

## Media Effects in Middle Childhood

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The telecommunications revolution of the twentieth century has created a new environment for our children. Radio, television, movies, videos, video games, and computer networks have assumed central roles in socializing our children while parents may have lost influence. For better or worse, the mass media have an enormous impact on our children's values, beliefs, and behaviors. No examination of middle childhood environments can be complete without understanding the influences of the mass media.

Of course, it is beyond the scope of this chapter to review all of the effects that the mass media have on youth in middle childhood. Excellent recent reviews of media effects on children are available (Anderson et al., 2003; Comstock & Paik, 1991; Huston & Wright, 1997; Palmer & Young, 2003; Singer & Singer, 2001). Instead, in this chapter, we will first elaborate the theory that has developed to explain the different ways in which media exert both short- and long-term influences on children's behaviors and cognitions. We will also review some of the characteristics of media presentations and some of the individual differences in children that have been shown to moderate these effects. Finally, we will review the empirical evidence on the effects of the exposure to the mass media in childhood on four dimensions of behavior and beliefs: (a) violent and aggressive behavior, (b) body image and obesity, (c) stereotype formation, and (d) learning and academic achievement.

### THEORETICAL RATIONALES FOR MEDIA EFFECTS

Media exposure can affect young people in middle childhood through *time displacement effects*, *short-term content effects*, and *long-term content effects*. Time displacement refers to the role of the mass media in displacing other activities. Short-term content effects are due to (a) priming processes, (b) excitation processes, and (c) the immediate imitation of specific behaviors (Bushman & Huesmann, 2001; Huesmann, 1988, 1998). Long-term content

effects seem to be due to (a) lasting observational learning of cognitions and behaviors, (b) activation and desensitization of emotional processes, and (c) didactic learning processes. Of course, these are general psychological processes that explain how children are influenced by what they see and experience whether it is at home, in the neighborhood, or in the media.

### Short-Term Effects

**Priming.** Priming is the process through which spreading activation in the brain's neural network from the locus representing an external observed stimulus excites another brain node representing a cognition, emotion, or behavior (Berkowitz, 1993). The external stimulus can be inherently linked to a cognition (e.g., the sight of a gun is inherently linked to the concept of aggression) (Berkowitz & LePage, 1967), 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 behaviors linked to them more likely. Although this effect is short-lived, the primed script, schema, or belief may have been acquired long ago.

**Arousal.** If mass media presentations arouse the observer, a range of behaviors may become more likely for two reasons: excitation transfer (Bryant & Zillmann, 1979) and general arousal (Berkowitz, 1993; Geen & O'Neal, 1969). Immediately following an exciting media presentation, *excitation transfer* could cause more aggressive responses to provocation, greater sexual arousal in response to sexual stimulation, and greater anxiety in response to anxiety provoking stimuli (e.g., tests). Alternatively, the increased general arousal stimulated by the media presentation may result in a decline in performance on complex tasks, diminished inhibition of inappropriate responses, and the display of dominant learned responses in social problem solving (e.g., direct instrumental aggression).

**Imitation.** The third short-term process, imitation of specific behaviors, can be viewed as a special case of the more general long-term process of observational learning (Bandura, 1986; Huesmann, 1998). Imitation is a powerful innate learning mechanism in humans that influences behavior from infancy through old age (Huesmann, 2005). Children mimic the social behaviors they see and reproduce these behaviors at later times (Bandura, 1977; Bandura, Ross, & Ross, 1963). Observing expressions on others' faces also leads people to automatically imitate those observed expressions and to experience the emotion that the other was experiencing (Zajonc, Murphy, & Ingelhart, 1989). As children grow into middle childhood, the imitated behaviors and emotions are combined into scripts for sequences

of behavior, and by middle childhood, whole social scripts have been acquired through repeated observations.

### Long-Term Effects

By middle childhood, according to these social cognitive models (Anderson & Huesmann, 2003; Huesmann, 1998), the scripts, world schemas, and normative beliefs that children acquire through observing others become more firmly encoded, more resistant to change (Huesmann & Guerra, 1997), and capable of exerting very long-term influences. To the extent that these acquired scripts are used and achieve desired goals, they become even more firmly encoded. One of the powerful characteristics of video games is that the act of playing the game involves not only observation of behaviors but also reinforcement of the behaviors that "win" the game.

Long-term effects of the mass media are also increased by the way the mass media and video games affect emotions. Through classical conditioning, fear, anger, or general arousal can become linked with specific stimuli after only a few exposures (Cantor, 1994, 2002; Harrison & Cantor, 1999). These emotions influence behavior in social settings away from the media source through stimulus generalization. Children may then react with inappropriate anger or fear in a novel situation similar to one observed in the media.

Repeated exposures to emotionally activating media or video games also can lead to habituation of certain natural emotional reactions through a process of "desensitization." Behaviors observed by the child viewer that might seem unusual at first start to seem more normative after being viewed many times. Emotions experienced automatically in response to a particular scene decline in intensity after many exposures. For example, most humans have a negative emotional response to observing blood, gore, and violence, as evidenced by increased heart rates, perspiration, and self-reports of discomfort (Cline, Croft, & Courier, 1973; Moise-Titus, 1999). However, with repeated exposure to violence, 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, making proactive aggression more likely.

Interestingly, desensitization of emotional responding does not require effortful cognition. It happens without children being aware of what is happening. Nevertheless, properly presented didactic material and persuasive arguments that engender "central, effortful" processing generally produce more enduring well-integrated cognitions that are resistant to change (Chaiken, Lieberman, & Eagly, 1989). Consequently, carefully scripted presentation about social relations such as those found on *Sesame Street*, *Mr. Rogers' Neighborhood*, or *Fat Albert and the Cosby Kids* may have

enduring socialization effects on middle childhood youth (e.g., Hearold, 1986).

Cognitive changes in middle childhood make children more active processors of media information; they apply the schemas they have acquired and become more interested in the abstract, conceptual meanings of the material presented (Huston, 1983; Huston & Wright, 1989). They become more receptive during this period to the counter-stereotypic (or stereotypic) messages and nuanced perceptions provided by both shows directed at children (e.g., *Freestyle*, *The Wonder Years*) and adult programming (e.g., *The Cosby Show*, *The Simpsons*, *Seinfeld*, *Friends*). Counter-stereotypic messages received from the media during middle childhood (e.g., about alternative life styles) are probably particularly likely to be processed effortfully, resulting in more lasting effects.

#### MODERATORS OF MEDIA EFFECTS

The effects of media content on children are moderated by (a) characteristics of the presentation, including both form and content; (b) characteristics of the child and how these interact with characteristics of the presentation; and (c) characteristics of the physical and human context in which they are exposed to media. Presentations that do not attract a minimum level of attention will have little influence. Although effects can occur through peripheral processing without cognitive resources being devoted to processing the material in a presentation, they cannot occur without a minimal level of attention (Bandura, 1994).

During "viewing," on average, children look at the television set for less than 40% of the time, though attention increases across middle childhood (Anderson, 1986). Consequently, form and content factors that attract and maintain attention to a presentation are important in determining the magnitude of effects. Factors that facilitate attention for young children include action, special effects, and comprehensible speech; attention is lower when there is lack of movement, extended still shots, eye contact with the viewer, and male voices (Anderson & Burns, 1991; Comstock & Paik, 1991; Huston & Wright, 1989). The latter are all factors that might normally be part of didactic messages directed at an adult audience.

There are clear exceptions to these general patterns (e.g., *Mr. Rogers' Neighborhood*), and as children develop these formal features become less important. Children in middle childhood attend to the combination of attention-grabbing formal features – movement, music, change of scenes – with content that demands the application cognitive resources to assemble elements into a narrative (Comstock & Paik, 1991). The formal features are still important because children in middle childhood recognize that these formal features signal content of interest (Huston & Wright, 1997).

Once the child attends, individual characteristics interact with the content presented to affect the response. For example, children are more likely to imitate behaviors that are rewarded than those that are not (Bandura et al., 1963). For youth in middle childhood, who already have a conception of the world around them, material that "contrasts" too much with their existing conception will have less effect than material that they can assimilate into their world schemas (Lord, Ross, & Lepper, 1979).

This principle helps to explain why children who already tend to behave in certain ways are more likely increase that behavior in response to media content (Bushman & Huesmann, 2001). Material that is perceived as telling about the world like it really is has more effect than material perceived as pure fantasy (Huesmann & Eron, 1986). The behavior and beliefs of characters with whom the child identifies have more effect than the behaviors and beliefs of other characters (Huesmann, Moise-Titus, Podloski, & Eron, 2003; Leyens & Picus, 1973).

Elements of the setting in which the medium is encountered affect its power. Video games that are played as part of a peer network and that are viewed as accepted and normative have more influence than video games played in isolation (Williams, 2004). Parents who regulate and discuss the movies and TV shows that children view change the impact of those shows (Nathanson, 1999). In summary, the impacts of video games, movies, television, and other media on youth in middle childhood vary substantially depending on their presentation, individual child characteristics, and the social context of exposure.

#### INFLUENCES ON AGGRESSION AND ANTISOCIAL BEHAVIOR

The methods used to study the relation between media violence and aggression fall into three major classes: (a) experiments in which the researcher manipulates exposure to media violence; (b) correlational studies, or one-time observational studies, in which exposure to violence and concurrent aggressive behavior are measured with surveys or observations; and (c) longitudinal observational studies in which exposure and behavior are measured on the same sample repeatedly over long periods of time. It is critical to integrate the findings of all three methods in reaching any conclusion.

#### Experiments

Generally, experiments have demonstrated that exposing middle childhood youth to violent behavior on film and TV increases the likelihood that they will behave aggressively immediately afterwards (see reviews by Bushman & Huesmann, 2001; Geen and Thomas, 1986; Paik & Comstock, 1994). In the typical paradigm, randomly selected children are shown either

**Learning and Body Image.** Television may influence children's body image. Television characters, especially women, tend to be thinner and more fit than typical Americans, and thinner characters are treated better than heavier characters (Fouts & Burggraf, 1999; Silverstein, Perdue, Peterson, & Kelly, 1986). Middle childhood viewers may learn that it is desirable to have a thin, fit body, and that any other body type is undesirable. Such beliefs and attitudes may translate into two very different behavior patterns among those whose bodies do not conform to the ideal. Some may diet or develop eating disorders; for others, reactance may intervene, leading to more (and less healthful) eating. Some individuals may simply respond to the stress of dissonance by eating; obesity researchers have observed that eating is a common response to distress, depression, and loneliness (Banis et al., 1988).

#### Television Viewing and Obesity: Empirical Data

Although the results of studies exploring the connections between television viewing and obesity are somewhat equivocal, they do suggest a relation between viewing television and being overweight or obese. A number of national studies employing representative sampling techniques have found that children who spend relatively more time watching television are more likely to be overweight or obese than their peers who watch less (Andersen, Crespo, Bartlett, Cheskin, & Pratt, 1998; Dietz & Gortmaker, 1985). This finding has been replicated with smaller, more homogenous yet widely diverse samples (Armstrong, Sallis, Alcaraz, Kolody, & McKenzie, 1998; Gable & Lutz, 2000). Some similar studies have found no relationship between television viewing and obesity (DuRant, Baranowski, Johnson, & Thompson, 1994; Robinson et al., 1993). Among these correlational studies, there is no readily apparent, systematic difference between studies that find significant relationships and those that do not.

Longitudinal studies exploring connections between television viewing during middle childhood and adolescent obesity are rare, and also yield mixed results. Some find a clear relation, with heavy television viewing during middle childhood predicting obesity even after controlling for numerous environmental factors (Gortmaker et al., 1996). Others find no relation (Robinson et al., 1993). No longitudinal analyses of the relation between early viewing and adult obesity are available. The question therefore remains, does viewing television cause obesity, or is it simply correlated with it for other reasons?

A single controlled field experiment suggests that television viewing causes obesity (Robinson, 1999). One group of third- and fourth-grade students in California was exposed to a school curriculum designed to decrease television viewing, while a matched group received no such curriculum. Compared to control students, those who received the

intervention watched less television at the end of the study, as indicated by both self- and parental-report, and they also had decreases in Body Mass Index (BMI), skinfold, and other indicators of obesity, even when ethnicity and socioeconomic status were statistically controlled.

**Television Viewing, Obesity, and Displacement of Physical Activity.** Most research fails to support the time displacement hypothesis, that passive television viewing displaces more active activities, as an explanation for the correlation of viewing with obesity. Although some studies do confirm a correlation between television viewing and physical activity (DuRant et al., 1994; Robinson et al., 1993), such relations are weak and generally occur in studies that do not link television viewing to obesity. Most studies on obesity in middle childhood find no relation between physical activity or physical fitness and television viewing (Andersen et al., 1998; Armstrong et al., 1998; Gable & Lutz, 2000; Robinson, 1999).

**Television Viewing, Obesity, Diet, and Nutrition.** The alternative hypothesis, that television viewing may influence obesity in middle childhood by influencing children's diets, receives more support. In fact, children who view more television have been found to eat more sugar and junk food (Gable & Lutz, 2000), to have less accurate nutritional knowledge, and to make worse dietary choices (Ross, Campbell, Huston-Stein, & Wright, 1981; Signorielli & Lears, 1992b; Signorielli & Staples, 1997). Children who watch more television gain faulty knowledge about nutrition from commercials for processed foods. This influences their food choices, which in turn may lead to obesity. This process is more likely to occur for children who learned less about nutrition from other sources.

#### Television Viewing and Body Image: Empirical Data

During middle childhood, some children are clearly influenced by the images of bodies they see on television, but this influence depends on both the nature of the message and how children respond to it. In one study, when fourth- and sixth-grade girls were shown idealized images of women's bodies accompanied by messages that emphasized comparisons between viewers and the images, the girls believed themselves to be less attractive; when the messages emphasized viewers' attractiveness or ability to become attractive, girls perceived themselves as more attractive (Martin and Gentry, 1997). Another study found that early elementary-aged girls who find moderate-weight characters more appealing had fewer symptoms of eating disorders (Harrison, 2000).

Children's unfavorable comparisons of their own bodies with those they see on television could produce stress that leads to excessive dieting or excessive eating. Studies of adults have documented altered eating patterns

a violent or nonviolent short film and are then observed as they play with each other or with objects such as Bo-Bo dolls. Children who see the violent film clip behave more aggressively immediately afterwards than those viewing nonviolence toward persons (Bjorkqvist, 1985; Josephson, 1987) and toward inanimate objects (Bandura, 1977). For example, Josephson (1987) randomly assigned 7- to 9-year-old boys to watch either a violent or a nonviolent film before they played a game of floor hockey in school. In some conditions, the referees carried a walkie-talkie, a specific cue that had appeared in the violent film, which was expected to remind the boys of the movie they had seen earlier. Among boys who scored above average on a measure of aggressiveness prior to the study, the combination of seeing a violent film and seeing the movie-associated cue stimulated significantly more assaultive behavior than any other combination of film and cue. The effect size was moderate ( $r = .25$ ).

In experiments like this, causal effects have been demonstrated for children from preschool age to adolescence, for boys and girls, for Black children and white children, and for children who are normally aggressive and those who are normally nonaggressive. The average size of the immediate effect produced is about equivalent to a .40 correlation (Paik & Comstock, 1994). In these well-controlled laboratory studies there can be no doubt that it is the children's observation of the violence that is *causing* the changes in behavior. The question then becomes whether these causal effects observed in the laboratory generalize to children's everyday lives. That is, does media violence cause aggression not just in the short run, but in the long run as well?

### Cross-Sectional and Longitudinal Studies

Empirical cross-sectional and longitudinal studies of children and youth behaving and watching media in their natural environments provide strong support that there are long-term effects on children's aggressive behavior. Although cross-sectional and longitudinal nonexperimental studies cannot establish causation, when coupled with the results from experiments, their results provide strong support for extending the causal conclusion demonstrated by the experiments.

The great majority of competently done one-time survey studies have shown that children who watch more media violence day in and day out behave more aggressively day in and day out (Paik & Comstock, 1994). The correlations obtained usually are between .15 and .30. Such correlations are not large by the standards of variance explained, but they are moderate by the standards of children's personality measurement, and they can have real social significance (Rosenthal, 1986). In fact, as Rosenthal has pointed out, a correlation of .30 translates into a change in the odds of aggression from 50/50 to 65/35 – not a trivial change. Moreover, the relation is highly

replicable even across countries (Huesmann & Eron, 1986; Huesmann, Lagerspetz, & Eron, 1984).

Complementing these one-time survey studies are the longitudinal, nonexperimental studies that have shown correlations between childhood viewing of media violence and later adolescent or adult aggressive behavior (Eron, Huesmann, Lefkowitz, & Walder, 1972; Huesmann et al., 2003; Johnson, Cohen, Smailes, Kasen, & Brook, 2002; Slater, Henry, Swaim, & Anderson, 2003; for reviews see Huesmann & Miller, 1994; Huesmann, Moise, & Podolski, 1997). Analysis of longitudinal data has also shown that early habitual exposure to media violence *in middle childhood* predicts aggressiveness beyond what would be predicted from early aggressiveness.

For example, in their 1972 analysis of males from age 8 to age 19, Eron et al. (1972) showed that the correlation between a preference for viewing violent TV programs at age 8 and aggressive behavior 10 years later was .31. This correlation remained significant even when initial aggressiveness and many other demographic and personal variables (e.g., IQ) were statistically controlled. On the other hand, behaving aggressively in middle childhood did not predict higher subsequent viewing of violence, making it less likely that the correlation was due to aggressive children turning to more violence (Eron et al., 1972).

In a comprehensive three-wave study of children who were interviewed as they moved through middle childhood (ages 6–8 or 8–10), Huesmann and Eron (1986; Huesmann, Eron, & Lagerspetz, 1984) found higher rates of aggression for both boys and girls who watched more television violence even with controls for initial aggressiveness and many other background factors. Children who identified with the portrayed aggressor and those who perceived the violence as realistic were especially likely to show these observational learning effects.

A 15-year follow-up of these children (Huesmann et al., 2003) demonstrated that those who habitually watched more TV violence in their middle childhood years grew up to be more aggressive young adults. For example, male children who were in the upper quartile on violence viewing in middle childhood were more likely to have been convicted of a crime; to have "pushed, grabbed, or shoved their spouse" in the past year; and to have "shoved a person" when made angry in the past year compared to all other males in the study. Among females, high-violence viewers were more likely to have "thrown something at their spouse" in the past year; to have "punched, beaten, or choked" another adult when angry in the past year; and to report committing a crime in the past year. These effects were not attributable to any of a large set of child and parent characteristics including demographic factors, intelligence, and parenting practices. Although there was some tendency for children who were more aggressive in middle childhood to watch more violence in adulthood, the much larger

effect was from watching violence in middle childhood to later aggressive behavior.

Another recent longitudinal study found similar bidirectional longitudinal effects for children moving from middle childhood into adolescence. Slater and colleagues (2003) obtained self-reports of violence viewing and aggressive thoughts, beliefs, and behaviors at four times between the middle of the sixth grade and the middle of the eighth grade. Growth curve analyses reveal significant effects of both contemporaneous and prior violence viewing on aggression, but use of violent media viewing was predicted only by contemporaneous aggression, not by prior aggression. At least one other longitudinal study has found a simple relation between the amount of general television viewing in late middle childhood or adolescence and subsequent aggression, but the mechanisms explaining these results remain obscure because content of the programs watched was not assessed (Johnson et al., 2002).

These longitudinal studies, when combined with current thinking about child development, suggest that middle childhood is a critical period for exposure to media violence to have lasting effects. The 7- to 11-year-old child has developed to the point where social cognitions related to aggression begin to be stable (Huesmann & Guerra, 1997). He or she is capable of processing the implied messages inherent in many of the violent shows about the acceptability of violence, and therefore of acquiring lasting scripts and schemas that promote violence. The aggressive behavior that results may make viewing violence on television even more likely because of the children's desire to justify their own behavior and the decreased popularity that aggression is likely to engender (Huesmann & Eron, 1986). This can produce a long-term downward spiral in behavior and viewing (Slater et al., 2003) continuing into adolescence and young adulthood. Although we do not have longitudinal studies that examine the lasting effects of exposure in earlier periods of a child's development, the existing longitudinal studies show that exposure between ages 6 and 11 has lasting effects consistent with this perspective. In contrast, there are few studies that show lasting effects for exposure to media violence for teenagers and young adults.

#### OBSESITY AND BODY IMAGE

Television viewing is often implicated in the dramatic rise in obesity among Americans generally, and among children specifically because viewers are physically inactive and because advertising encourages consumption of calorie-dense foods. Research findings seem to support a relation between viewing and obesity in middle childhood, but there is controversy about the conclusions to be drawn. Similarly, anorexia and other eating disorders have become more prevalent among American female youth, and some

have argued that the proliferation of ultrathin females in the media has contributed to this epidemic.

#### Theoretical Connections Between Television, Obesity, and Body Image Disorders

Obesity and eating disorders, like violence and aggression, are complex phenomena and are not caused by any single factor. Numerous biological and social factors promote or inhibit weight gain (for a review, see Yanovski & Yanovski, 1999). Any influence of television must be considered within a more complex framework; television is neither a necessary nor a sufficient cause of obesity or body image problems. It may be a contributing factor, though research is by no means unequivocal on the question.

*Displacement of Activities and Obesity.* The most commonly hypothesized mechanism by which television is believed to influence obesity is through time displacement. When children watch television, they are not engaged in physical activity; that sedentary behavior could increase the likelihood of obesity. If this is the case, more television viewing should be correlated with less physical activity, obesity, and poor physical fitness. Media influence is of particular concern because children in middle childhood spend more hours viewing television per day (three to four hours on average) than either adolescents or young adults (Comstock & Paik, 1991). Some scholars argue that television viewing is unlikely to displace physical activity because displacement occurs primarily between similar activities. Thus, passive entertainment like television viewing is most likely to displace other passive entertainment, such as reading, playing video games, or talking on the phone rather than highly active activities (see Neuman, 1995).

*Learning and Obesity.* The same processes that link media violence to real-life aggression may connect media content to obesity. Television, particularly for child audiences, is rife with commercial messages promoting unhealthy, sugar- and fat-laden foods (Kotz & Story, 1994; Taras & Gage, 1995). Children viewing messages presenting such foods as attractive, appealing, and even healthy may adopt positive attitudes and beliefs about such foods that would lead to greater consumption. Middle childhood is a critical period for shaping health-related attitudes and beliefs because attempts to establish patterns of healthful eating and exercise during this period are more durable than those undertaken later in life (Epstein, McCurley, Wing, & Valoski, 1990) and because obesity or being overweight in middle childhood is a strong predictor of adulthood obesity (Sorenson & Sonne-Holm, 1988).

immediately following exposure to media content that is emotionally provocative (Sheppard-Sawyer, McNally, & Fischer, 2000) or which depicts idealized body images (Harrison, Taylor, & Marske, 2004). Importantly, the way in which individuals respond to thin-ideal or emotionally provocative images is not uniform. In one study, normally restrained eaters increased their consumption of popcorn when watching an upsetting film (compared to a neutral film), although normally less restrained eaters decreased their consumption during the upsetting film (Sheppard-Sawyer et al., 2000). In response to idealized body images, some individuals increase their consumption of available snack foods, some decrease their consumption, and others seem unaffected, depending largely on sex and the size and nature of their self-discrepancies (Harrison et al., 2004).

Given the numerous factors that contribute to body composition, the increasing frequency of childhood obesity, the health risks associated with obesity, and data strongly suggesting a link between television viewing and increased risk of obesity, further research is clearly warranted. Although displacement effects have essentially been ruled out as explanations for the TV-obesity link, other explanations have been inadequately explored. Future research should consider the impact of television viewing on nutrition knowledge, body image, and eating. Further, researchers in this area would be well advised to adopt longitudinal methods, which could provide more clear answers to the role of these factors in a developmental context. Middle childhood is apparently a key time when eating behaviors are shaped; it is imperative that television's role in shaping them be clearly understood.

#### INFLUENCES OF MASS MEDIA ON STEREOTYPING IN MIDDLE CHILDHOOD

By observing how the world works on television, children develop systematic schemas about the workings of the world around them. Such schemas, when applied to a group of people identified by some salient characteristic, constitute stereotypes. It seems obvious that certain relatively unproblematic stereotypes are learned from television, particularly for groups with which children are unlikely to have extensive experience; such stereotypes may include beliefs that police officers wear uniforms and are helpful, that fire fighters are brave and friendly, or that doctors are intelligent and wear white coats. Other schemas or stereotypes are more problematic.

#### Television Viewing, Stereotyping, and Gender Roles

Middle childhood is a period of gender role dynamism. Although most children in this stage are well-versed in common gender stereotypes,

over the course of middle childhood, changing cognitive abilities allow children to deal with exceptions to gender stereotypes and accommodate more individual information (Stoddart & Turiel, 1985). Theoretically, the schemas developed in childhood will be maintained or amplified throughout the lifespan unless they are meaningfully and persistently countered.

Television frequently depicts fairly rigid and traditional gender roles: Men are leaders and work in male-dominated professions; women are followers, nurturers, frequently employed in support positions or not employed outside the home (Campbell, Breed, Hoffman & Perlman, 2002; Signorielli, 1989; for reviews see Durkin, 1985; Signorielli, 1990). Children who view this content are likely to learn it, just as children who view violent television content are likely to learn aggression-supportive beliefs and attitudes. Because middle childhood is a time when schemas become increasingly nuanced and complex, children may also be receptive to alternative information.

Gender constancy – the certainty that gender is consistent across all situations – is an important developmental milestone usually achieved by age 6 or 7. Some argue that achieving gender constancy allows children to transgress gender stereotypes because they know that gender does not change with behavior (Huston, 1983). If this is the case, then children in middle childhood should be more susceptible than younger children to counter-stereotypical portrayals. Others argue the opposite: that children seek out ways to act consistently with their new certainty about gender (Ruble & Frey, 1991), making them particularly susceptible to gender stereotypes portrayed on television.

#### Television Viewing and Gender Stereotyping: Empirical Data

A meta-analysis of television viewing and stereotype endorsement concluded that television content contains many sex stereotypes and that there is a relation between viewing sex-stereotyped television and accepting sex stereotypes (Herrett-Skjellum and Allen, 1996). Children who are heavy viewers of television in middle childhood (25 hours or more per week) score significantly higher on measures of gender stereotypes than light viewers (10 hours or less per week), particularly stereotypes about males and appropriate male behaviors (Frueh & McGhee, 1975; McGhee & Frueh, 1980).

Television viewing is correlated with sex-stereotypic attitudes toward household chores. Children who watch more television see chores as more sex-typed than those who watch less, although viewing has no impact on what chores children do (Signorielli and Lears, 1992a). The latter finding does not challenge the influence of television on gender stereotypes,

because parents may determine what chores children perform. Elementary school girls who watch relatively more television were more likely to associate negative attributes with female targets than girls who watch less television (Zuckerman, Singer, & Singer, 1980).

Experimental evidence also shows that sex stereotyping can be acquired from television viewing and that viewing can activate and reinforce stereotypes that have already been learned. For example, third graders watched television commercials that depicted women in traditional, stereotypical roles (e.g., serving men or preparing food for children) or women engaged in nontraditional roles (e.g., working as a doctor or farming). After viewing, both boys and girls who saw women in nontraditional roles scored higher on a scale evaluating women's competence and the appropriateness of women filling diverse roles than did children who viewed women in traditional, stereotyped roles (Pingree, 1978).

Even exposure to a single commercial has been shown to increase or decrease stereotyping. Ruble, Balaban, and Cooper (1981) showed 4- and 5-year-old children, who scored either high or low on a measure of gender constancy, a television commercial in which same-sex peers or opposite sex peers played with a gender-neutral toy. After viewing, children who were high in gender constancy spent much less time playing with the featured toy if they had seen the opposite-sex commercial as compared to the same-sex commercial or no commercial at all.

Counter-stereotypical or egalitarian portrayals on television can influence children as well. Perhaps the most notable demonstration is *Freestyle*, a television program developed specifically to challenge sex role stereotypes, particularly those relating to careers, held by children in fourth through sixth grades. This program, which was broadcast nationally and discussed as part of many school curricula, led children to be more accepting of diverse roles for women, especially when they discussed the programs in the classroom (Johnston & Ettema, 1982).

Overall, the research seems to support the notion that children learn schemas about what it means to be male or female from television, and that what they learn depends on what they see. Although a small group of correlational studies have found no such relation (Meyer, 1980; Perloff, 1977), there is ample correlational and experimental evidence that viewing television that is characterized by gender role stereotypes influences children's beliefs about appropriate gender roles, their reactions to characters who behave in ways which are consistent or inconsistent with those roles, and their own aspirations for the future. Although most television content tends to reinforce traditional stereotypes about women and men and their roles in society, counter-stereotypical content that offers attractive models can produce more progressive beliefs and attitudes among child viewers.

### Television, Stereotyping, and Race

The same processes that underlie the influence of gender and sex-role stereotypical television content apply to racial and ethnic stereotypes. Although very little research has been conducted which explicitly examines whether viewing television influences the nature of children's schemas about members of other ethnic or racial groups, there is abundant reason to predict that such influence may occur.

Children who have relatively little direct experience with members of other racial and ethnic groups in particular likely form schemas based on media depictions. Content analyses have shown that African Americans are disproportionately depicted as criminals in the news (Dixon & Linz, 2000), as aggressive or irrelevant in advertisements (Coltraine & Messineo, 2000), and as overweight in situation comedies (Tirodkar & Jain, 2003). At the same time, families of color are nearly as prevalent on television as they are in the population of the United States, and those families are diverse in their structure, makeup, and socioeconomic status (Dates & Stroman, 2001). Because there are no systematic content analyses of racial depictions in recent children's television programs clearly more research is needed to identify what information about issues pertaining to race and ethnicity are embedded in such programs.

There is some evidence that children learn racial stereotypes during middle childhood from what they see on television. For example, in one survey, children in third through fifth grades who watched more violent programs tended to endorse stereotypes of Blacks as less competent, and those who watched more programs with predominantly Black casts were more likely to endorse stereotypes of Blacks as superior athletes (Zuckerman et al., 1980). Viewing comedies, dramas, and sports programs was unrelated to racial stereotyping and prejudice.

Children, especially minority children, also learn from portrayals of members of their own racial or ethnic groups on television. Minority children who view more television would be expected to learn from the depictions of race and ethnicity they see. Although depictions of African Americans on television is clearly problematic, there are some indications that viewing more television featuring Black casts predicts relatively higher self-esteem among Black children, but viewing other types of television does not (McDermott & Greenberg, 1984; Stroman, 1986).

Children can and do acquire stereotypes from television during middle childhood. Evidence is strongest for stereotypes about gender but probably holds for stereotypes about race as well. What children learn, however, is strongly dependent on content; counter-stereotypical content can produce counter-stereotypical beliefs and attitudes. Middle childhood is probably a particularly key time for acquiring stereotypes for much the same reason



that it is a key time for acquiring aggressive and prosocial behaviors from the mass media. It is during middle childhood that social schemas, scripts, and normative or moral beliefs crystallize, become relatively stable and resistant to change, and begin to predict subsequent behavior. The mass media have powerful influences on such social cognitions at any time, but these influences are most likely to be lasting when they occur in middle childhood.

#### INFLUENCE OF THE MEDIA ON LEARNING AND ACADEMIC PERFORMANCE

Television is often blamed for lowering children's academic achievement. According to displacement theory, television viewing replaces more intellectually valuable activities, such as reading and homework. However, most evidence shows that, although television and video games may displace some leisure reading in middle childhood, they are more likely to displace movie viewing and radio listening, leaving reading and homework time fairly intact (Neuman, 1988). Television content may teach children to place less value on academic achievement and greater emphasis on other endeavors that are rewarded in the world of television. Television viewing may also directly impair children's ability to focus or engage in mental work (Harris, 1994).

#### Television and School Achievement: Empirical Data

Though few studies have been undertaken to examine their effects, available evidence shows that educational television programs developed for middle childhood audiences are successful in improving their viewers' problem solving abilities (Hall, Esty, & Fisch, 1990) and science knowledge (Clifford, Gunter, & McAleer, 1995; Goodman, Rylander, & Ross, 1993, as cited in Huston & Wright, 1997). Children can and do learn when they watch educational television which is designed for them.

Most research on television and learning largely ignores the question of content, however, instead addressing the broad question of whether overall television viewing is linked to diminished academic performance. Some studies fail to find a correlation (Anderson & Maguire, 1978), but much of this research suggests a negative correlation between time spent viewing television during middle childhood and school grades (Ridley-Johnson, Cooper, & Chance, 1983), IQ (Gortmaker, Salter, Walker, & Dietz, 1990), or other measures of intellectual achievement (Neuman, 1988). For example, a study of over 200,000 sixth graders in California revealed a linear decline in achievement test scores as time spent watching TV increased (Comstock & Paik, 1991). The decrement related to TV viewing was greatest for children from higher SES families.

Viewed on a larger scale, the relation between television viewing and academic performance is more complex. Using very large data sets, two studies found that, at low levels of viewing, viewing time is positively correlated with academic achievement. Negative relations were observed only for children who spend a great deal of time watching television (more than 25 hours each week), though "optimal" viewing amounts are much less (closer to 10 hours each week) (Neuman, 1995; Razel, 2001).

The question of whether excessive television viewing actually *causes* diminished academic performance has received less attention (for a review, see Huston & Wright, 1997). One longitudinal analysis of a national, representative sample found that television viewing during middle childhood did not predict IQ or performance on measures of reading and math ability in early adolescence after longitudinal controls were applied (Gortmaker, Salter, Walker, & Dietz, 1990). Displacement of academic activities has not been supported as a cause for the relationship between television viewing and academic achievement; in field studies comparing children in communities with and without television, Schramm, Lyle, and Parker (1961) observed only trivial differences in time spent reading or doing homework. Instead, such factors as parents' TV or reading habits predict both television viewing and academic performance (e.g., Neuman, 1995).

Although inadequate research on television's impact on academic performance is available for children in middle childhood, available research suggests that heavy entertainment television viewing during middle childhood is generally associated with diminished academic and intellectual performance. Television *can* be informative and educational, but very little of it is.

#### CONCLUSIONS

Exposure to television has a major impact on children's behaviors, beliefs, and achievement during middle childhood. Moreover, the impact of the mass media during middle childhood lasts into adolescence and adulthood. Children learn aggressive behaviors and positive attitudes about aggression from viewing television violence and playing violent video games in middle childhood; what they learn influences their behavior as adults. Children learn about gender roles from television and movies (and probably video games) and acquire more or less egalitarian gender role beliefs depending on what they watch. Children acquire gender and ethnic stereotypes from the mass media, and these stereotypes affect their judgments and behaviors. On the positive side, middle childhood is also the period when mass media counter-stereotypical portrayals can effectively influence children, and prosocial portrayals can effectively stimulate lasting prosocial tendencies.

In other domains of development, the nature of media influence is more ambiguous or less well understood. There is an association between watching large amounts of television and being overweight or obese, but we do not know precisely why. There are links between academic performance and television viewing, but the relation is complex. Despite these gaps in our knowledge, the existing research demonstrates that mass media are among the most influential elements in a child's environment during middle childhood, and they cannot be ignored.

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