefer to see them play, but sometimes I just want to sit and look [at TV]. (African American mother of a 7-year-old boy)

2.5.4 Reluctance to Reduce Their Own TV Use

Parents who enjoyed watching television themselves realized that to cut down on their children's TV time, they would need to reduce their own use. Often they were reluctant to make that change. One mother said:

Well, I think my husband and I would really have to get out of the comfort zone of sitting down and watching TV as well. (Hispanic mother of a 12-year-old girl)

More detail about barriers to changing TV use is provided in the next section, where we discuss specific changes that a family might make.

2.6 Reactions and Barriers to Potential Changes

To more thoroughly explore the barriers and possible incentives to changes, we asked parents to discuss four specific strategies that, if implemented, would have the result of reducing children's TV use. By doing this, we sought to understand family reactions to more incremental change strategies. We explored (1) no background TV, (2) no TV during mealtimes, (3) no TV in children's bedrooms, and (4) no afternoon TV. We selected the afternoon because it seemed to be the time of day during which TV viewing is most prevalent.

2.6.1 Parent Reactions to Suggestions for No Background TV

In general, parents seemed agreeable to the strategy of removing background TV. Most agreed that it was a good strategy and that it would be easy to implement. Of the four suggested strategies, this was the one that parents generally felt would be easiest to implement. Some even mentioned that they had already tried to reduce background TV in their homes by turning off the TV when no one was watching.

Yet, even parents who agreed that it was a good idea to turn off background TV noted that enforcement of this rule would require them to be more active in turning off the TV. Moreover, a minority of parents (nearly a quarter of the parents who made comments about this suggested change) were resistant to this strategy, suggesting that they were the "culprits" because they liked the background noise themselves. Interestingly, there seemed to be some guilt associated with the responses from these parents. It may be that they realized that, although it would be good for their child, it would be an unlikely strategy for them to implement:

I think I leave the television on to avoid the noise with [my daughter] and my younger son because they are always really loud and I can't take a lot of noise. (African American mother of a 7-year-old girl)

I like having the background noise. Could we do it? Sure [laughter], I would probably be the one to object more so than anybody else. (White mother of a 12-year-old girl)

2.6.2 Parent Reactions to No Mealtime TV

For many parents, no TV during mealtime seemed to be a good strategy. Some parents mentioned that watching TV while eating meals did not occur in their household. Interestingly, however, a lot of these parents were quick to distinguish snacks from meals, noting that they did eat snacks while watching TV. Some parents also mentioned that occasionally they are pizza while watching TV and perceived this activity as a treat for the whole family.

On the other hand, a minority of parents (perhaps 10 % of the total sample, but 30 % of respondents who currently had TV on during mealtime), had negative reactions to this suggestion. Of the parents who commented that they had the TV on during mealtime, nearly twice as many expressed a favorable reaction to the change as those who expressed a negative reaction. Negative reactions to eliminating TV during mealtime were nearly twice as common among parents of 6- to 7-year-olds than among parents of older children.

The barriers to change among these parents stemmed from the perceived benefits that derived from the TV's ability to distract children, resulting in less bickering among family members during mealtimes. Some parents reported that mealtimes were a time in which the family could watch the news together, allowing children to learn and ask questions about current events, and that watching TV is a stimulating and enjoyable activity:

It's possible, but it's stimulating for us to eat and see the events—what's going on—like the news or Jeopardy. (Mother of a 9-year-old boy)

It's a great idea, but the bickering and everyone wants to talk, and I just need that distraction. (Mother of a 7-year-old)

2.6.3 Parent Reactions to No TV in Children's Bedroom

In principle, parents agreed that the strategy of not having a TV in a child's bedroom would be a good way to reduce the overall amount of TV viewing. At the same time, however, many parents did not think it was an appropriate or necessary strategy for their own child. Only a third of the children in the sample did not have a TV in their bedroom. Removing a TV from a child's bedroom was perceived as particularly difficult. Indeed, there were as many negative responses to the idea of no TV in a child's bedroom as there were positive ones. Many of the negative responses dealt with the difficulty of removing a TV—one mother described this as "World War III." But parents were also concerned about the behavior that may have prompted them to put a TV in a child's bedroom in the first place. One mother commented:

No TV in my kid's bedrooms. That would be punishing me. They would never agree on what to watch. They would forever be bickering. (White mother of a 10-year-old boy)

The parents' perception was that it would be easier not to put a TV in a bedroom than to take it out. For instance, one mother explained:

Thankfully she doesn't have a [TV with a videogame] system in her room as she would be completely glued to it. You could drive a car in the room and she wouldn't notice. (White mother of a 13-year-old girl)

2.6.4 Parent Reactions to No Afternoon TV

Many parents seemed to agree with the strategy of having no afternoon TV, and many said that their child did not watch a lot of TV in the afternoon anyway. The primary reason cited by most parents was that children were doing homework then. It was common for parents to state that, after school, their child had to do homework before watching any TV. Some parents viewed TV watching as a reward for the child after homework was done.

On the other hand, roughly as many parents were resistant to the idea of no afternoon TV as were positive about the idea. A primary reason for their reluctance was that parents viewed the afternoon as a time for the child to unwind after getting home from school or a means by which the child remained occupied while parents completed household chores (e.g., cooking). For instance, mothers of 9- to 10-year-old boys said:

I think TV is fine. They need to unwind too.

That's my son's release. Because he tries so hard in school.

A few mentioned it would be a difficult strategy for them to implement because they worked and were not home with their child during the afternoon or because they would be pressed to find alternative activities for their child.

2.7 Incentives for Change

In exploring incentives for change, we asked parents and children to describe how they would feel or react to reducing TV time and what other activities they would turn to in that case. In general, children reported that they would find other ways to occupy their time.

Parents were often quite positive about the potential impact on their families of reducing TV time, citing closer family communication as the primary benefit. They were often particularly concerned about the effects of separate TV viewing in children's rooms.

Watching TV together gives you more family life...because, if not, each one is in their own world. (Hispanic mother of a 6-year-old girl

My sister said, "Don't you think it is not good that you have so many TVs?" That only divides the family. (Hispanic mother of a 12-year-old boy)

Some parents mentioned improved school performance as a benefit to limiting TV.

I want children to be smarter, to be able to solve problems, to be able to interact with others. If you are always in front of the TV, then the less you are getting with a real person. (White father of a 7-year-old boy)

Parents also observed behavioral improvements when their children watched less TV.

I limit the amount of TV after 6:00 pm and I notice that he is calmer without TV. (Hispanic mother of a 6-year-old boy)

My son is much more friendly and open. (White mother of a 6-year-old boy)

Nonetheless, parents were also cognizant of the potential for conflict and discontent that would ensue, not only between the child and parent but between siblings who would be spending more time interacting without TV to distract them. Hence, while parents were often aware of the positive benefits of less TV viewing, they were concerned about the consequences involved in "making it happen." Parents were apprehensive that limiting TV time would require them to be more involved in finding alternative activities for their children.

Interestingly, while most children reported that they could fairly readily find things to do on their own, parents believed they would need to be much more involved in the process by either enrolling them in classes, taking them places, spending "quality time" with them, or directly supervising children's adherence to the TV limits. However, the variety of alternatives that most children readily turned to did not involve parental involvement. This finding suggests that parents may not need to play the role of "social director" to implement a 2-hour limit. Thus, the task of reducing TV time may not be as onerous as some parents perceived.

CHAPTER 3 SUMMARY AND DISCUSSION OF POSSIBLE STRATEGIES

3.1 Summary

This study points to a number of challenges in effectively communicating with families about limiting children's media use. Media is deeply embedded in the life of the family, and one implication of this study is that information, by itself, may not be sufficient to move families to change their behavior. Parents generally agree with a 2-hour limit to children's TV use. It is consistent with their own views, and they understand the reasons for the recommendation, including improved education performance, positive behavior changes, and, less prominently, avoidance of obesity. Children's reactions to the idea of limiting media use are similar to those of their parents. Nevertheless, they would not like turning off media and would try to wheedle out of the limits. Thus, monitoring is important, although children indicated that they would comply with their parents' rules, as long as parents were consistent.

It is also useful to remember that families have rules about media use, particularly about content and about homework/chores. Their children tell us that they obey the rules that are enforced. Moreover, when rules about duration exist, the rules require fewer than 2 hours of use.

This study also indicated that less than a quarter of families have clear rules about duration (and even these rules are relaxed on weekends or at times when a child is watching with their parent). Moreover, media use by children in the home is pervasive. Media use data show that two thirds of children have a TV in their bedroom, and one-half of families have a TV in an eating area. As a result, children in this study are watching, on average, between 3 and 3.5 hours of TV a day and their total media use, including computers and videogames, is between 4 and 6 hours a day.

Families also report a number of barriers to limiting media use. For example, many do not perceive media use as a problem for their family. Also, parents are reluctant to change their own TV viewing, and they often rely on TV as a babysitter and to avoid conflicts and arguments. Parents are also concerned about having to become an entertainer if they cannot use TV to keep their children occupied.

Nonetheless, the study also identified possible incentives that parents expressed for reducing media use. These include increased closeness as a family, improved educational performance, improved health, and improved behavior.

The challenge is to build on this understanding, to build on current family practices for media use, and to support family values by suggesting incentives that will help to overcome the barriers to change. Because information alone is not sufficient to result in change, we must learn how to move parents to action. One model of health behavior – the Transtheoretical or "Stages of Change" model of Prochaska and DiClemente (1983; 1991) refers to the challenge of moving from "precontemplation" to "contemplation" and "preparation for action." To accomplish this, it

may be useful to offer cogent reasons for reducing children's media use and to suggest actions that parents can take to make it easier to limit their children's media use.

3.2 Issues to Consider in Developing Messages for Families about Media

The findings of the study, described above, led us to identify the following as issues that are important to address in developing messages about TV viewing for families.

3.2.1 Consider Providing Broader, More Compelling Messages about Negative Effects of Excessive TV Viewing

Consideration should be given to whether parents would be more persuaded by a single focused argument, such as the connection between TV viewing and the risk of overweight, or by the accumulation of evidence about TV viewing in a variety of domains. Many parents did make the TV viewing/childhood obesity connection, but only after they were "primed" (that is, when we told them about recommendation for TV limits). Prior to this point in the discussion, their concerns about the negative effects of TV were centered on how it affected children's cognitive development (their brain, their schoolwork) and their behavior ("zombie," aggressive), but only rarely did they talk about obesity or physical inactivity. In addition, parents wanted a good rationale to present to their children for making any changes.

3.2.2 Define the 2-Hour Limit

Parents want clarity about the meaning of the recommendation to limit children's TV use. They would ask, "Does this mean 2 hours a day *every day* or 2 hours a day *averaged over the course of a week*?" Some parents do have rules restricting TV time, but the rules are considerably loosened on weekends. When asked to report how much time children spend watching TV in an average week, the mean time for average daily viewing was fewer than 2 hours a day (mean = 116 minutes). Moreover, although the majority of parents said they saw the 2-hour recommendation as reasonable, many felt that it would not work on the weekends, particularly during the winter. (There is some evidence in the literature that children's heavy viewing during the school year is more predictive of obesity than their heavy viewing during the summer [Armstrong et al. 1998].)

3.2.3 Recognize Families' Widely Differing Rules and Practices

Parents and children reported that television viewing was used as an incentive and a reward, while television restriction was used as a punishment. In addition, while some parents had very clear and consistent rules about television (e.g., limited viewing on weekdays), others had no rules about time at all. Thus, one must consider whether it is useful to construct a message about "moving the needle" (i.e., making incremental progress toward a desired objective). Would this approach have the advantage of offering something that is realistic for all families? Or would it have the danger of conveying complacency among families who do not consider their children's viewing to be a problem?

3.2.4 Build on the Incentives of Parenting

Parents feel positive and somewhat wistful about the time they spend with their children. Perhaps the most memorable portion of the discussion with parents and children was about

quality time together. Several parents described their practice of scheduling "family time." It is important to recognize that television plays some role in bringing families together, and that coviewing may not be considered in parents' calculations of the time their children spent watching TV. Strategies or messages to reduce TV time could appeal to parents' wish to spend more quality time with their children and could suggest practical ways to accomplish this without television.

3.2.5 Tailor Messages to Specific Audiences

The data suggest that there may be important ethnic, sex, and age-group differences to consider. For example, although ethnicity is conflated with interview locale variables, it appears that the Hispanic children in our sample were especially fond of videogames and that the Hispanic parents were particularly motivated by the idea of increased family communications that might result from decreased TV consumption. Moreover, girls showed different media use preferences and patterns than did boys. Girls were more resistant to TV time limits, in part because they had fewer appealing media alternatives (such as videogames). Most clear were age differences in media use and parental concerns. Parents of 9- to 10-year-olds saw time spent with computers as particularly valuable, but parents of 12- to 13-year-olds expressed concern over the perils of the Internet.

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