

# Parents' Evaluation of Media Ratings a Decade After the Television Ratings Were Introduced

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## Parents' Evaluation of Media Ratings a Decade After the Television Ratings Were Introduced



**WHAT'S KNOWN ON THIS SUBJECT:** Parents desire media ratings to help them make choices for their children, but the ratings have problems with reliability and validity.



**WHAT THIS STUDY ADDS:** Three national surveys reveal what parents think of the rating systems and what types of information they would prefer.

## abstract

**OBJECTIVE:** The 3 national studies reported here were designed to find out how satisfied parents are with media rating systems, how regularly they use them, and what types of information they ideally would like to have

**METHODS:** Parents (n = 745, study 1; n = 768, study 2; n = 769, study 3) were surveyed nationally by independent research firms. Studies 1 and 2 were conducted by Harris Interactive, and study 3 was conducted by Research Now. All of them were cross-sectional national surveys.

**RESULTS:** Parents desire ratings for many types of media, but they do not think the existing ratings accurately provide the information they want. They would prefer ratings to provide detailed content information. In general, parents tend to agree on the types and descriptors of content about which they would like to know. They do not, however, agree on the ages for which different content aspects are appropriate. Parents would support the creation of a universal rating system that could be applied to multiple types of media.

**CONCLUSIONS:** Ratings can be effective only if they are useful for parents. This set of studies reveals that improvements in media ratings are needed to make them valuable for parents. *Pediatrics* 2011;128:36—44

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#### **KEY WORDS**

media ratings, parents, content-based ratings, age-based ratings

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Over the past 50 years, hundreds of studies have demonstrated that television, movies, video games, and other media can have both positive and negative effects. Some effects, such as those on school performance or obesity, are related to the amount of time children spend with screen media. More research, however, has focused on the influence of content.

Several studies have demonstrated that educational content can have profound effects. For example, research has found that viewing the television show *Sesame Street* can improve children's school readiness,<sup>3</sup> and this early benefit lasts through high school.<sup>4</sup> Similarly, educational and prosocial video games can teach skills<sup>5</sup> and helpful behaviors.<sup>6</sup>

Research has also documented potentially harmful content. Violent media can increase aggressive thoughts, feelings, and behaviors in the short-and long-term.<sup>7-10</sup> Sexual media exposure is related to earlier and riskier sexual activity.<sup>11-14</sup> Parents are also concerned about the values to which their children are exposed, although these have not been studied empirically in detail. Research findings, parental concern, and political pressure on the entertainment industry led to media rating systems to inform parents about media content.

The movie rating systems began in 1968, with other rating systems coming later, and the media landscape has changed dramatically in this time. Television now has hundreds of channels. Video games have gone from a children's niche market to being larger than film or music. 15 Furthermore, the features of media have changed, including more potentially harmful content. 16 Children's media access has also increased, 17 highlighting the need for consistent, valid, and informative ratings.

Unfortunately, the rating systems have many problems, including being ap-

plied in an unreliable manner. In a study of 2757 television programs, 79% of shows contained violence but no V (violence) descriptor rating, 91% of shows with offensive language lacked an L (offensive language) rating, and 92% of shows with sexual content had no S (sexual scenes) rating. 18 Similar problems exist for video-game, movie, and music ratings. 19-22 Ratings also have been criticized for becoming more lenient over time (so-called ratings creep).  $^{22}$  One study of  $\sim$  2000 films found that a film rated PG-13 in 2003 included approximately the same amount of violence, nudity, and offensive language as an R-rated film of 10 years before.23

Studies have also demonstrated that rating systems lack validity, as measured by accurately labeling content known to be harmful or being congruent with parents' perceptions (the consumers of ratings). 18,23,24 One study of 1332 television shows coded dimensions posing the highest degree of risk for harmful effects on youth and compared these with their assigned television ratings. 18 Industry ratings did not match the content of the shows. For example, more than two-thirds of children's shows with high-risk violent content were rated as TV-Y (the youngest rating) without the V (violence) descriptor (in fact, the youngest ratings are designed to not include content descriptors). Across the ratings systems, researchers found that parents generally did not agree with the industry ratings. For example, parents felt that only 15% of television shows rated TV-14 were clearly appropriate for adolescents.<sup>24</sup> In summary, research demonstrates serious problems with each rating system, which must hamper their usefulness for parents.

It is valuable to know parents' feelings about the existing rating systems. Studies of parents were conducted in the 1990s when the television rating

system was created.<sup>25–30</sup> Parents have had experience with the existing rating systems for a decade. Three national studies, reported here, were designed to determine how satisfied parents are with the rating systems, how regularly they use them, and what types of information they ideally would like to have.

## **METHODS**

## Study 1

## **Participants**

A total of 2392 adults were surveyed nationally by Harris Interactive: 690 were parents of children aged 17 years and younger. The data were weighted to reflect the national composition of the adult population. Weights were based on national proportions of age, gender, race/ethnicity, education, region, household income, and propensity to be online. This method is standard of Harris Interactive's procedures to ensure that the final sample is representative of national proportions. The weighted sample of parents was 47% male, and 72% were white (13% Hispanic, 10% black or African American, 3% Asian or Pacific Islander, 0.2% Native American, and 2% multiracial/other). Results are reported only for parents with children living at home.

## Procedure and Materials

This Harris Interactive poll was conducted online within the United States in 2007. Parents were surveyed about their knowledge of the existing rating systems, how often they use the ratings, and what they would like in a rating system.

#### Study 2

## **Participants**

A total of 2303 adults were surveyed nationally by Harris Interactive; 768 had children aged 17 years or younger living at home. The weighted sample of parents was 43% male, and 66% were

white (18% Hispanic, 12% black or African American, 1% Asian or Pacific Islander, 0.9% Native American, and 3% multiracial/other).

## Procedure and Materials

This Harris Interactive poll was conducted online within the United States in 2008. It included items from study 1, with additional questions regarding how important certain types of content were in making decisions about what children should see.

## Study 3

## *Participants*

A total of 769 adults between 25 and 54 years of age, who owned at least 1 television, were a decision maker in the household, and had a child younger than 17 years old living at home, completed the survey. The sample was 76% female (n=583), and 81% were white (3% Hispanic, 3% black/African American, 3% Asian/Pacific Islander, 1% Native American, and 8% multiracial/other). In addition, 51% were classified as frequent churchgoers (ie, attending religious services at least once a month).

#### Procedure and Materials

Participants were selected from a panel provided by Research Now, according to the criteria listed above. Research Now recruits participants by invitation, to construct panels that represent a given population (US parents in this case [see www.researchnow.com/en-US/Panels/ PanelQuality/Recruitment.aspx]). Participants completed the survey online using a 5-point scale (anchored with always to never) to indicate how often they would filter out specific types of television content for at least 1 of their children, and a 6-point scale ( $\leq$ 6, 7–9, 10–12, 13–16, ≥17 years, and inappropriate for all) to indicate the minimum age the content would be appropriate.

Participants answered questions pertaining to sexual content, violent con-

tent, offensive language, and mature content. Each category was described with 11, 10, 6, and 10 detailed descriptors, respectively (see Table 1 for descriptions), and participants were asked about the sufficiency of the content descriptors.

#### **RESULTS**

## Study 1

When asked how much they understand about each of the 3 major rating systems, parents reported being most familiar with the movie ratings and least familiar with the video- game ratings (Table 2). Parents were asked how often they use the rating systems to help decide what is appropriate for their children to watch and/or play. Of the 3 systems, parents use the movie rating most (48% use them "every time" or "most of the time"). Fewer parents reported using the videogame ratings (34%) and television ratings (31%) every time or most of the time. In response to specific questions about the video-game rating system, the M, E, and T ratings were most known by parents (67%, 60%, and 59%, respectively). Fewer parents knew what the E10+, A0, RP, and EC ratings meant (41%, 23%, 16%, and 14%, respectively). When asked what an ideal rating system would include, a majority of parents wanted content information (76%), age recommendations (68%), and general warning statements (66%). When asked how much they would support or oppose the creation of 1 universal rating system, a majority (57%) reported strongly or somewhat supporting it, whereas only 11% would strongly or somewhat oppose it.

#### Study 2

## Current Rating Systems

Again, parents were most familiar with the movie ratings and least familiar with the video-game ratings (Table 2). Unfortunately, only 18%, 15%, and 14% of parents said they get "all" of the information they need from the movie, television, and video-game ratings, respectively. Combining the all and most responses, the percentages increase to 53%, 46%, and 40%, respectively. Furthermore, only 6%, 5%, and 6% of parents feel the movie, television, and video-game ratings are always accurate, respectively. With a more lenient criterion, still fewer than half (46%, 46%, and 41%, respectively) think the ratings are always or usually accurate.

## Ideal Rating System Features

More than half of parents indicated the following media should include a rating system: television shows, Internet Web sites, Internet games (eg, Flash games), music CDs, Internet videos (eg, YouTube), cartoons, and games on handheld devices (eg, cell phones) (Table 3). In addition, parents felt a rating system should include information about many types of content (Table 4). Of all content types included in the survey, only 1 was not rated as extremely important or very important by the majority of parents: "materialism or things that promote materialistic attitudes." Similar to study 1, approximately half of parents strongly (30%) or somewhat (29%) supported a universal ratings system, with only  $\sim$ 1 in 10 strongly (5%) or somewhat (7%) opposed.

#### Study 3

Studies 1 and 2 demonstrated that parents are aware that the existing ratings do not provide all of the information they want, are not sufficiently accurate, and therefore are not used regularly. This is not because parents do not desire ratings, because they reported wanting information on several types of content for several types of media.

Study 3 was designed to gather detailed data on the content information

**TABLE 1** Content Labels and Descriptions

Label	Description
Sexual content descriptors	
Romantic kissing	Affectionate but not sexual kisses. No open mouths or tongue contact. Examples: parents kissing good-bye, boy-girl innocent first kiss
Mild sexual innuendo	Flirting, hints, or indirect sexual references
Revealing clothes	Bathing suits, sportswear, or other clothing that clearly outlines or exposes the body
Nonsexual partial nudity	Infant's bottom, rear view of naked behind in nonsexual situation. Example: distance shot of old man riding motorcycle naked in <i>Waking Ned Divine</i>
Sexually suggestive content (dialogue, scenes, or clothes)	Nonexplicit reference to sex. Example: "You turn me on"; glances or camera shots lingering on body (no nudity); flirtatious body contact (stroking partner's neck, back, arm, or leg); sexy dancing. Lengthy kisses, including kissing with tongues or open mouth. Example: <i>Pride and Prejudice</i> (2005). Sexy lingerie scenes; stripper or prostitute clothing
Commercials with sexual content	Sexy lingerie. Sexually oriented movie trailers or shows. Commercials for medical or personal products related to sex. Examples: lubricating jelly, contraceptives, erectile dysfunction products
Implied sexual situation (between adults)	Scenes or dialogue involving sexual behavior but no nudity. Examples: couple in bed starts to kiss but camera cuts away; postcoital bed scene
Implied sexual situation (mature content)	Scenes or dialogue that involve sexual behavior AND also involves adultery, teen sex, sexual abuse, incest, bestiality, masturbation, or use of pornography
Explicit sexual dialogue/sexual situations	Clear references to any sexual activity, contraceptive use, sexual organs, sexually transmitted diseases, abortion, or masturbation
Sexual	5
Nudity (partial) Explicit sexual situations/behavior; full sexual nudity	Partial nudity in a suggestive context. Examples: <i>Titanic, Witness</i> Full sexual nudity even if no sexual behavior occurs. Explicit sexual situations or behavior: touching any sexual body parts, visible sexual activity, or intercourse
Violent content descriptors	Schall body parts, visible schall activity, or intercourse
Comic violence/cartoon violence/slapstick	Examples: Pokémon, Robotboy, Looney Tunes
Scary images (tense, threatening images)	Examples: menacing animal or person; short-lived suspense
Scary situations (tense and threatening	Threatened violence: guns pointed, swords drawn, short-lived suspense or danger. Verbal references to or
situations)	descriptions of crimes
Mild fights/martial arts combat Implied lethal violence/moderate	Brief or nonlethal fistfights and choreographed martial arts combat without blood or serious injuries Soldiers fighting, falling, getting shot, or stabbed but no close-ups or prolonged scenes. Minimal blood.
fights/nonexplicit battles	Scenes showing killer approaching victim, then later scene with corpse; cruelty to animals
Commercials with violent content	Trailers for violent movies, video games, or programs
Physical abuse or torment; domestic abuse	Beating, punching, whipping, or choking a person; any physical abuse of child, spouse, or partner
Intense fight scenes with serious injury or death/ bloody but nongraphic situations, including medical scenes	Intense hand to hand fighting or combat scene showing serious injury or death. Guns, knives, swords may be used to kill, maim, or seriously injure; bloody scenes
Self-harm/suicide/euthanasia	Binding, hanging, bulimia, cutting, burning self; suicide attempts or completed; euthanasia
Sexual crimes/graphic violence or graphic medical scenes/torture or disturbing images/ gratuitous violence	Simulated amputations or surgery (close-up views); autopsies or close-ups of corpses that died from violent crimes; concentration camp or genocidal images, corpses. Gratuitous or excessive violence
Offensive language descriptors Mild slang for body parts or functions/mildly	Examples: butt, poop, or pee. Jokes about fats, peeing, or pooping
crude dialogue or bathroom humor Mild insults using body parts	Examples: "You're a butthead, stupid"
Disrespect toward a deity or sacred symbol's name	Any deity's name used as an exclamation. Example: "Oh my God!"
Mild cursing	Cursing (hell or damn)
Moderate crude dialogue or humor; intentional verbal cruelty (ridicule)	Crotch jokes, more specific bathroom humor or jokes about anatomy. Cutting remarks and contemptuous gestures about overweight or disabled person
Moderate profanity	Common profanities and their variations. Examples: shit, shithead, ass, asshole, bastard, boobs, knockers, or bitch that are used as a curse
References to substance abuse	Illegal drug use or teen-aged alcohol abuse
Deity's name used as a curse	Examples: G[hyphen]d damnit, Jesus Christ
Racial, sexual, ethnic, or religious slurs	Examples: tits, booty, prick, dick, nigg, fag, kike, guinea, jewboy, p-ssy, slut
Obscenity, sexual slang as expletives	Variations of: f-ck, c-nt
Mature content descriptors	Evoligit deniction of illegal drug use such as marijuane, seesing on heroing
Illegal drug use Teen-aged alcohol abuse	Explicit depiction of illegal drug use such as marijuana, cocaine, or heroine Underage drinking, including drunkenness and binge drinking
Sexual dialogue, alternative lifestyles	Explicit dialogue about sexual situations involving gay, lesbian, bisexual, transgender, or questioning individuals or couples
Occult, rituals/paranormal	Situations involving occult, witchcraft, black magic, or paranormal activities
Implied or explicit sexual situation, alternative lifestyles	Implied or explicit sexual situations involving gay, lesbian, bisexual, transgender, or questioning individuals or couples
Commercials including mature content	Illegal drug use, occult, paranormal, alternative lifestyles, or teen-aged alcohol abuse

**TABLE 2** Familiarity With Various Rating Systems

Response	Video Game		Мо	vie	Television		
	2007	7 2008 2007 200		2008	2007	2008	
Everything	6	28	38	59	13	31	
A lot	22	28 47 35		35	40	43	
A little	44	28	11	11 6		22	
Not at all	28	16	4 1		8	4	

Numbers represent percentage scores

**TABLE 3** Types of Media Parents Believe Should Have a Rating System

5n	Should have a Rating System					
Percentage of Parents	Type of Media					
76	Television shows					
72 Internet Web sites						
69 Games on Internet Web sites (eg, Flash games)						
69	Music CDs					
67	Videos on Internet Web sites (eg, YouTube)					
56	Cartoons					
51	Video games on handheld devices, such as cell phones, BlackBerrys, or Palm Pilots					
34	Commercials					
26	News					
26	Sports Programs					

Movies, as an additional media type, were not included in the survey because of space limitations and similar previous reports consistently showing parents want a rating system for movies.

**TABLE 4** Parents' Preferred Descriptors: Study 1

	,
Percentage of Parents <sup>a</sup>	Type of Media
81	Sexual behavior
76	Nudity
72	Illegal substance use
72	Physical violence
70	Offensive language
68	Age-based rating
66	Antisocial and disrespectful behaviors
66	Discrimination/stereotypes/racism
65	Relationship aggression and mean- spirited behavior
58	Scary situations or images
58	Positive prosocial behaviors, such as helping or caring
57	Educational content
55	Legal substance use of tobacco or alcohol
54	Paranormal or occult
53	Alternative lifestyles
44	Materialism or things that promote
	materialistic attitudes

<sup>&</sup>lt;sup>a</sup> Percentage reported of those who responded either extremely important or very important.

 TABLE 5
 Parents' Opinions About the Number of Detailed Content Descriptors

Content	No. of Detailed	Percenta	Percentage of Parents Who Indicated					
Area	Descriptors	Just Right	Too Many	5 Is Sufficient <sup>a</sup>	Numbers			
Sexual	11	81	14	31	1–10			
Violent	10	85	10	39	1-9			
Language	10	85	10	33	1-8			
Mature	6	86	6	37	1-5			

<sup>&</sup>lt;sup>a</sup> Percentage is based on those who indicated too many (not total).

 TABLE 6
 Parents' Opinions About the Sexual Content Labels

Percentag Out		Content Label	Percentage Response Regarding Minimum Age Appropriateness						
Always or Often	Never		≤6 y	7—9 y	10-12 y	13–16 y	≥17 y	Inappropriate for All	
79	7	Explicit sex	1	0	3	10	53	34	
72	8	Mature content	1	1	5	22	45	26	
70	9	Explicit dialogue	2	1	6	23	47	22	
61	9	Partial nudity	2	2	9	28	47	16	
53	11	Sexy commercials	3	4	14	34	32	13	
46	11	Sexual suggestion	4	4	14	35	35	8	
43	11	Implied sex	3	4	15	38	31	8	
30	16	Mild sexual innuendo	6	9	23	40	19	3	
25	22	Revealing clothes	17	14	17	33	17	7	
24	24	Nonsexual partial nudity	20	15	21	22	16	6	
14	46	Romantic kissing	33	17	18	22	9	2	

desired. In addition, personal values may moderate parents' opinions regarding ratings; this possibility was explored by separating participants according to church attendance.

## Sufficiency of Content Descriptors

For all 4 broad content areas (sexual, violent, language, and mature) the majority of parents indicated the number of descriptors provided was just right in 81%, 85%, 85%, and 86%, respectively (Table 5).

#### Sexual Content

For 5 of the 11 detailed descriptors, more than half of parents indicated they would always or often filter out the following, for at least 1 child: explicit sex (79%), implied sexual situations involving mature content (72%), explicit dialogue (70%), partial nudity (61%), and commercials with sexual content (53%). Except for sexy commercials, the largest percentage of parents indicated 17 years and older as the minimum appropriate age for

these types of content. For the remaining 6 sexual descriptors, there was no clear consensus on how often parents would filter out the content or at what age the material is appropriate (Table 6). With the exception of romantic kissing,  $\chi^2$  tests revealed significant differences (P < .001) between frequent and infrequent churchgoers for filtering out content and its age appropriateness. For example, 15% of infrequent churchgoers would always filter out sexy commercials and 6% found these commercials inappropriate for all ages. In contrast, 39% of frequent churchgoers would always filter out sexy commercials and 21% found them inappropriate for all.

#### Violent Content

For 4 of the 10 violent content descriptors, more than half of parents indicated they would always or often want to filter the following, for at least 1 child: sexual crimes/graphic violence (68%), self-harm/suicide/euthanasia (64%), physical abuse

 TABLE 7
 Parents' Opinions About the Violent Content Labels

Percentage I	Filter Out	Content Label	Percentage Response Regarding Minimum Age Appropriateness						
Always or Often	Never		≤6 y	7–9 y	10-12 y	13–16 y	≥17 y	Inappropriate for All	
68	9	Sexual crimes	1	2	8	26	42	22	
64	9	Self-harm/suicide/euthanasia	2	3	11	31	35	19	
61	9	Physical abuse	2	4	16	34	29	16	
53	9	Intense fighting with injury/death	2	5	17	40	29	8	
34	15	Violent commercials	5	15	29	33	12	6	
29	14	Implied lethal/moderate fights	4	18	36	30	11	2	
27	15	Scary situations	5	24	31	30	8	2	
24	17	Scary images	7	30	28	26	6	2	
15	24	Mild fights/martial arts	14	33	27	20	5	1	
14	31	Cartoon violence	25	34	21	14	5	2	

**TABLE 8** Parents' Opinions About the Language Content Labels

Percentage Filter Out Content Label			Percentage Response Regarding Minimum Age Appropriateness						
Always or Often	Never		≤6 y	7—9 у	10–12 y	13–16 y	≥17 y	Inappropriate for All	
74	9	Sexual obscenities	2	1	6	21	35	36	
66	9	Racial or religious slurs	2	2	11	25	28	33	
56	11	Moderate profanity	3	5	17	35	26	16	
52	15	Deity name as curse	5	9	18	26	13	28	
43	12	Reference to substance abuse	4	7	21	37	22	9	
42	12	Moderate crude language	3	11	26	34	15	12	
32	22	Deity disrespect	12	23	23	18	7	18	
26	20	Mild cursing	7	20	30	27	10	6	
23	20	Body insults	10	31	28	20	7	4	
16	28	Body parts/functions	21	30	24	16	6	4	

(61%), and intense fighting with injury and/or death (53%). Unlike the sexual content descriptors, there was less agreement regarding the minimum age for when these are appropriate. Although almost half of parents agreed that sexual crimes/ graphic violence would only be appropriate for those aged 17 years and older (42%), the other 3 content areas were split between 17 years and older and 13 to 16 years (Table 7). All  $\chi^2$  tests for violent content questions revealed significant differences (P < .05) between churchgoers. To illustrate the differences between groups, 38% of infrequent churchgoers would always filter out sexual crimes and 13% found them inappropriate for all ages. In contrast, 50% of frequent churchgoers would always filter out sexual crimes and 30% considered them inappropriate for all.

## Language Content

For 4 of the 10 language content descriptors, more than half of parents indicated they would always or often want to filter the following, for at least 1 child: sexual obscenities (74%), racial or religious slurs (66%), moderate profanity (56%), and using a deity's name as a curse (52%). Although parents often agreed that none of this content was appropriate for children aged younger than 9 years, there was a mix of responses for when they are considered appropriate, if ever (Table 8). Again, all  $\chi^2$  tests were significant for differences between churchgoers (P < .05). One of the greatest differences between these 2 groups is in the appropriateness of the use of deity as a curse; 16% of infrequent churchgoers would always filter out the use of deity as a curse and 14% find it inappropriate for all ages. In contrast, 46% of frequent churchgoers would always filter out the use of deity as a curse and 42% found it inappropriate for all.

#### Mature Content

For 5 of the 6 mature content descriptors, more than half of parents indicated they would always or often want to filter the following, for at least 1 child: explicit sexual situations involving alternative lifestyles (58%), illegal drug use (56%), commercials that include mature content (55%), dialogue pertaining to alternative lifestyles (54%), and teen-aged alcohol use (53%). Once again, the only consensus among parents about age-appropriateness was that this content was not appropriate for children 9 years old or younger (Table 9).  $\chi^2$  tests revealed significant differences between churchgoers (P <

**TABLE 9** Parents' Opinions About the Mature Content Labels

Percer Filter	0	Content Label	Percentage Response Regarding Minimum Age Appropriateness					
Always or Often	Never		≤6 y	7–9 y	10-12 y	13–16 y	≥17 y	Inappropriate for All
58	10	Explicit alternative lifestyles	3	4	10	29	31	23
56	10	Illegal drug use	2	5	14	30	33	16
55	11	Mature commercials	3	5	13	32	29	19
54	11	Alternative lifestyle dialogue	3	4	13	32	29	19
53	11	Teen-aged alcohol use	3	4	17	36	27	13
46	13	Occult/paranormal	4	7	18	29	25	17

.001) for all mature content items. One example is with the appropriateness of dialogue about alternative lifestyles: 22% of infrequent churchgoers would always filter out dialogue about alternative lifestyles and 8% find it inappropriate for all ages. In contrast, 45% of frequent churchgoers would always filter out this content and 28% found it inappropriate for all.

## **DISCUSSION**

Together, these 3 national samples of parents demonstrate that (1) parents desire ratings for many types of media; (2) they do not think the existing ratings accurately provide the information they want; and (3) although they want detailed content ratings they also want age-based ratings. In general, parents tend to agree on the types of content they would like to know about. They do not, however, agree on the ages for which they think different content descriptors are appropriate.

This last finding is perhaps surprising, given the television, film, and videogame rating systems are all age-based systems. The industries' use of age-based systems implies consensus about when different types of content are age appropriate. This may be due to the false consensus bias, in which people tend to overestimate the degree to which people agree with them or hold similar beliefs.<sup>31</sup> The disparity between the existing age ratings and the age-appropriate standards of most parents, which do not achieve consen-

sus themselves, suggests that the agebased ratings are founded on a false consensus of what is age appropriate. From a parent's perspective, agebased ratings are clearly simpler than detailed content-based ratings to base a decision on, but the system fails if there is no true consensus on what is age appropriate. This may be part of the reason that so few parents use the existing ratings regularly.

Ratings can only be effective if they are useful for parents. Although age-based ratings have the potential to be useful, they are clearly not going to be perceived as accurate for all, or even most, parents. This finding may help to explain the lack of validity as defined by ratings fitting parents' perceptions that has been found previously.<sup>24</sup> The data here demonstrate that different demographic variables (ie, church attendance) and personal values may be related to perceptions of ageappropriateness for different types of content. Because it would be impossible to have different rating classifications for all of the relevant demographic groups, these data provide another reason why content-based ratings would be preferable to agebased ratings. Clearly defined and available content descriptors provide the most information and they allow parents to make their own decisions about age-appropriateness. One implication of these data, however, is that parents may not understand what is

truly age appropriate. For example, fewer than one-third of parents stated they would regularly filter out scary images or moderate fights, despite research demonstrating that these can have significant effects on children. 32,33 Therefore, it may be important for pediatricians to provide this information during well-child visits. 34

Many surveys of parents and experts have shown that content-based systems are preferred, 26,27,35,36 as was also shown in study 1. Other studies have documented that age-based ratings are more likely to enhance children's interest (the "forbidden fruit" effect), whereas content-based ratings are more likely to decrease it (the "tainted fruit" effect). 36-41 Furthermore, several recent studies have documented a ratings creep, the shift over time for more mature content to get lower age-based ratings. 16,22-24 A content-based system would be less prone to ratings creep because it is designed to simply record the presence or absence of specific content, not to make a judgment about its appropriateness. Furthermore, it becomes clearer and simpler for parents, as they no longer would need to guess what a vague label like "PG-13: Parental guidance suggested" means.

The studies discussed here have several strengths, most notably being national surveys conducted by independent research firms. Although Harris Interactive and Research Now use different methods for gathering their samples, both are considered to be industry-standard approaches. It is possible that there is some selection bias in willingness to participate in online surveys, but it is unknown how that might change parents' opinions about ratings information. Some studies suggest that if socioeconomic factors are controlled (as was done here), the results are similar to telephone and mail survey methods. 42,43 In

the present samples, the data seem consistent despite different sampling methods.

The American Academy of Pediatrics and others have recommended that 1 universal rating system be created that could be applied to all media.<sup>24,44,45</sup>

Our studies revealed that parents not only want changes to the ratings, but that they would support the creation of a universal system. Given that we are well on the way to digital "convergence," where one can watch movies, television shows, or video games all on the same device, it seems that the time

may be right to begin seriously considering taking this next step to improve media ratings.

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