

CHAPTER 16

Media and Youth Socialization

Underlying Processes and Moderators of Effects

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Consider this quote: “By the time most Americans are eighteen years old, they will have spent 15,000 hours in front of a television set, about 4,000 hours more than they have spent in school, and far more than they have spent talking with their teachers, their friends, or even their parents” (Minnow & LaMay, 1995, p. 5). Today’s youth are exposed to a “media-saturated environment” (Roberts, Foehr, Rideout, & Brodie, 1999), which has long been a concern of parents, educators, policymakers, professional groups, and researchers, and there is much empirical evidence of meaningful effects of media exposure on youth (see, e.g., Anderson et al., 2003; Singer & Singer, 2001).

Concern with the effects of communicated words and images on youth is not new; it has been around as long as humans have been able to write and draw. Scientists were not needed to convince Greeks that audience members are influenced by the plays they saw, or to convince European kings that the populace is influenced by what they read, or to convince the 19th-century British middle class that children tend to imitate what they see others doing. However, with every step that society has taken toward greater “mass” communication, with each introduction of a new medium (e.g., photography, radio, movies, television, video games, and the world wide web), the concerns have increased. Increases in research have accompanied increases in concerns, and the outcomes of even the very early research tended to validate society’s concerns. In the 1930s, studies by Peterson and Thurstone (1933) showed that movie viewers’ attitudes about ethnic groups were altered by what they saw. By the 1940s, Lazarsfeld had established an “Office of Radio Research” at Columbia University that investigated the effects of radio, ranging from the influence of daytime serials on women to the influence of political advertisements on voting (Lowery & DeFleur, 1995). However, the real explosion of research occurred in the

latter half of the 20th century as television became a primary element in every child's life. As we argue in this chapter, this accumulating research, taken together, indicates that the mass media is in fact a key socializing influence in almost every child's life.

To make this point, we first present recent statistics describing the prevalence of children's exposure to television, video games, and the computer, paying particular attention to age, gender, and socioeconomic differences. Next, we examine theoretical explanations describing the underlying processes by which media exposure influences youth. Because this research generally shows that some youth are more affected by media exposure than other youth, we examine factors that moderate the effects of media exposure on youth. Finally, we present a section on selected examples of media effects; here, we highlight selected empirical research on the degree to which media exposure is associated with specific outcomes for youth at three developmental levels (preschool age, middle childhood, adolescence). Specifically, we examine the socializing impact of educational programming on preschoolers, the effect of violent content on children, and the impact of sexual content on adolescents.

CHILDREN'S EXPOSURE TO MEDIA

The data describing children's exposure to different types of media reported in this section come from three recent national large-scale surveys in the United States. The Kaiser Family Foundation reported on two studies: (1) the *Generation M: Media in the Lives of 8-18 Year-Olds* survey (Roberts, Foehr, & Rideout, 2005), a school-based survey administered to 2,032 students in grades 3-12, supplemented by media diaries from 694 of these students; and (2) *The Kids & Media @ the New Millennium* survey (Roberts et al., 1999), based on samples of 2,065 children in 3rd through 12th grades surveyed in their schools, 1,090 children ages 2-7 interviewed in their homes, and 621 children for whom media use diaries were completed by parents or the children themselves. The third data set is *The Media in the Home* survey (Woodard, 2000), supported by the Annenberg Public Policy Center, which was based on telephone interviews of 1,235 parents of children ages 2-17 and 416 children ages 8-16.

Television

Roberts et al. (2005) found that 51% of youth reported that the television is on "most of the time" in their homes; 63% said the television is on during meals. Children watch 184 minutes per day of television (Roberts et al., 2005). Woodard (2000) reported that boys watched more TV than girls, but Roberts et al. (2005) found no gender difference, and whereas Woodard (2000) found that children from higher-income homes watched less TV than children from lower-income homes, Roberts et al. (2005) found no income-level differences.

There are strong age-related viewing trends (Comstock & Paik, 1991) with viewing hours peaking at age 11-13 and declining slightly thereafter. Twelve-year-olds average about 28 hours per week of viewing, and 25% of 12-year-olds watch 40 or more hours per week. Of course, this is more time than they spend in school. On a typical day, 59% of infants (ages 0-2 years) and 73% of 0- to 6 year-olds watch TV (Kaiser Family Foundation, 2003a). Forty-three percent of 4- to 6-year-olds and 68% of children age 8 and

older have a TV in their bedroom (Roberts et al., 2005). Younger children (ages 2–7) overwhelmingly watched entertainment and educational programs, 8–13-year-olds preferred entertainment and comedy programs, and 14–18-year-olds preferred comedy, drama, and sports programs (Roberts et al., 1999).

Parental viewing behavior also seems to influence how much children watch. Woodard (2000) found that children's frequency of TV viewing was related to their parents' frequency of TV viewing. Woodard also reviewed data that raise the concern that parents might be using television as a babysitter. Specifically, a higher percentage of children living in single-parent households had a television in their bedrooms compared to children in homes with multiple adult caretakers. Roberts et al. (1999) also reported that TV use was higher among children in single-parent homes. Even in dual-parent homes, parental covieing with the child is relatively low. On average, 2- to 7-year-olds watch TV *without* a parent present more than 80% of the time, and for teenagers that number increases to 98% (Kaiser Family Foundation, 2003b, p. 2). Correspondingly, covieing with peers increases as the child gets older.

One other recent trend in television programming has become very important for the issue of how television socializes children. With the introduction of cable television in the 1970s and the explosion of multiple networks and stations that followed in the 1980s and 1990s, TV programming became much more diverse. Specialized channels targeting children or subsets of adults emerged, and niche programming became more frequent. Programs could be successful that were aimed at smaller proportions of the general audience and that would offend or "turn off" the majority of viewers. The consequences are that youth are now exposed to a greater variety of material than ever before on TV, some of which is specifically targeted at them (e.g., Nickelodeon, and MTV), and some of which was never intended for viewing by children.

Video Games

Video game units are now present in 83% of homes with children (Roberts et al., 2005). Children spent 49 minutes per day playing video games (Roberts et al., 2005). Each day, 52% of children ages 8–18 years play a video game. The surveys found that boys played video games far more frequently than girls. In the most recent survey, video game playing was unrelated to family income level. Regarding age trends, video game use declined from an average of 65 minutes per day for 8–10-year-olds to 33 minutes per day for 15–18-year-olds (Roberts et al., 2005). Action, adventure, and sports games were the most popular choices, with role-play games increasing in interest for the 14–18-year-olds (Roberts et al., 1999).

Computers and Online Access

Roberts et al. (2005) found that 86% of homes with children ages 8–18 have a computer, 74% have Internet access, and the average time spent on the computer for recreational purposes (not school related) was 62 minutes. Neither Roberts et al. (2005) nor Woodard (2000) found gender differences in amount of time spent on the computer. All three surveys found that computer ownership was related to family income level: Roberts et al. (2005) found that 78% of families in the "less than \$35,000/year" income range versus 93% of families in the "over \$50,000" range reported owning a computer. Nevertheless,

Roberts et al. did not find significant family-income-level differences in total recreational computer use per day. Regarding age trends, Woodard (2000) and Roberts et al. (1999) reported that young children (below age 8) used the computer less frequently than did older children. Woodard found that Internet use was 8 minutes per day for preschoolers, 15 minutes per day for school-age children (ages 6–11), and 46 minutes per day for teens. More recently, Roberts et al. (2005) reported that total recreational computer use increased from 37 minutes per day for 8–10-year-olds, to 62 minutes per day for 11–14-year-olds, to 82 minutes per day for 15–18-year-olds. In addition, use of the computer for instant messaging increased with age from an average of 3 minutes per day for 8–10-year-olds, to 18 minutes per day for 11–14-year-olds, to 27 minutes per day for 15–18-year-olds. Woodard (2000) reported that children ages 8–13 years preferred entertainment and gaming websites, whereas 14–18-year-olds preferred entertainment and sports websites.

The “Media Budget” and Parents’ Views

Roberts et al. (1999; Roberts et al., 2005) calculated a “media budget” that represents the portion of time youth were exposed to each media type. Through age 14, Roberts et al. (2005) reported that the largest proportion of time was spent with television. In fact, television accounts for more than half the leisure time of 6–11-year-old children (Comstock & Paik, 1991). For the 2–7-year-olds, the second largest portion was spent with print media (18% of their time). But by age 11, Roberts et al. (2005) found that the second largest portion of youth’s media time was spent with audio media (radio, tapes, and CDs). For the 14–18-year-olds, audio media occupied the largest proportion of youth’s media budget (30%, compared to 28% for television). Interestingly, Roberts et al. (2005) found that across these age groups, less than 13% of children’s media budget was allocated to video games and less than 16% also was allocated to the computer.

Many have investigated what activities diminish when children devote more and more time to the mass media (Comstock & Paik, 1991). The overarching principle to describe what happens has been called the replacement of “functionally similar” activities. As children watch more television, their reading time, study time, and library time, for example, all decrease, while there is little change in their time spent in sports or socializing (Comstock & Paik, 1991). In other words, the mass media substitutes for what might be called functionally similar activities. However, more recently, Roberts et al. (2005) reported that heavy users of any one medium (i.e., TV, print media, computer, and video games) tend to be heavy users of the other media and that one should exercise caution in assuming “that time spent with media is synonymous with time taken from other activities.” Rather, it is important to examine the specific “medium (or media) under consideration, the ‘other’ activity under consideration, and the individual youth” (p. 50). For example, whereas heavy TV users reported spending more time with their parents compared to light TV users, they also reported spending less time on their homework.

Surveys also show that a large portion of parents are concerned about their children’s exposure to media. Woodard (2000) reported that over 70% of parents were at least “somewhat” concerned with their children’s exposure to TV, the Internet, and music, and 53% were concerned with video games. Almost half of all parents believe that “viewing violence and sex on TV contributes a lot to children adopting violent behavior or becoming involved in sexual situations before they are ready” (Kaiser Family Foundation, 2001). A survey by Common Sense Media (2003) found that 80–90% of American

parents believe that today's media contribute to children "becoming too materialistic, using more coarse and vulgar language, engaging in sexual activity at younger ages, experiencing a loss of innocence too early, and behaving in violent or anti-social ways." Still, most parents recognize the media can have a positive effect on children (Kaiser Family Foundation, 2003b). They are most conflicted about Internet use. For example, most parents recognize the educational value of the Internet for their children (Corporation for Public Broadcasting, 2003) but worry that online time will displace more important activities and expose them to negative content (Lenhart, Rainie & Lewis, 2001).

THE MASS MEDIA AS A SOCIALIZING INFLUENCE

Given the sheer amount of time from infancy to adolescence that youth devote to media consumption, given the lack of parental awareness and control over that media exposure, and given the reduction in time that some children might spend on other socializing activities, one has to be concerned with the role of the mass media in socializing children. The very act of engaging with the mass media either alone or with peers provides learning opportunities that socialize children, and what children observe through the mass media's window on the world alters their beliefs, attitudes, and behaviors, as we demonstrate later in this chapter in our review of studies of media effects. Some (e.g., Huesmann, 1995) have characterized the time since the introduction of television in the 1950s as a period in which the mass media steadily gained influence in socializing children while parents and more traditional socializing organizations (e.g., schools, churches) steadily lost influence. Because much of the content of the mass media to which children are exposed contains stereotyped, unrealistic, and/or antisocial models of social behavior (Kilbourne, 1999; Mastro & Greenberg, 2000; Yokota & Thompson, 2000), it is only natural that social scientists have focused more on understanding the negative influences of the mass media in socializing children. Yet, the mass media also provides opportunities for positive socialization. As becomes clear below, the powerful psychological processes that account for the influence of the mass media in socializing children do not distinguish between the positive and negative, though some content may be more likely than others to invoke certain processes. For example, sexual scenes and scenes of blood and gore may be more innately arousing than prosocial scenes. However, one can produce scenes that innately stimulate positive emotions or sad emotions that are just as intense. Whether the mass media teaches prosocial or antisocial behavior more easily certainly depends on how the behavior is presented, but the same learning processes are involved in both cases.

UNDERLYING PROCESSES BY WHICH MEDIA EXPOSURE AFFECTS YOUTH OUTCOMES

Huesmann and his colleagues (Anderson et al., 2003; Bushman & Huesmann, 2001; Huesmann, 1988, 1998, 2005; Huesmann, Moise-Titus, Podolski, & Eron, 2003; Huesmann & Taylor, 2006) have described a set of psychological processes that they believe explain most of the effects that exposure to the mass media has on youth. It is important to realize that these processes (described in detail later) apply to observations of behavior in real life (e.g., at home, in school, and in the neighborhood) as well as in the

media. The social-cognitive psychological processes of observational learning, priming, desensitization, and so on, always have been defined as processes that occur when behavior is observed anywhere, not just in the mass media (Bandura, 1986; Huesmann, 1998). Furthermore, empirical examples of all these processes working in the real world are readily available (Fiske, 2004; Guerra, Huesmann, & Spindler, 2003; Wolpe, 1958). In addition, although the theoretical explanations were developed initially to account for the effects of exposure to media violence, the processes also are applicable to understanding the ways in which exposure to positive media content can affect behavior (Mares & Woodard, 2001). These processes generally fall under the rubric of social-cognitive information-processing models, which focus on the ways in which people perceive, interpret, learn, and come to behave in their interactions with their social world.

One of the most important distinctions that Huesmann (Huesmann et al., 2003) makes is to divide these information processes into those that account for short-term effects of media exposure and those that account for long-term effects. In this chapter, we are more concerned with the long-term effects that account for the socializing influence of the mass media, but they can only be understood in the context of the short-term processes. Short-term processes are those through which exposure to the mass media stimulates immediate changes in behaviors, emotions, or cognitions, but the changes are very transient.

Short-Term Effects

Huesmann (1988, 1998; Huesmann et al., 2003) proposes that most short-term effects of exposure to television, films, video games, or Internet web pages are a consequence of three processes: (1) priming of already existing cognitions or scripts for behavior; (2) immediate mimicking (imitation) of observed behaviors; or (3) changes in emotional arousal and the misattribution of that arousal (excitation transfer).

Priming

Neuroscientists and cognitive psychologists posit that the human mind acts as an associative network in which ideas are partially activated, or primed, by stimuli with which they are associated (Fiske & Taylor, 1984). The activation produced by an observed stimulus spreads in the network and moves even remotely related concepts more toward a threshold of influence. Thus, an encounter with an event or object can prime related concepts, ideas, and emotions in a person's memory, even without the person being aware of it (Bargh & Pietromonaco, 1982). For example, the mere presence of a weapon in a person's visual field can increase aggressive thoughts or behavior (Berkowitz & LePage, 1967). Alternatively, exposure to a scene of helping behavior can stimulate related prosocial thoughts and supportive feelings. The external stimulus can be inherently linked to a cognition; for example, the sight of a gun is inherently linked to the concept of aggression, or the external stimulus can be something inherently neutral like a particular ethnic group (e.g., African American) that has become linked in the past to certain beliefs or behaviors (e.g., welfare) (Valentino, Traugott, & Hutchings, 2002). The primed concepts make thoughts, emotions, and behaviors linked to them more easily activated.

Repeated exposure to specific media content, therefore, has the potential to bias individuals toward thinking, feeling, or behaving in ways relevant to that content. For ex-

ample, priming men to view women as sexual objects via exposure to sexually objectifying commercials not only increases the speed with which men recognize sexist words, illustrating construct activation, but also increases the likelihood that the men will behave in a sexist manner during subsequent interactions with a female (Rudman & Borgida, 1995). In a related vein, priming women who excel at math and for whom math achievement is central to self-worth with gender-stereotyped commercials predicted decreased performance on a subsequent math exam (Davies, Spencer, Quinn, & Gehardstein, 2002). Importantly, this decrease was mediated by the extent to which gender stereotypes were made cognitively accessible, as measured by increased speed of recognizing words relevant to the female stereotype.

Imitation

Immediate mimicry of specific behaviors can be viewed as a special case of the more general long-term process of observational learning (Huesmann, 2005). Human and primate young have an innate tendency to imitate whomever they observe (Butterworth, 1999; Meltzoff & Moore, 2000; Wyrwicka, 1996). Neuroscientists (e.g., Rizzolatti, Fadiga, Gallese, & Fogassi, 1996) have discovered so-called mirror neurons in primates that seem to promote such processing. Although theorists argue over whether immediate mimicry is “true” imitation (see Hurley & Chater, 2004), no one doubts that it happens automatically in human youth. Consequently, observation of specific facial expressions or social behaviors increases the likelihood of children immediately displaying those expressions or behaviors (Bandura, Ross, & Ross, 1963; Meltzoff & Moore, 2000). In fact, many studies have shown that most young children frequently mimic the behaviors of those characters they observe in the media (e.g., Paik & Comstock, 1994).

Arousal and Excitation Transfer

Media portrayals are often high-action sequences that can be very arousing for youth, as measured by increased heart rate, skin conductance of electricity, and other physiological indices of arousal. To the extent that mass media presentations arouse the observer, certain behaviors may become more likely in the short run for two possible reasons—general arousal (Berkowitz, 1993; Geen & O’Neal, 1969) and excitation transfer (Bryant & Zillmann, 1979; Zillmann, Bryant, & Cominsky, 1981).

First, high arousal generated by exposure to rapid action sequences and loud music makes any dominant response tendency more likely to be carried out. The increased general arousal stimulated by a media presentation may simply reach such a peak that performance on complex tasks declines, inhibition of inappropriate responses is diminished, and dominant learned responses tend to be displayed in response to an immediately encountered social situation (e.g., direct instrumental aggression in response to a highly arousing social conflict situation). Second, when a child has been generally aroused by a media stimulus, the specific emotion (e.g., anger) generated by a subsequent real-world event (e.g., an insult) may be “felt” as more severe than it is because some of the emotional response stimulated by a preceding media presentation is misattributed as due to the provocation (Bryant & Zillmann, 1979; Zillmann et al., 1981). This process differs from priming in that the causal stimulus is not specifically linked to anger in any way, but simply increases general arousal.

Long-Term Effects

Although short-term effects have important influences on children's day-to-day behaviors, emotions, and thinking, they do not result in lasting changes in children's cognitions, behaviors, or the links between emotions and cognitions and behaviors. The more lasting changes that could be called "mass media socialization" occur when new cognitions or behavioral scripts are firmly encoded as a consequence of exposure to the mass media or new links between emotions and these cognitions and behaviors are acquired. Three long-term processes seem to be most important for socialization of the child: (1) observational learning of behavioral scripts, world schemas, and normative beliefs; (2) activation and desensitization of emotional processes; and (3) didactic learning processes.

The Observational Learning Process

By "observational learning" we mean the process of encoding lasting behavioral scripts and cognitions simply as a consequence of observing others. Whereas short-term mimicry requires only one exposure to an observed behavior, long-term observational learning usually requires repeated exposures. The more the child's attention is riveted on the observed behavior, the fewer repetitions are needed. However, numerous other factors besides attention affect the extent of the learning. Current conceptions of this process have grown out of the convergence of Bandura's (1986) social learning theory with more recent theories of social information processing (Dodge, 1985; Huesmann, 1988, 1998). The more the child identifies with the observed people (e.g., responds that he or she acts like or does the things a certain character does; Huesmann & Eron, 1986), the more the child is likely to encode the behavioral scripts the people are using, adopt the schemas about the world that the people seem to hold, or acquire the beliefs that the observed behaviors seem to imply (Huesmann, 1988, 1998, 2005). The more the observed scripts for behavior are rewarded and portrayed as appropriate, the more firmly the scripts will be encoded, and the more likely it is that more general beliefs about such behaviors will be extracted and encoded (Bandura, 1986; Huesmann, 1998).

As children grow older, they learn progressively more complex, generalized scripts for behavior through repeated observations of family members, peers, others in the community, and characters portrayed in the mass media. The scripts become more complex, abstract, and automatic as children's social-cognitive schemas about the world around them become more elaborated and as children mentally rehearse the scripts (Huesmann, 1988, 1998). For example, extensive observation of violence biases children's world schemas toward attributing hostility to others' actions (Dodge, 1985; Gerbner, Gross, Morgan, & Signorielli, 1994), which in turn increases the likelihood of children behaving aggressively themselves (e.g., Dodge, Pettit, & Bates, 1995). Through repeated observation of real-life models and models portrayed in the media, as well as by reflecting on the consequences of their own behaviors in social situations, children develop normative beliefs about what social behaviors are appropriate. During middle childhood, these beliefs become crystallized and begin to act as filters to evaluate scripts that are accessed in a given situation (Guerra et al., 2003; Guerra, Huesmann, Tolan, Van Acker, & Eron, 1995; Huesmann & Guerra, 1997; Huesmann, Moise, & Podolski, 1995).

This observational learning interacts with conditioning by family and peers to build behavioral scripts and social cognitions that are highly resistant to change. The reinforce-

ments that a child receives from imitating a positive or negative behavior strongly influence the likelihood of that behavior persisting (Bandura, 1986; Berkowitz, 1993). One of the powerful aspects of the interactive nature of video games as a socializing tool is that the act of playing the game not only provides for observation of behaviors that can be acquired but also provides for the reinforcement of the behaviors that “win” the game (Gentile & Anderson, 2003). Similarly, if the world schemas and normative beliefs that a child acquires through observing others (again, in real life and in the media) lead to valuable outcomes for the child, they will become more firmly encoded and more resistant to change (Huesmann & Guerra, 1997).

Long-term socialization effects of the mass media also are increased by the way the mass media and especially interactive video games affect emotions. Through classical conditioning, fear or anger can become linked with specific stimuli after only a few exposures (Cantor, 2002; Harrison & Cantor, 1999). These emotions influence behavior in social settings away from the media source through stimulus generalization. A child may then react with inappropriate fear or anger in a novel situation similar to one that the child has observed in the media.

Activation and Desensitization of Emotional Processes

Repeated exposure to emotionally arousing media or video games can lead to habituation of certain natural emotional reactions. This process is often called “desensitization,” and it has been used to explain a reduction in distress-related physiological reactivity to media portrayals of violence (Carnagey, Anderson, & Bushman, in press). Indeed, violent scenes do become less arousing over time (Cline, Croft, & Courier, 1973), and brief exposure to media violence can reduce physiological reactions to real-world violence (Carnagey et al., in press).

If we apply this concept more broadly to children’s media exposure, behaviors observed by the child viewer that might seem unusual at first might begin to seem more normative after repeated presentations. For example, most humans seem to have an innate negative emotional response to observing blood and violence, as evidenced by increased heart rates, perspiration, and self-reports of discomfort that often accompany such exposure. However, with repeated exposure, this negative emotional response habituates, and the child becomes “desensitized.” The child can then think about and plan proactive aggressive acts without experiencing negative affect. For example, Moise-Titus (1999) and Kirwil and Huesmann (2003) have shown that more aggressive college students show less negative emotional reactions to observing violence than do less aggressive students. Although it is difficult to know if the individual differences in those studies stemmed from dispositional differences or habituation, Drabman and Thomas (1974a, 1974b) have shown that young children become less emotionally aroused by violent scenes and more tolerant of aggression after just one exposure.

Didactic Learning Processes

Most persuasion theorists distinguish between influences on viewers’ attitudes and beliefs that operate through “peripheral” processing and influences that require “central” processing (see Petty & Priester, 1994). These concepts are usually applied to persuasive communications, but they represent a more general theoretical proposition that attitudes and beliefs can be changed by what the child observes through relatively “automatic”

cognitive processes of which the child may be unaware or through more “controlled and effortful” cognitive processes including thoughtful elaboration of observed information. The social-cognitive theory of observational learning allows that scripts, world schemas, and normative beliefs about behaviors can be acquired from observations without viewer awareness. Similarly, emotional desensitization does not require conscious awareness. Consequently, much of the media socialization process can happen outside the child’s awareness. For example, the ethnicity and gender of characters, the behaviors they accept as normative, the emotions they display in response to events—all these influence the child viewer’s cognitions, and the child may not be aware of the influence of these elements.

Nevertheless, research has shown that properly crafted didactic material and persuasive arguments that engender “central, effortful” processing can produce enduring well-integrated cognitions (Chaiken, Lieberman, & Eagly, 1989), as illustrated by carefully scripted depictions about social relations such as those found on *Sesame Street* and *Mr. Rogers’ Neighborhood*. Further, cognitive changes in middle childhood make children more active processors of media information, applying the schemas they have acquired and becoming more interested in the abstract, conceptual meanings of the material presented (Huston & Wright, 1997). Children during this developmental period become more receptive to the counterstereotypical (or stereotypical) messages and nuanced perceptions provided by both content directed at children and content directed at adults. Counterstereotypical messages received from the media during middle childhood and early adolescence (e.g., about alternative lifestyles) are probably particularly likely to be processed effortfully resulting in more lasting effects.

MODERATORS OF MEDIA SOCIALIZATION FOR CHILDREN AND ADOLESCENTS

The previous section reviewed the basic psychological processes by which media exposure influences children’s attitudes, behaviors, and emotions. However, as illustrated by the media effects studies we review later in this chapter, we know that youth are not equally affected by even the same media portrayal (e.g., a specific violent scene in a movie, a music video with sexual content). Thus, a crucial question is, “Why are there individual differences in the ways in which exposure to a specific type of media content affects the development of youths’ attitudes, behaviors, and emotions?” Researchers have identified many variables that act as moderators of the effects of media exposure. In this review, we present an organizational framework for understanding media effects on cognitions, behaviors, and emotions, based on our interpretation of the current body of research (see Figure 16.1). This framework includes the theoretical processes believed to underlie media effects, as well as five categories of moderators hypothesized to affect the degree to which media content will influence outcomes: the user’s motivations for viewing, the user’s characteristics, attributes of the media content, the viewing context, and cultural factors. In the next section, we review studies that provide empirical support for some of these moderators.

The User’s Motivations

According to the uses and gratifications theory of media effects (Katz, Blumler & Gurevitch, 1974; Rubin, 1986), children engage with the mass media for multiple rea-

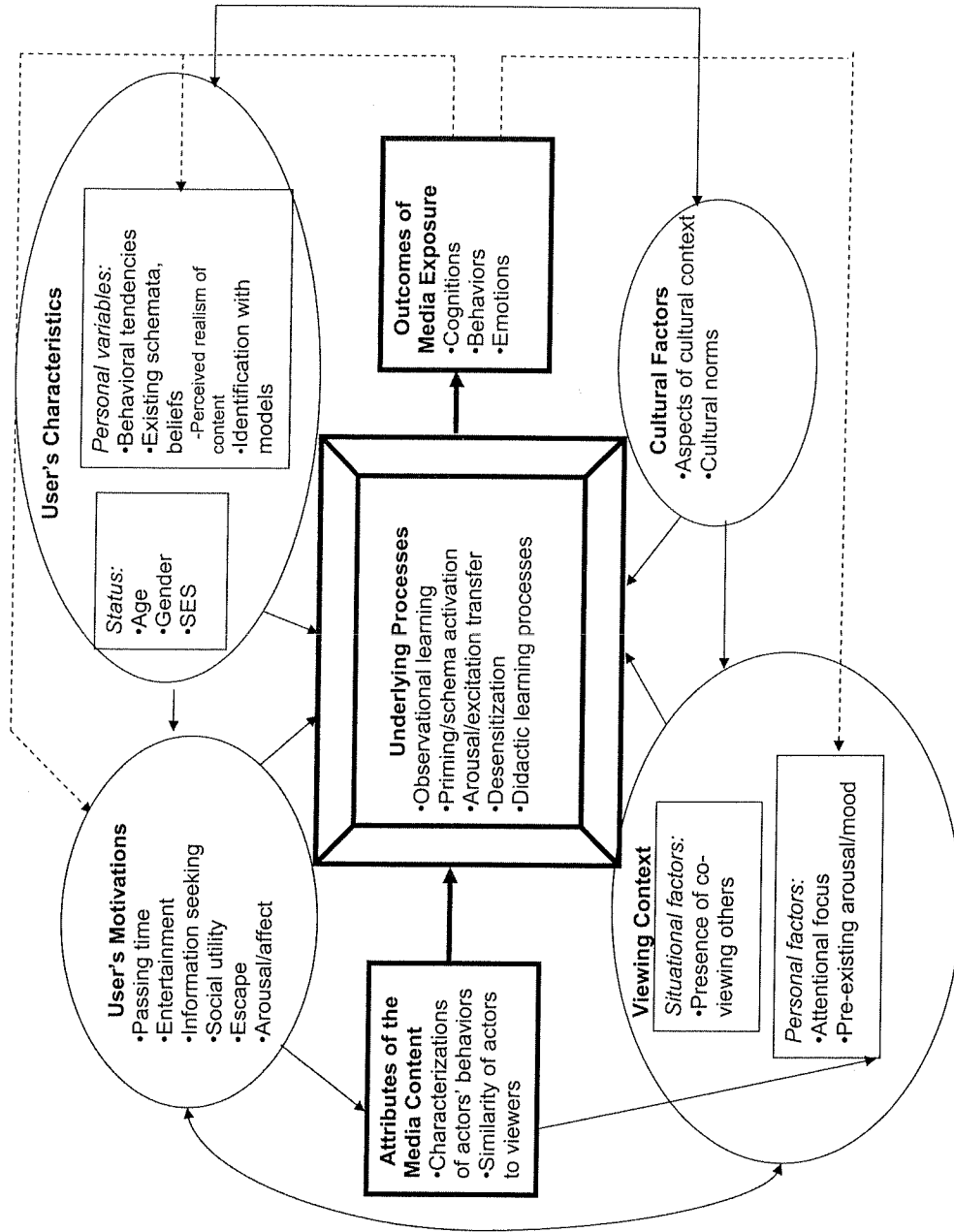


FIGURE 16.1. Organizational framework for understanding media effects on cognitions, behaviors, and emotions.

sons: simply to pass the time, to be entertained, to seek specific information, for social utility purposes (e.g., social comparison, to fit in with the peer group, to support identity formation), to escape boredom or aversive activities, and to achieve a certain level of arousal/mood state (Comstock & Scharrer, 2001; Roberts & Christenson, 2001; Valkenburg & Cantor, 2000). Of course, uses of and gratifications derived from media consumption are not static but evolve in step with developmental interests and needs. In any case, to the extent that an adolescent chooses a particular genre of media for the purposes of identity formation (see Larson, 1995), we can expect that the content can contribute significantly to the development of attitudes, emotions, and behaviors differently than if the genre were selected for another reason. For example, another adolescent might use the same media for entertainment purposes and not encode the content in a way that connects him or her to identity constructs, so we would not expect a similar effect of the media for that adolescent. As another example of the role of users' motivations, adolescent females, who are socialized to conflate social identity and feelings of self-worth with physical appearance concerns, may be motivated to selectively consume and idealize images of female beauty in media programs and magazines. Although research generally finds an association between exposure to idealized images and increased body image concerns (Harrison & Cantor, 1997; Stice & Shaw, 1994), individual differences motivating selective exposure moderate the degree of media impact. For example, Thomsen, McCoy, and Gustafson (2002) found that selective consumption of women's magazines for the purposes of feeling motivated to lose weight was associated more strongly with disordered eating and body image concerns than was sheer frequency of reading.

The User's Characteristics

Age

Paik and Comstock (1994), in a meta-analysis of the effects of TV/movie viewing on aggression, found that the strongest effects were on children less than 5 years old. The conclusion that even very young children are influenced strongly by what they observe around them and in the mass media is supported by the research described earlier showing that imitation is an innate process that operates from infancy on (Meltzoff & Moore, 2000).

Existing Behavioral Tendencies

Individuals who already have tendencies toward behaving a particular way are more likely to be influenced in that direction by relevant mass media exposures. For example, multiple studies show that aggressive individuals are more likely than less aggressive individuals to show short-term effects of viewing media violence and playing violent video games on subsequent aggressive outcomes (see Anderson et al., 2003; Josephson, 1987), although viewing violent TV programs has been shown to increase later aggression among children initially displaying even low levels of aggression as well (Eron, Huesmann, Lefkowitz, & Walder, 1972; Huesmann et al., 2003). More aggressive youth already have developed more aggressive scripts for dealing with conflict situations, and when they are exposed to violent content, these scripts are easily primed. In addition, new aggressive scripts can more easily be encoded if they are consistent with existing scripts, schemas, and beliefs.

Schemas and Beliefs

Children's existing schemas and beliefs about aggression and violence moderate the effects of media violence. Huesmann and colleagues (Huesmann & Eron, 1986; Huesmann et al., 2003) have shown that school-age children who believed that the violent programs they watched were realistic portrayals of life scored higher on measures of physical and verbal aggression 1 year and 15 years later compared to youth who perceived the programs as less realistic and who were less identified with aggressive protagonists. A compelling illustration of the importance of perceiving the media portrayal as realistic is a case study by Coleman (2002); in response to an ongoing dialogue with a young African American male, convicted of being party to a copycat murder after watching *Menace II Society*, Coleman notes, "[he] saw ghetto-centric media (in mythic proportions) and real life conflate to create a series of acceptable courses of action for him to choose from in a given situation" (p. 265).

Identification with Characters

Theoretically, individual differences in intensity of character identification should be one of the most important determinants of the media impact of idealized images. According to social-cognitive observational learning theory, children should learn most from characters with whom they identify. Indeed, the empirical evidence seems to support this prediction. In a classic study by Vidmar and Rokeach (1974), viewers high and low in prejudice alike reported finding *All in the Family* enjoyable and humorous. However, whereas high-prejudice viewers identified with the bigoted views of the main character, Archie Bunker, low-prejudice viewers dismissed Archie's prejudicial attitude and instead identified with the egalitarian struggle of the liberal son-in-law. Of course the attitudes acquired and reinforced from watching the shows would then differ for the two types of viewers.

The importance of identification has been illustrated even more clearly in the research on how exposure to certain media can increase eating disorders in young women. The degree to which young women identify with and idealize female icons increases the power of such role models. For example, Harrison (1997) found that women's "interpersonal attraction" (e.g., liking, wanting to be like, and feeling similar) to a favorite female character was associated with increased eating disorder symptomatology after controlling for mere exposure to shows featuring thin characters. Young women's levels of relational anxiety also may motivate more intense engagement with idealized images. Greenwood and Pietromonaco (2004) found that women with anxious ambivalent attachment styles (women who rely on others for emotional regulation and validation of self-worth) were most likely to identify with, idealize, and feel close to favorite female characters. Appearance idealization in particular was associated with increased body anxiety. Although young women who already are concerned with body image may be more prone to identify with and idealize ultrathin characters, this research highlights the relevance of understanding the interpersonal processes that may link these two phenomena. Further, it is likely that the recent "downward spiral" model—applied to the interaction between existing aggressive tendencies and increased aggression following selective exposure to media violence (Slater, Henry, & Swaim, 2003)—also is relevant to the complex relation between body anxiety and selective exposure to idealized images. Specifically, emotional

engagement with idealized media icons may reflect, reinforce, and exacerbate existing body concerns.

Research on media violence also has provided strong evidence of the importance of identification to the observational learning process. Identification with the aggressive character moderates the effect of violence viewing on aggression. Huesmann and colleagues (Huesmann & Eron, 1986; Huesmann et al., 2003) found that both over the course of a year and over the course of 15 years, those boys who viewed violence and identified more with the aggressive character behaved more aggressively than the boys who viewed violence but did not identify as much. For females, identification with aggressive characters also predicted increased subsequent aggression, but the interaction was not as strong.

Attributes of the Media Content

Characteristics of the media content moderate effects on outcomes. For example, children's attentional focus during media exposure plays a role in learning effects, and format and content can compel or repel children's attention. Rapid character movements, colorful characters, changes in sound, and frequent changes in camera angles attract attention (Comstock & Paik, 1991). Bickham, Wright, and Huston (2001) suggested that by "layering" bits of novel, slightly more complicated material into content that is familiar to the child, not only is the child's attention maintained, but the complex material becomes more familiar, enhancing learning effects.

The extent to which a child identifies with a character as discussed earlier depends on how the character is portrayed. According to observational learning theory, the likelihood that a child will acquire a certain modeled behavior is increased by the model's perceived attractiveness, power, charisma, and similarity to the viewer (e.g., similar age, gender, and race) (Huesmann, 1998; Huesmann et al., 2003). Advertisers have long used such models to promote products such as tobacco and alcohol among targeted populations, and studies have shown that adolescents' increased exposure to such ads are associated with adolescents' positive beliefs about the product as well as more positive perceptions of users (Atkin & Block, 1983; Atkin, Neuendorf, & McDermott, 1983). However, an equally important implication is that most children are more likely to be influenced in their behavior by powerful, attractive, charismatic heroes in dramas than by villains or undesirables. Scenes in crime dramas, westerns, and science fiction in which heroes use violence will teach more violence to the child viewer than scenes in which characters with whom they cannot identify use violence.

Another important moderating attribute of the content of a media presentation is whether the behaviors being observed in the scene are portrayed as justified and are rewarded. Both characteristics have been shown to increase the likelihood of behaviors being learned (Anderson et al., 2003; Bandura, 1986; Bandura et al., 1963). For example, Berkowitz and his colleagues (Berkowitz & Geen, 1967; Berkowitz & Powers, 1979) showed that to the degree to which violence was portrayed as justified, research participants were more likely to exhibit aggression in a laboratory setting in response to a prior provocation. Consequently, one should expect, for example, the greatest socialization toward acceptance of aggression to occur when a child is exposed to a movie with a physically attractive, charismatic hero who uses violence for justified reasons, to achieve desirable goals, and who is rewarded extensively for what was done.

The Viewing Context

The social context of media use is another viewing factor that moderates its effects. Parents can perform important coviewing functions. Coviewing parents can discuss the media content with their children by commenting critically about the realism of the portrayals and the potential consequences of protagonists' behaviors if enacted in the real world. These parent behaviors can reduce the potentially negative impact of violent media content (Anderson et al., 2003; Nathanson, 1999; Singer & Singer, 1986).

Siblings and peers are more likely than parents to be the coviewing others. Roberts et al. (1999) reported that one-third to one-half of children coviewed with siblings or peers. As an example of potential effects of coviewing with siblings, Wilson and Weiss (1993) found that preschool-age children who coviewed a frightening television program with their older siblings became less emotionally aroused than preschoolers watching the program alone; the older siblings provided emotional and physical comfort to their younger siblings. Regarding coviewing with peers, Huntemann and Morgan (2001) suggested that youths' media preferences reflected a "badge of identity that young people use to define themselves, both to themselves and to others" (p. 313). The authors argued that coviewing with peers can strengthen group identity, in both positive and negative ways. Huesmann and Taylor (2006) similarly suggested that video games often are played as part of a peer network, which is especially concerning given findings that both boys and girls across grade levels prefer violent video games (see Funk, 2002) and that playing violent video games influences aggressive behavior, thoughts, and emotions (Bushman & Anderson, 2001). Coviewing with peers also may function to reinforce traditional gender role socialization. Research suggests that opposite-sex coviewing of horror films, for example, may provide a context for boys to rehearse stereotypically masculine displays of stoicism, whereas the same context may socialize girls to exhibit stereotypically feminine displays of fear and dependence (Zillmann & Weaver, 1996).

Cultural Factors

The impact that media exposure has on a given individual is often relevant to his or her surrounding social-cultural context. The socializing influence of media may increase when the television content is resonant with everyday lived experience (Gerbner et al., 1994). For example, research has shown that television exposure was related to both general and personal perceptions of crime risk only for those individuals who had direct experience with crime in their own lives (Shrum & Bischak, 2001). Media images seemed to magnify their perceptions of real-life experience. On the other hand, the effects of exposure to media violence on aggression toward peers were lessened for children raised in kibbutz environments that emphasized prosociality (Huesmann & Eron, 1986).

Another interesting study illustrating the impact of cultural context on media influence comes from research on television consumption and body image disturbance among women in Fiji (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002). Prior to the introduction of Western media programs, Fijian women seemed buffered against subscribing to a thin ideal of female beauty; "going thin" frequently was used in the pejorative, suggesting declining health or well-being. However, 3 years after television viewing became more normative among Fijian residents and programs such as *Melrose Place* made their way into homes, young women reported increased disordered eating symptoms and

weight concerns. Although this increased symptomatology might reflect the impact of TV viewing becoming more normative in Fijian society, the authors raised the possibility that media effects on body image were actually exacerbated by the changing climate of Fijian social and economic life. The glamorous career women depicted on television may have represented attractive social models for Fijian women, who were increasingly entering the work force and imagining a different life from older generations. The authors also raised the possibility that peer culture moderated this impact, as the women described the extent to which new ideals for female roles and attractiveness influenced their peers, which further affected their own perceptions. Of course, in this study it is not easy to isolate the effects of multiple variables (e.g., changing cultural norms, media effects, and peer effects), or the directions of relations among those variables. Nevertheless, the study illustrates an interesting interplay among cultural norms, media portrayals, and individual adjustment.

SELECTED EMPIRICAL STUDIES OF MEDIA EFFECTS

Two recent volumes (Singer & Singer, 2001; Strasburger & Wilson, 2002) reviewed the wide range of research on media effects on children and adolescents, including effects on cognitive and academic skills, prosocial and aggressive behaviors, fears and anxieties, sexual attitudes and behaviors, gender role images, identity development, body image concerns, and substance use. In this section, our intent is not to provide an exhaustive review of those findings. Rather, for each of three developmental levels (preschoolers, elementary school-age children, adolescents), we review media effects on selected outcomes, and within those studies, we highlight findings for moderator effects.

Media Socialization and Preschoolers: A Focus on the Educational and Social Impact of Children's Programming

In 1968, the Children's Television Workshop (CTW) created *Sesame Street* with a major goal of fostering the educational progress of preschool children, especially those from low-income families (Palmer & Fisch, 2001). From its outset, CTW paired TV producers with educators and researchers to assess whether *Sesame Street* was effective in enhancing children's preacademic (language, reading, math) and social-affective skills. And, indeed, research has shown that those preschoolers who viewed *Sesame Street* most frequently gained the most in literacy and number skills, and in the following year, their teachers judged them to be more proficient in school readiness skills, quantitative skills, positive attitudes toward school, and peer relations (Mielke, 2001). In a nationally representative telephone survey in which data were collected from parents of 10,888 preschool through first-grade children, Zill (2001) found that the effects of more frequent *Sesame Street* viewing on parent-reported preacademic skills (e.g., letter recognition, counting to 20 or more, and telling connected stories when pretending to read) were stronger for lower-income viewers than for middle-income viewers. Although this cross-sectional study could not provide strong evidence about changes induced by viewing *Sesame Street*, it is possible that *Sesame Street* provided resources for learning for children from lower-income homes that already might be available to children from higher-income homes. Perhaps more impressive are results of short-term (Wright, Huston, Scantlin, & Kotler, 2001) and long-term (Anderson, Huston, Schmitt, Linebarger, & Wright, 2001) longitu-

dinal studies of the educational value of *Sesame Street*. Regarding long-term effects, Anderson et al. (2001) reported on the results of "The Recontact Study," which followed up 570 preschoolers in two cities (Topeka, Kansas, and Springfield, Massachusetts) when they were adolescents (average ages at follow-up were 16.6 years for the Topeka youth, 18.2 years for the Springfield youth). For both boys and girls, more frequent viewing of *Sesame Street* at age 5 predicted higher high school math and science grades and a composite score reflecting leisure reading. For boys, viewing *Sesame Street* also predicted higher high school English grades. These results held even after controlling for background variables (i.e., parents' education level and birth order).

In addition to underscoring the educational impact of specific programming targeting children, research also suggests that exposure to certain programs influences children's social attitudes and behaviors. Interestingly, however, this research generally indicates that prosocial content is most effective and lasting when program exposure is combined with and reinforced by additional interactive interventions (Mares & Woodard, 2001). For example, viewing a series of prosocial episodes of the program *Freestyle* was associated with decreases in fourth to sixth graders' gender stereotypes; however, the positive attitudinal impact of viewing was most pronounced when episodes were followed by teacher-facilitated classroom discussion (Johnston & Ettema, 1982). Similarly, Singer and Singer (1998) found that repeated viewing of episodes of *Barney* had a positive impact on preschool children's knowledge about polite social behavior, and that these results were notably stronger when combined with a postviewing lesson compared to viewing alone, or lesson alone.

Media Socialization in Middle Childhood: A Focus on the Effects of Violent Content on Aggression

Children's exposure to violent media is probably the most widely studied media socialization effect, dating back to the 1954 Kefauver hearings, and followed by other high-profile investigations (e.g., National Institute of Mental Health, 1982; Steinfeld, 1972; Eron, Gentry, & Schlegel, 1994; Joint Statement of Congress, 2000; Anderson et al., 2003), most of which concluded that media violence is a cause of aggressive behavior, particularly among children. It is impossible in this chapter to review adequately the large number of empirical studies that led to these conclusions; thus we focus here on a few meta-analytic reviews and one longitudinal study that illustrates the socialization effect. Extensive recent reviews exist that cover the material in much greater depth (e.g., Anderson et al., 2003).

The theory that explains how exposure to media violence would socialize children into behaving more aggressively has been described earlier. The longer-term socializing effects are best explained as due to the child's acquisition through observational learning of social cognitions (e.g., world schemas, normative beliefs, and scripts) that promote aggression and from desensitization of the child's negative emotional reactions to violence through repeated exposures to violence. Once acquired, such cognitions and lack of reactivity may persist throughout life and increase the risk of aggression throughout life.

In 1994, Paik and Comstock conducted the most comprehensive meta-analysis to date about the relation between TV viewing and aggressive or antisocial behavior. They analyzed 217 key studies conducted from 1957 to 1990. The studies included laboratory and field experiments, surveys, and time series designs. They found that the average effect

size for experiments was $r = .40$ and for field studies was $r = .19$. These effect sizes, while moderate to small in absolute terms, were highly significant. The effect sizes were significant for college-age students ($r = .39$), preschoolers ($r = .49$), 6- to 11-year-olds ($r = .32$), and 12- to 17-year-olds ($r = .23$). The overall effect sizes were also somewhat stronger for males ($r = .37$) than for females ($r = .26$). The Paik and Comstock review did not include many studies of video games, but in 2001 Anderson and Bushman published a meta-analysis of the effects of violent video games. They found 35 research reports through 2000. The results showed highly significant relations for aggressive behavior ($r = .19$), aggressive cognitions ($r = .27$), and aggressive affect ($r = .17$), which were similar across ages (children below age 19 vs. adults), gender, and study design (experimental vs. nonexperimental). These same authors (Bushman & Anderson, 2001; Anderson & Bushman, 2002) also conducted a new meta-analysis of the effects of violent media content for 280 studies conducted up to the year 2000 across multiple media types (television, movies, video games, comic books, and music). They found effect sizes very comparable to those reported earlier by Paik and Comstock (1994). Effect sizes across study designs (laboratory and field experiments, cross-sectional and longitudinal studies) ranged from $r = .17$ to $r = .23$.

Researchers of effects of violent media content on aggressive behavior generally have reached a consensus that "media violence increases the likelihood of aggressive and violent behavior in both immediate and long-term contexts" (Anderson et al., 2003, p. 1). This conclusion has emerged from the combination of the laboratory studies in which causation has been unambiguously demonstrated, the cross-sectional field studies in which correlations have been found in many different "real-world" settings, and the longitudinal studies in which it has been found that children who are exposed to more violence grow up to be more aggressive independently of any of the third variables that have been examined as potential explanations (existing aggression, low IQ, low socioeconomic status, poor parenting, etc.). A number of scholars (e.g., Abelson, 1985; Anderson et al., 2003; Rosenthal, 1986) also have noted that although correlations around .20 may seem to explain only small proportions of variance, it is the wrong statistic with which to evaluate the social significance of a public health threat. Effect sizes of $r = .20$ are very socially meaningful because a very large population is exposed to the risk factor, the effects are likely to accumulate with repeated exposure, and no other explanatory factors have much larger effect sizes. A number of writers have disputed the importance of media violence in socializing children into aggression (e.g., Fowles, 1999; Freedman, 2002; Rhodes, 2000), and numerous scholarly rejoinders to their critiques have been written (Huesmann, Eron, Berkowitz, & Chaffee, 1992; Huesmann & Moise, 1996; Huesmann & Taylor, 2006).

Let us now turn to one specific study that illustrates the long-term socializing effect of habitual exposure to media violence in childhood. This recent longitudinal study demonstrates empirically that repeated exposure to TV violence in childhood has lasting effects; it also illustrates the influence of moderator variables (Huesmann et al., 2003; Huesmann & Eron, 1986). The study began in the late 1970s when 748 children in two cohorts (6-year-olds, 8-year-olds) were assessed each year for 3 consecutive years. Children reported on their TV violence viewing and peers reported on the children's aggressive behavior using a classroom-based peer-nomination procedure. It was found that those boys and girls who regularly watched more TV violence in the first 2 years were significantly more aggressive in the third year than children who were equally aggressive

initially but did not watch the violence. However, for boys the effect was strongest when the boy not only watched the violence but strongly identified with the character (usually a “hero”) who was being aggressive.

Huesmann et al. (2003) reinterviewed the U.S. children 15 years later when they were in their early 20s. They then found that for both men and women childhood TV violence viewing measured 15 years earlier now predicted how aggressive they were as adults. This was true for predicting physical, verbal, and indirect aggression, even when the researchers controlled for childhood aggression, socioeconomic status, and academic achievement. (Alternatively, childhood aggressiveness was not related to adult TV violence viewing.) For example, compared to males who were low childhood TV violence viewers, males who were high childhood TV violence viewers were more likely to report having “pushed, grabbed, or shoved” their spouses (42% vs. 22%). Compared to females who were low childhood TV violence viewers, females who were high childhood TV violence viewers were more likely to report “shoving, punching, beating, or choking” someone who had made them angry (17% vs. 4%). The extent to which this effect is a product of “socialization into cognitions approving” of aggression was indicated by the fact that for both males and females normative beliefs approving of aggression was found to be a significant “mediator” of the 15-year effect (Huesmann et al., 1995).

Media Socialization and Adolescents: The Effect of Sexual Content on Attitudes and Behaviors

Perhaps the only other type of content that rivals the amount of violent content in the mass media is sexual content. Researchers have found that young people are likely to encounter up to 14,000 sexual images or messages on television per year (Harris & Associates, 1988, as cited in Strasburger & Wilson, 2002). It is important to note that sexual and violent content are not always separable; sexually explicit content is frequently confounded with violent content in the media (Malamuth & Spinner, 1980; Yang & Linz, 1990), a combination that has been cause for concern among researchers and parents alike. Another concern about the potential socializing influence of sexual media content is the way in which certain genres of media, such as music videos, depict women as passive sexual objects relative to men (Jhally, 1995). Researchers also have noted an asymmetry between the high frequency of sexual innuendo and behavior occurring on prime-time television programs (Kunkel, Cope, & Colvin, 1996) and the relatively low frequency of discussion surrounding abstinence, contraception, or the health risks of sexual activities (Cope-Farrar & Kunkel, 2002, as cited in Strasburger & Wilson, 2002). Although the sexual media landscape looks bleak, there are some media programs that raise public awareness of sexual health issues from rape to AIDS and contraception use (Agha, 2003; Folb, 2000).

Correlational investigations frequently find an association between exposure to sexual content and sexual attitudes and behaviors (e.g., Brown & Newcomer, 1991; Strouse, Buerkel-Rothfuss, & Long, 1995). However, this body of research also indicates that viewing habits and sexual behaviors are often moderated by gender, family environment, and/or viewing context. For example, Strouse et al. (1995) found that the associations between exposure to sexual content (e.g., in music videos) and increased sexual behavior and sexually permissive attitudes were stronger for adolescent girls than boys. These effects were most pronounced for girls who reported unhappiness and dissatisfaction with

their family environments. Further, research on exposure to sexually explicit media and onset of sexual intercourse is complicated by questions of causal direction. Although researchers have found increased likelihood of having engaged in intercourse to be associated with increased exposure to sexual content in the media (Brown & Newcomer, 1991), the authors note that it is unclear whether this suggests a selection effect (i.e., those who are already interested in sexual activity choose to consume sexually relevant media) or a socializing impact (i.e., increased sexual behavior is motivated by media depictions).

Experimental manipulations of sexually oriented media content appear to have at least short-term effects on adolescents' attitudes and behaviors that outweigh individual differences in motive and engagement. Greeson and Williams (1986) found that adolescents (7th and 10th graders) exposed to only 10 minutes of music videos were more likely to report acceptance of premarital sex than those who were not exposed. Much work also has been devoted to understanding the effects of violent sexual content on viewers' attitudes and behaviors (e.g., Donnerstein & Berkowitz, 1981; Linz, Donnerstein, & Penrod, 1984; Malamuth, 1984). That research has found evidence of a desensitization effect as a result of viewing violence; specifically, men who watched sexually explicit and violent films over a period of 5 days perceived less violence on the final day of viewing (suggesting that they had habituated to the violence) and evaluated a hypothetical rape victim more harshly than men who were not exposed to such content (Linz et al., 1984). Other research has found that the way a female character responds to sexual violence may play a critical role in men's subsequent perceptions (Donnerstein & Berkowitz, 1981). Viewing scenes in which a woman is portrayed as responding positively to sexual violence (what has been termed "rape myth sexual violence"; Harris, 1999, p. 226) relate to increased aggressiveness toward females but not males.

Not all portrayals of sexual behavior in the media are negative in impact. To the extent that sexual content in the media may stimulate open communication between parents and children, it may prove to be a highly useful medium. For example, although the former hit TV show *Sex and the City* (now in syndication) has sparked much controversy over its explicit focus on sexual activities and issues, it also has won awards for "accurate and honest representation of sexuality" (Hepola, 2003). In particular, the show has been lauded for its candid dialogue regarding abortion, an issue that is frequently avoided in many other programs, in which a strategically timed miscarriage might preclude the debate over termination considerations (Strasburger, 1995). Media programs also may disseminate valuable information about sexually transmitted diseases, such as AIDS, and increase public awareness. For example, increased exposure to contraception advertisements (e.g., condoms) in Kenya was associated with increased perceptions of self-efficacy in the domain of contraception and decreased discomfort in buying condoms (Agha, 2003). Moreover, fictional programming also may be useful in educating adolescent viewers about sexual awareness; a plot line in the popular teen program *Felicity* focused on date rape and included a rape crisis number at the end of the episode, and calls to the hotline increased significantly after the episode aired (Folb, 2000).

In general, the research evidence linking media exposure to sexual attitudes and behaviors in young adults is fairly persuasive. Correlational and experimental studies find that increased exposure to sexual content is associated with media-perpetuated attitudes about sex. Integrating the findings from one-shot exposures and habitual viewing pat-

terns, it seems plausible that chronic exposure to sexual-themed media might cultivate and perpetuate media-congruent attitudes. More research is needed to clarify the specific interactions among exposure, involvement, and personal experience on viewers' sexual schemas.

SUMMARY AND CONCLUSIONS

In this chapter, we first reviewed the frequency with which youth are engaging in media consumption. Next, we examined the underlying psychological processes by which exposure to media content exerts its effects. We stressed that it is necessary to distinguish between processes accounting for short-term effects (e.g., priming and excitation transfer and simple imitation) and processes accounting for long-term effects (e.g., observational learning and desensitization of emotional processes), as well as the relation between the two (e.g., chronically primed images and messages may become more easily accessible over time). In addition, we reviewed factors that act as moderators of the effects of media exposure on youth (e.g., characteristics of the user and characteristics of the viewing context). Finally, we illustrated how these processes and moderators were relevant to understanding the effects of educational content on preschoolers, the effects of violent content on children, and the effects of sexual content on adolescents. As some of the studies illustrate, by understanding the processes and moderators accounting for media effects, researchers can develop interventions that can weaken potential negative effects and strengthen the potentially positive effects of media content (e.g., promoting active adult covieing and postpresentation discussions).

A media socialization model that stresses ongoing interactions among content, moderators, processes, and outcomes also may prove highly useful for asking and answering questions about the impact of the latest interactive media (e.g., instant messaging, web-based games, and chat rooms). Researchers are just beginning to scratch the surface of how Internet use may influence the social development of children and adolescents (Wartella, Caplovitz, & Lee, 2004), and to date, "the empirical research on children and interactive media has yet to match the myriad of questions posed about its effects" (Wartella et al., 2004, p. 3). However, early investigations into this particular domain of media already highlight the utility of considering multiple moderators such as the user's age, gender, and motivation that may interact with medium-specific features to predict facilitation or inhibition of educational and social development (Lenhart et al., 2001). Ongoing research must keep pace with the emerging trends in media technology that command the interest and attention of young consumers.

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