

Media as Agents of Socialization

Prot, S. , Anderson, C. A. , Gentile, D. A. , Warburton, W. ,
Saleem, M. , Groves, C. L. and Brown, S. C.

Author post-print (accepted) deposited in CURVE February 2016

Original citation & hyperlink:

Prot, S. , Anderson, C. A. , Gentile, D. A. , Warburton, W. , Saleem, M. , Groves, C. L. and Brown, S. C. (2014) 'Media as Agents of Socialization' in Joan E. Grusec and Paul D. Hastings (Eds). Handbook of Socialization: Second Edition: Theory and Research (pp: 276-300). New York: The Guilford Press

<http://www.guilford.com/books/Handbook-of-Socialization/Grusec-Hastings/9781462525829/contents>

ISBN 9781462525829

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

This document is the author's post-print version, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

[CURVE](#) is the Institutional Repository for Coventry University

Media as Agents of Socialization

Text

Sara Prot¹, Craig A. Anderson¹, Douglas A. Gentile¹, Wayne Warburton², Muniba Saleem³,
Christopher L. Groves¹, Stephanie C. Brown¹

¹Iowa State University, USA; ²Macquarie University, Australia; ³University of Michigan-Dearborn and Institute of Social Research, University of Michigan, USA

“You were never there for me were you mother? You expected Mike and Carol Brady to raise me! I'm the bastard son of Claire Huxtable! I am a Lost Cunningham! I learned the facts of life from watching *The Facts of Life*! Oh God!” Jim Carrey as Ernie "Chip" Douglas in the movie “*Cable Guy*” (1996).

Unlike Chip Douglas from the movie “*Cable Guy*,” most children are not raised exclusively by television, without support from parents, teachers and other caregivers. Nonetheless, media play an increasingly significant role as socializing agents in the lives of children and adolescents. Over the past ten years, media consumption among youth has grown steadily. There have been significant increases in time spent watching television, listening to music, playing video games, and using the Internet and cell phones (Jones & Fox, 2009; Harris Interactive, 2008; Rideout, Foehr & Roberts, 2010). Youth in the U.S. now use media for an average of 7 and a half hours a day (Rideout et al., 2010).

The mass media explosion that began in the 1950s has dramatically changed the environment in which children are raised. Electronic media provide children with a variety of new learning opportunities and broaden the range of events children experience. Socialization is no longer constrained to the influences of family, peers and other people in children's

immediate surroundings. Indeed, most everything we experience as humans has an impact on the way the brain becomes wired, just as the things we eat have an impact on our body. As with a food diet, it is important to consider issues such as amount, content, and age-appropriateness when it comes to a media diet (Warburton, 2012a). Although most research has focused on potential negative effects of some types of media, it is equally important to examine positive effects of a ‘healthy’ media diet (Warburton & Highfield, 2012).

In the short-term, media use affects behavior through priming cognitions and eliciting affect, increasing arousal and prompting imitation (Anderson et al., 2003; Paik & Comstock, 1994). In the long-term, media influence beliefs, perceptions, behavioral scripts and affective traits, bringing about lasting changes in personality (Gentile, Groves & Gentile, in press; Huesmann & Kirwil, 2007). Significant effects of media use have been demonstrated in a wide range of domains of socialization, including violence, helping, and education. This chapter broadly summarizes research findings concerning entertainment-focused *mass* media as agents of socialization. We do not include media that have been specifically designed to teach educational content or health related behaviors. Some teaching/learning based targeted media products have been found to successfully teach their content, and represent a positive development in technology use, but fall outside the reach of this chapter. First, we describe the General Learning Model (GLM), a useful theoretical framework for understanding socialization mechanisms. Next, we review relevant research on mass media and socialization. Finally, we identify key questions for future research.

THE GENERAL LEARNING MODEL

The GLM (Barlett & Anderson, 2013; Buckley & Anderson, 2006; Gentile, Groves, & Gentile, in press)—derived from the General Aggression Model (Anderson & Bushman, 2002; DeWall, Anderson, & Bushman, 2012)—is a useful framework for understanding short- and long-term media effects. It describes processes through which personal

characteristics and environmental stimuli affect social behaviors in short-term contexts. It also shows how long-term attitudes, beliefs, and behavioral tendencies are formed through repeated exposure to various types of social encounters (including media use). We pay special attention to long-term learning processes because they are the key to media influences on socialization. Nonetheless, short-term processes are described as well.

In any immediate situation, social behaviors are influenced both by person factors (e.g., personality, mood, genetic predispositions) and by situation factors (e.g., media use, the physical environment, other people's actions). Person factors and situation factors influence one's present internal state— active cognitions, affect, and state of arousal. For example, playing a prosocial video game primes prosocial cognitions and increases positive affect (Saleem, Anderson, & Gentile, 2012a; 2012b; Greitemeyer & Osswald, 2009). These internal states jointly influence appraisal and decision-making processes. For instance, increased positive affect may increase benign (rather than hostile) attributions in ambiguous social encounter. Such immediate appraisals occur automatically and require little mental effort. In contrast, people engage in reappraisal only when sufficient mental resources are available and when the immediate appraisal is perceived as both important and unsatisfactory (Buckley & Anderson, 2006). Thus, normal appraisal and decision-making processes can result in either impulsive or thoughtful actions of many types, prosocial and antisocial. In turn, that action influences the current social situation, essentially starting a new social episode.

Through repeated priming and reinforcement of specific knowledge structures, exposure to any type of experience can lead to lasting influences on personality and social development (See Figure). Long-term effects occur through three interrelated processes: changes in cognitive constructs, cognitive-emotional constructs and emotional constructs. Cognitive constructs include perceptual schemata, beliefs and behavioral scripts. For example, long-term exposure to media violence leads to the development of a hostile attribution bias, a

tendency to perceive other people's harmful actions as hostile rather than accidental (Anderson et al., 2007). Violent media use also increases beliefs that aggression is an appropriate response (Möller & Krahe, 2009). Cognitive-emotional constructs include attitudes and stereotypes. For example, long-term media violence exposure is associated with proviolence attitudes (Funk et al., 2004). Stereotypical portrayals of racial groups in mass media influences real world evaluations of minorities (Lett, DiPietro, & Johnson, 2004; Saleem & Anderson, 2013). Emotional constructs include conditioned emotions and affective traits. High exposure to media violence leads to desensitization and reduced empathy towards violence victims (Carnagey, Anderson, & Bushman, 2007; Krahe & Möller, 2010; Mullin & Linz, 1995). These same psychological processes explain how prosocial media use increases empathy (Gentile et al., 2009; Greitemeyer, Osswald, & Brauer, 2010). In sum, people learn attitudes, beliefs and behaviors from social interactions, real and fictional. What types of beliefs and behaviors are learned from media is largely determined by content.

EMPIRICAL EVIDENCE OF SOCIALIZING INFLUENCES OF MASS MEDIA

Negative Media Effects

Violent Media Effects

Media violence effects on aggression and related outcomes have received a huge amount of attention and are well-understood. Experimental, correlational, and longitudinal studies, even experimental intervention studies confirm that violent media exposure is a causal risk factor for aggression (Anderson et al., 2003; Anderson et al., 2010; Bushman & Huesmann, 2012). Such effects have been found for movies, television shows (Huesmann, Moise-Titus, Podolski & Eron, 2003), video games (Anderson et al., 2010), music (Anderson, Carnagey & Eubanks, 2003), even violent comic books (Kirsh & Olczak, 2002). They have been replicated across age, culture and research teams.

Experimental evidence. Experimental research renders a clear picture of the

immediate causal influence of media violence exposure on aggression. Many experiments show that even brief violent media exposure can lead to immediate increases in aggressive thoughts, hostile affect, and aggressive behavior. Such effects have been found using a variety of different aggression measures, including delivery of aversive noise blasts, administration of painful electric shocks, increases in pushing, hitting, and kicking observed during free play, and forcing hot sauce on a person who is known to dislike spicy foods. Experimental studies have also shown that exposure to media violence leads to physiological desensitization to violence and decreases in empathy and prosocial behavior (Krahé et al., 2011; Carnagey, Anderson & Bushman, 2007). For example, one experimental study found that playing a violent video game for 20 minutes made participants slower and less likely to help a victim injured in a fight (Bushman & Anderson, 2009).

One key short-term mechanism involves priming. Simply presenting individuals with images of guns primes aggressive thoughts and increases later aggressive behavior; the types of guns having the biggest impact depends on one's life experience with guns (hunters vs. nonhunters) (Bartholow et al., 2005). The effects of a single episode of media violence exposure can dissipate quickly (Barlett et al., 2009), but repeated exposure leads to more lasting changes in emotions, cognition and behavior—i.e., learning.

Correlational and longitudinal evidence. Correlational studies demonstrate long-term effects by revealing significant associations between habitual violent media use and real-life aggressive behaviors. For example, preschoolers who typically watch violent television shows tend to exhibit more aggressive play tendencies (hitting, pushing, taking other children's toys; Singer & Singer, 1976). Violent media use among children is also associated with perceptions of violence as a legitimate means for solving problems (Dominick & Greenberg, 1972). Of course, drawing causal conclusions from correlational data is risky because of potential confounds, which is why many correlational studies include statistical

controls. For example, violent video game use is associated with violent behavior even after controlling for numerous potential confounds, such as psychopathy (DeLisi et al., 2013).

Longitudinal studies show that media violence use leads to long-term increases in aggression (Anderson et al., 2007; Christakis & Zimmerman, 2007; Eron, Huesmann, Lefkowitz & Walder, 1972). Huesmann and colleagues (2003) found that children who viewed more televised violence became more aggressive adults 15 years later, irrespective of how aggressive they had been as children. Long-term violent media use also leads to chronic desensitization to violence, reductions in empathy and prosocial behavior, and increases in aggressive thinking (e.g., Anderson et al., 2010).

Meta-analytic evidence. Meta-analyses integrate data from multiple studies and provide a comprehensive picture of violent media effects. In the media violence domain, over a dozen meta-analytic reviews have been conducted exploring the effects of media violence (e.g., Anderson et al., 2010; Bushman & Huesmann, 2006; Paik & Comstock, 1994). Overall, these meta-analyses provide consistent evidence of small to moderate sized effects on media violence on aggression, and on other theoretically-relevant variables.

Risk-glorifying media

Media often glorify risk-taking behaviors, such as reckless driving, smoking, binge drinking, and having unprotected sex. To give a few examples, the television show *Jackass* features young men engaging in a series of dangerous stunts such as pole vaulting over a sewage pit, and getting tattooed on a buggy ride. Racing video games such as *Need for Speed*, *Burnout*, and *Road Rash* reward players for reckless driving. Several recent studies show that exposure to such risk-glorifying media impacts both risk-taking inclinations and actual risk-taking behaviors (Fischer et al., 2011; Wills et al., 2009). These effects have been shown for different types of visual media, including advertisements, movies, and video games. In this section, special attention will be paid to two types of risk-taking behaviors that are influenced

by media use: substance use and risky sexual behaviors.

Substance use. Positive portrayals of substance use that do not show negative consequences are frequent in the media. Some examples include alcohol advertisements (Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005), and portrayals of alcohol use in movies and television shows (Wills et al., 2009).

Experimental studies have found significant short-term effects of media that glorify substance use. For example, viewing movies that portray drinking in a positive light causes an increase in participants' expectations that drinking alcohol will lead to positive outcomes, such as camaraderie (Kulick & Rosenberg, 2001). After viewing film sequences that include smoking, people report greater likelihood of smoking in the future (Hines et al., 2000).

Correlational studies, including some prospective studies, have found significant associations between exposure to risk-glorifying media and substance use in real life. For example, exposure to alcohol use in movies is related to early onset and to binge drinking among adolescents (Hanewinkel, Tanski, & Sargent, 2007; Sargent et al., 2006). Longitudinal studies yield similar effects. For example, early exposure to alcohol marketing predicts underage drinking (Collins, Ellickson, McCaffrey, & Hambarsoomians, 2007). Tobacco industry advertising predicts adolescent smoking onset (Pierce et al., 1998; Pierce, Lee & Gilpin, 1994). Adolescents' exposure to alcohol use in movies predicts increased alcohol consumption and alcohol-related problems measured years later (Wills et al., 2009). Similar longitudinal effects have been shown for smoking (Dalton et al., 2003; Wills et al., 2009).

Sexual content. Learning about sexuality is a normative maturational achievement in adolescence. Unfortunately, a substantial number of adolescents report that they do not get adequate information about sexuality from parents and schools (Brown, Greenberg & Burkel-Rothfuss, 1993). This is one reason why mass media play a major role in the sexual socialization of most adolescents (Strasburger, 2005). Indeed, research has shown that half of

all adolescents actively seek sexual content when choosing media (Bleakley, Hennessy & Fishbein, 2011).

Sexual content is frequent in the media, especially in movies, sitcoms, and music (Kunkel et al., 2005; Kunkel et al., 2007). However, portrayals of sexuality in the media often are unrealistic. Although over 75% of prime-time television shows have sexual content, they address the risks and responsibilities of sexual activity in only 14% of cases (Kunkel et al., 2005).

Frequent viewing of sexual content on television leads adolescents to overestimate the number of their peers who are sexually active (Buerkel-Rothfuss & Strouse, 1993; Ward & Rivadeneyra, 1999). Exposure to sexual content also changes teens' sexual expectations, attitudes, and intentions (Aubrey, Harrison, Kramer, & Yellin, 2003; L'Engle, Brown & Kenneavy, 2006; Ward, 2002). For example, males who view more sexual content in television shows are more likely to expect a broad range of sexual activities in relationships, whereas females who view a lot of sexual content in television shows are more likely to expect to initiate sex earlier in relationships (Ward & Rivadeneyra, 1999). Some research suggests that the impact of the media on sex-related "knowledge" is higher than the impact of family, peers, and school (Lou, Cheng, Gao, Zuo, Emerson, & Zabin, 2012).

Studies also find significant effects on sexual behavior. Exposure to sexual content in different media (television shows, movies, music and Internet sites) is linked to more actual sexual activity among adolescents (Bleakley, Hennessy & Fishbein, 2011). Exposure to a lot of sexual content on television predicts becoming sexually active at a younger age (Collins et al., 2004). Particularly alarming is the recent longitudinal finding that exposure to violent X-rated material leads to increased sexually aggressive behavior by children and adolescents (Ybarra et al., 2011).

It is important to note that not all sexual media content has such negative effects. When

media convey accurate information about sexuality and include socially responsible messages, they can effectively educate people about sexuality and promote responsible sexual behaviors (Brodie et al., 2001; Collins et al., 2003; DuRant et al., 2006).

Media and Stereotypes

Stereotypes are sets of socially shared beliefs about traits that are characteristic of members of a social category (Greenwald & Banaji, 1995). From a social-cognitive view, stereotypes are a part of a person's schema about a social category (Fiske & Taylor, 1991). Like other elements of an individual's world schema, race and gender stereotypes are influenced by what an individual observes across contexts (in the family, in the peer group, in the mass media). Social-cognitive models explain how observations of media can influence an individual's understanding of the social world (e.g., Bandura, 1986; Barlett & Anderson, 2013; Berkowitz, 1990; Crick & Dodge, 1994; Gentile et al., in press). Specifically, media are powerful socializing agents that provide initial or reinforcing information to create cognitive structures and associations between social groups and certain shared characteristics (Entman & Rojecki, 2000). Through repeated media exposure, individuals form associative links between a social group (e.g., black males) and the stereotypic characteristics (e.g., criminal). Eventually these associations become automatized; when the social group category is activated, the associated stereotypes are automatically activated as well (Dixon & Azocar, 2007). Media-based ethnic stereotypes are especially influential for individuals who do not have direct contact with depicted minority members (Fujioka, 1999).

Media and ethnic minority stereotypes. Even though ethnic minorities make up over 40% of the U.S. population, their representation in American TV and film roles was about 27.5% in 2008 (McNary, 2009). Unfortunately, most of these ethnic minority representations are negative (Greenberg, Mastro, & Brand, 2002; Children Now, 2001; Mastro & Behm-Morawitz, 2005; Mastro & Greenberg, 2000). The most widely studied group in U.S. media

has been African Americans (Harris, 2004). Several studies have found that the mainstream media juxtaposes African American characters with social problems, welfare, crime, poverty, drugs, and violence (e.g., Abraham, 2003). Other ethnic groups are under-representation in the media. Despite Latinos being a growing population in the U.S. (17% of the total population in 2011), only 2-4% of characters on prime-time TV are Latinos (Mastro & Greenberg, 2000) and a mere 1% of lead characters in top grossing, U.S motion pictures (Eschholz, Bufkin, & Long, 2002). Additionally, Latino images tend to be portrayed in negative or narrow roles when they do occur (Greenberg, Mastro, & Brand, 2002). Although limited (between 1 and 3% of characters on primetime American TV), the portrayal of Asian Americans seems to be more positive than other ethnic groups (Harris, 2004). Post 9/11, depictions of Arabs have increased in American media, but most of these portrayals are negative, associating Arabs with terrorism, violence, and aggression (Shaheen, 2009). Negative Arab stereotypes are present in newspapers, television shows, movies, web animations and even in children's literature (Nacos & Torres-Reyna, 2007; Nisbet, Ostman, & Shanahan, 2008; Schmidt, 2006; Van Buren, 2006). In video games, Arabs are almost always depicted as terrorists (Dill, Gentile, Richter, & Dill, 2005; Machin & Suleiman, 2006; Sisler, 2008).

Several studies examined the effects of media-based ethnic stereotypes on attitudes towards those groups. Overall, these studies find that even a single exposure to stereotypes in the media can influence real world evaluations of minorities (Dixon, 2006; 2007), provoke stereotypic responses (Gilliam & Iyengar, 2000) and guide intergroup outcomes (Mastro, 2003). For example, negative African American portrayals significantly influence the evaluations of African Americans in general (Mastro, & Tropp, 2004).

Portrayal of ethnic minorities in American television news is more negative than in fictional programming (Greenberg, Mastro, & Brand, 2002). When Dixon and Linz (2000)

examined 20 weeks of news programming from Southern California, they found that African American perpetrators were overrepresented (37%) compared to actual Southern California crime reports (21%). Such stereotypical depictions have a negative impact on the majority's perceptions and attitudes of the stereotyped groups. For instance, overrepresentations of African American criminals on local and network news can lead to a strong mental association between this group and criminality, creating the perception of African Americans as violent and deviant (Dixon, 2008). An experimental study found that stereotypical media depictions of African Americans post Hurricane Katrina decreased empathy and prosocial responding (i.e., policy support aimed to help Katrina victims) (Johnson et al., 2009). Similarly, amount of television news viewing subsequent to the 9/11 attacks was associated with college students' negativity towards Muslim peers (Lett, DiPietro, & Johnson, 2004).

Many video games undermine perceptions of minority groups by first, excluding them from taking on main character roles, and second, portraying them through stereotypic images (Children Now, 2001). A content analysis revealed that over 68% of main characters are White, with 11% African American and 11% Latino (Dill et al., 2005). Empirical research in this area is limited, but the effects of video game-based stereotypes on attitudes should theoretically be the same as other forms of media. Indeed, a recent study found that playing a video game that portrays Arab as terrorists increased college students' anti-Arab bias and their perceptions of Arabs as aggressive (Saleem & Anderson, 2013).

Media and gender stereotypes. Media depictions of gender are also problematic. Content analyses of video games reveal that the majority of characters are males (70%), and female characters are often presented as highly sexualized (Dill et al., 2005; Beasley & Collins-Standley, 2002). The Screen Actors Guild noted that male actors represent the majority of TV roles, especially in the supporting category, with about two roles for every female role (McNary, 2009). Content analyses of popular films reveal similar trends (Smith

& Cook, 2012). Additionally, women hold only 34.4% of all jobs in prime-time programs as opposed to 47% of the actual labor force in 2011.

In one experimental study, men were exposed to media-based stereotypical portrayals of women gave lower credibility to victims of sexual harassment and rape cases than men who exposed to non-stereotypic portrayals of women (Murphy, 1998). A meta-analysis of 31 studies found a positive correlation between exposure to media-based gender stereotypes and gender stereotypic attitudes and behaviors (Oppliger, 2007). Furthermore, exposure to physical appearance ideals in the media is associated with poor body image (Dohnt & Tiggemann 2006) and self-destructive behaviors such as pathogenic dieting practices (Thomsen et al. 2002). For example, researchers have found that media variables accounted for 15-33% of the variance in measures of adolescent girls' drives for thinness, body dissatisfaction, bulimic behaviors, and thin ideal endorsements (Botta, 1999).

Positive Media Effects

Prosocial Media Effects

The positive impact of media on prosocial behavior (defined as voluntary behavior intended to benefit another) has received much less research attention than negative effects of media. But, there is a growing research base, much by the same research teams that study violent media effects. Existing studies show consistent effects across research study types and media types; exposure to prosocial media can lead to increases in prosocial behavior in both the short- and long-term.

Media without prosocial messages. Interestingly, media do not need to have a prosocial message to promote prosocial behavior. Media that create a positive mood may facilitate helping behaviors without providing any sort of overt guidance. In particular, music without lyrics can create or enhance desired mood states or to counteract undesired ones, and can imbue such feelings as tranquility, peacefulness and happiness as well as other positive

emotions (see Bruner, 1990; Roberts et al., 2003). When music induces a positive mood, it can have a number of positive effects, including increases in helping behavior (Fried & Berkowitz, 1974; North et al., 2004) and decreases in anger, aggressive thoughts and aggressive behaviors (Krahe & Bienick, 2012). Similarly, a recent experiment by Whitaker and Bushman (2013) found that participants who played a relaxing video game (but did not have overt prosocial messages) behaved less aggressively and more helpfully than those who had just played violent or neutral games.

Media with prosocial messages. Most prosocial effects research has looked at media that either provide prosocial messages or model prosocial behavior. Early television studies found that for children watching prosocial television was positively associated with helpful behavior and prosocial attitudes (Mares & Woodard, 2005; Rosenkoetter, 1999; Sprafkin & Rubinstein, 1979). Furthermore, one longitudinal study (D. Anderson et al., 2000) found that children who regularly watched the prosocial television show *Blues Clues* had greater increases in prosocial behavior over time than children who did not watch it.

Video games. Several recent studies have examined the impact of playing prosocial characters in nonviolent video games (*Super Mario Sunshine*, *Chibi Robo*, *Firefighters: Saving Lives*). For example, playing a prosocial video game can lead to significant decreases in hurtful behavior and increases in helpful behaviors (Gentile et al., 2009; Greitemeyer et al., 2012; Saleem et al., 2012b). Other prosocial game effects found in experimental studies include: increasing the player's likelihood of helping an experimenter with a mundane task (Whitaker & Bushman, 2013), coming to the aid of a female experimenter being harassed by an ex-boyfriend (Greitemeyer & Osswald, 2010), increasing positive emotions (Saleem, Anderson & Gentile, 2012a), increasing empathy (Greitemeyer, Osswald & Brauer, 2010), increasing prosocial thinking (e.g., Greitemeyer & Osswald, 2010; Narvaez et al., 2008), and reducing hostility-related thoughts and emotions (e.g., Greitemeyer & Osswald, 2009;

Greitemeyer et al., 2010; Saleem et al., 2012a).

Longitudinal and cross-sectional studies of prosocial video games are fewer in number, but yield findings consistent with theory and the experimental studies. Prosocial video game play is positively correlated with cooperation, helping and sharing, even when other factors that can affect prosocial behavior are taken into account (Gentile et al., 2009; Linder & Gentile, 2009). Importantly, recent studies have tracked such changes over time. For example, Gentile et al. (2009) found that increases in prosocial behavior were linked with prosocial game playing over a 3-4 month period. Prot, Gentile, Anderson, et al. (in press) assessed TV and video game habits, empathy, and prosocial behavior over a two year period in a large sample of Singaporean children. They found that early exposure to prosocial TV and video games led to increased prosocial behavior, that this effect was partly mediated by increases in empathy, and that violent media had the opposite effects.

Music. Experiments using music with prosocial lyrics have yielded similar results. Compared to music with neutral lyrics, music with lyrics about helping and cooperation leads to increases in prosocial thoughts, greater empathy and a greater helping in the laboratory (Greitemeyer 2009a, 2009b), as well as kinder behavior in the real world (i.e., increases in tipping at a restaurant; see Jacob, Guéguen & Boulbry, 2010). Prosocial lyrics also have been shown to reduce aggression-related thoughts and feelings and to reduce aggressive behavior, primarily through reductions in aggression-related feelings and increased empathy (Greitemeyer, 2009a, Greitemeyer, 2011).

Overall findings. Regardless of media type or study type, recent evidence converges to show that nonviolent media with prosocial content have a positive effect on behaviors that help others. The behavioral effects appear to be mediated changes in thoughts and feelings.

Educational Media

Even though time with entertainment media can harm school performance (Anderson et

al., 2007; Sharif & Sargent, 2006; Weis & Cerankosky, 2010), educational media can improve a variety of academic skills. Longitudinal studies have shown that educational television can have long-term educational benefits (D. Anderson et al., 2000; Ennemoser & Schneider, 2007). Educational program viewing predicts development of reading competencies in early and middle childhood (Ennemoser & Schneider, 2007). Viewing educational programs at a preschool age is associated with better grades and reading more books in adolescence (D. Anderson et al., 2000). Interestingly, interactive shows that prompt children to actively engage, such as *Blue's Clues* and *Dora the Explorer*, may be especially effective teachers (Linebarger & Walker, 2005).

Educational video games also can have significant educational benefits. Video games have several characteristics that make them effective teachers: they require active participation, provide clear goals, give immediate feedback, adapt to the student's level, and encourage distributed learning (Gentile & Gentile, 2008). Educational video games have been used to teach children and adolescents a range of school subjects such as mathematics, reading, and biology (Murphy, Penuel, Means, Korbak & Whaley, 2002; Corbett, Koedinger, & Hadley, 2001). Educational games can also be used to teach youth about specific health conditions and encourage health-promoting behaviors (Brown et al., 1997; Kato, Cole, Bradlyn, & Pollock, 2008; Lieberman, 2001).

In addition, numerous studies demonstrate that media can be purposefully used as a positive socializing influence (Lemieux, Fisher & Pratto, 2008; Singhal, Cody, Rogers, & Sabido, 2004). For example, researchers have found that watching the television show *Barney & Friends* can teach children norms of polite social behavior (Singer & Singer, 1998). Findings from several studies indicate that responsible sexual behavior can be promoted through music (Lemieux, Fisher & Pratto, 2008), radio drama (Valente et al., 1994) and television shows (Collins et al., 2003).

Positive Effects on Ethnic Stereotypes and Gender Socialization

Just as stereotypes in the media increase stereotype thinking by consumers of those media, exposure to counterstereotypical media exemplars can reduce stereotypical attitudes (Bodenhausen et al., 1995; Dasgupta & Greenwald, 2001; Ramasubramanian, 2011).

However, note that even a very positive portrayal may contribute to misconceptions. For example, some White viewers of *The Cosby Show* cited the Huxtables as examples of why affirmative action is no longer necessary (Jhally & Lewis, 1992).

Media also can have positive effects on gender role socialization and gender stereotyping. Repeated TV appearances of women in traditionally male occupations can lead to more open attitudes in preteen girls towards considering these occupations (Wroblewski & Huston, 1987). Listening to music with proequality lyrics leads to more positive attitudes and behavior toward women (Greitemeyer, Hollingdale & Traut-Mattausch, 2012).

Parental Involvement in Media Use

Parental involvement in media use can act as a protective factor that promotes positive effects of media and mitigates negative effects (Gentile et al., 2012; Nathanson, 1999, 2004). However, the type of parental involvement matters. Three types of parental involvement in media use have been identified: active mediation, restrictive monitoring, and covieing.

Active mediation consists of conversations parents have with children in which they explain or discuss media content. Active mediation predicts several positive outcomes, such as enhanced learning from television (Valkenburg, Krmar & deRoos, 1998) and skepticism toward televised news (Austin, 1992). Active mediation has also been linked with reduced negative effects of advertising (Buijzen & Valkenburg, 2005), news (Buijzen, Walma van der Molen & Sondij, 2007), and violent media content (Nathanson, 1999, 2004)

Restrictive monitoring involves posing explicit rules about media content and media time. Restrictions on time use yields both lower media consumption (Atkin, Greenberg, &

Baldwin, 1991; Rideout et al., 2010) and better school performance (Gentile, Coyne, & Walsh, 2011; Gentile, Lynch, Linder, & Walsh, 2004). Having rules restricting violent media content may mitigate media violence effects, beyond the direct effect on reducing time spent on violent media, perhaps by conveying family antiviolence attitudes (Anderson et al., 2007; Grusec, 1973; Nathanson, 1999).

Coviewing involves watching television or playing videogames together with children. Several studies suggest that coviewing may enhance effects of both positive and negative media content. Coviewing educational television has been shown to enhance children's learning (Salomon, 1977). On the other hand, coviewing of violent television can exacerbate media violence effects (Nathanson & Cantor, 2000).

Given the significant effects of parental involvement in media use, it is worrying that many parents do not monitor their children's media consumption. Only 52% of children in the U.S. report that their parents have rules concerning computer use, 46% for television use, 30% for video game use and 26% for music (Rideout, Foehr & Robert, 2010).

EMERGING SOCIALIZATION DOMAINS AND EFFECTS

In this section, we briefly review several emerging domains for which it is clear that modern media are involved in socialization but research is sparse or inconclusive.

Cell Phones, Texting and Sexting

Cell phone use by young people has increased dramatically. Today, 78% of American adolescents own cell phones, compared to only 45% in 2004 (Lehnart, Hitlin & Madden, 2005; Madden et al., 2013). About one-third of 8- to 10-year-olds use cell phones (Rideout et al., 2010). Young people average 30 minutes a day talking on a cell phone and send about 60 text messages (Lenhart, 2012; Rideout, et al., 2010). Surprisingly, only 14% of parents set rules about texting and only 27% limit the time spent on voice calls (Rideout et al., 2010).

Texting is a popular mode of communication by children and adolescents (Lenhart et

al., 2010). The majority of text messages are used to enhance and maintain intimate relationships, especially in friendships and in romantic relationships (Thurlow & Brown, 2002). Adolescents also use texting as a means of civic engagement (Lenhart et al., 2008). Voice calls are more commonly used to communicate with parents (Lenhart et al., 2010). Cell phones provide a way for parents to monitor and provide support to their children. There is limited mixed correlation evidence concerning impact on socialization, with some positive and some negative effects (Weisskirch, 2009). In sum, using cell phones does not necessarily lead to better (or poorer) parenting, parent-child relationships, or socialization experiences. But, high cell phone and texting use by youth has led to concerns about potential adverse effects (Zhao, Qiu & Xie, 2012), but research has lagged.

One concern receiving attention is sexting— sending sexually explicit or suggestive images via cell phones (Mitchell et al., 2012). About 15% of U.S. adolescents report having received messages with sexual content, whereas 4% report sending them (Lenhart, 2009). Older adolescents are more likely to send sexual photographs (8% among 17-year-olds compared to 4% among 12-year-olds). Thus, sexting is not a normative behavior, but it a sizeable minority do engage in it. Such behavior merits research attention as it can result in considerable distress both for youth receiving images and for youth appearing in images (Mitchell et al., 2012). Recently, researchers have begun exploring the contexts in which sexting occurs, motivations for sexting and associations between sexting and risky sexual behaviors. Sexting most commonly happens in existing romantic relationships, but is sometimes also done as a prank or as a means to start a new relationship (Mitchell et al., 2012). A third of such incidents have been found to be related to aggravating factors, such as alcohol or drug use (Mitchell et al., 2012). There is some evidence that sexting may lead to other risky sexual behaviors, but this research is currently limited to cross-sectional correlational studies (Benotsch et al., 2013). Of course, there are numerous reports of how

sexting is used to embarrass and harass other youth, occasionally leading to suicide.

Longitudinal studies are needed to explore predictors and consequences of sexting as well as to explore prevention and intervention methods.

Media and Identity Development

A key part of human development is the creation of a unique identity— a distinctive set of attributes, beliefs, desires and principles that individuals think distinguishes them from others— as well as group identity (Fearon, 1999). Identity formation is a particularly salient task for teens (Erikson, 1968), a time also characterized by considerable media use. The media with which children and youth identify can become incorporated into their personal and social identities (Warburton, 2012b), for good or ill.

Although a preference for any type of media can become incorporated into a person's identity, research most often examines the role of music preference. Music that a child likes may provide messages for how to behave (both in lyrics and video clips), and admired musicians may behave in ways that can be imitated. Thus, preferred music and musicians can influence a child's beliefs, feelings and behavioral tendencies, and these in turn can become part of who the child 'thinks they are' (Warburton, 2012b). As Roe noted in 1996, "music plays a central role in the process of identity construction of young people. This process includes not only elements of personal identity but also important aspects of national, regional, cultural, ethnic, and gender identity" (p. 85).

Given the extensive research showing causal long-term effects of antisocial and prosocial media on behavior, it is reasonable to expect corresponding positive and negative effects on identity development. However, more research is needed on this topic.

Media and Social Networking

Social networking media and microblogs. More than half of US teenagers log into their favorite social networking site at least once a day; almost a quarter log 10 times a day or

more (O’Keeffe & Clarke-Pearson, 2011). Clearly, social networking through websites such as *Facebook* and *LinkedIn* and microblogs such as *Twitter*, play an important role in developing and maintaining social relationships for many people (Rideout et al., 2010). Whether the effects of these new socialization techniques are generally positive or negative for youth is unclear, and probably is too broad a question. Social media have some well publicized problems, including privacy issues, predatory behavior, and cyberbullying (Barlett et al., in press). But, they also play a positive role in many people’s everyday lives. For example, O’Keeffe and Clarke-Pearson (2011) suggest that social networking media provide youths with opportunities for (1) engaging with the wider community (through volunteering), (2) developing creativity through the sharing of artistic endeavors, (3) sharing and developing ideas, (4) developing increased tolerance through the expansion of social networks to include greater diversity, and (5) fostering one’s individual identity and unique social skills. It is important to add that social networking has also been linked with enhanced learning opportunities (Boyd, 2008; Borja, 2005), better access to health information, and better health outcomes (increased adherence to medical treatments; see Krishna, Borne & Bales, 2009). But, research on long-term positive and negative effects is relatively sparse.

Multi-media devices and MMORPGs. Multi-media technology such as broadband capable mobile devices also make it possible for people to reach out to another person at any time of the night or day using speech, email, text messaging, picture images or person to person video conferencing. Such devices markedly increase the options for direct and delayed interpersonal communication, and thus the potential for connectedness between a person and their social networks (Warburton & Highfield, 2012). But whether this increased accessibility results in better, poorer, or mixed outcomes for youth development is unclear.

Massive Multi-Player Online Role Playing Games (MMORPGs) such as *World of Warcraft* and *Star Wars: The Old Republic* are online video games that can have millions of

subscribers and hundreds of thousands of players at any given moment. MMORPGs have become increasingly popular, one of the attractive features being the opportunity for social networking. For example, in *World of Warcraft*, players typically gather into guilds that work together within the game, and multiple players from the same guild can connect to each other in real time via audio headphones. Of course, such online communication can also lead to negative consequences. That is, online communication does not always lead to benefits equal to face-to-face communication and can result in lowered well-being (Pea et al., 2012).

CONCLUSION

The rapid expansion of research on media effects has increased our understanding of the roles media play in the socialization process. Media have significant socializing influences across a wide range of domains, such as aggression, stereotyping, helping, sexual behaviors, education, social networking and identity development. The findings can be understood within the framework of the GLM, which delineates the processes through which media can affect social behavior in short-term and long-term contexts. The GLM emphasizes the fact that media effects are complex and depend on content, structure, time, and context. Media effects can be harmful, such as the effects of violent media on aggression and the effects of stereotypical media portrayals of groups on stereotypes and behaviors towards outgroups. Media effects can also be beneficial, such as the effects of prosocial media use on helping. Parental involvement can be a protective factor that can help foster positive media effects and ameliorate negative media effects.

Media psychology research has broadened over the past 20 years. Early studies focused on media violence effects, but several other lines of research have grown, such as media effects on risk behaviors and positive media effects on social networking and identity development. The rapid expansion of research in the field of media psychology has been accompanied by an overall trend toward better methodological quality in the field (Prot &

Anderson, 2013). An especially important development is the increasing number of high-quality longitudinal studies, which demonstrate long-term, cumulative effects of media use on socialization (Gentile et al., 2009; Krahe & Möller, 2010). Methodological diversity also is increasing. For example, researchers have begun exploring how media affect brain function (Bailey, West & Anderson, 2011; Hummer et al., 2010). Finally, recent studies demonstrate that the science of media effects can yield effective interventions that promote healthier media habits and ameliorate negative media effects on socialization (Möller et al., 2012).

In our view, several research areas within this field represent fruitful avenues for future research. One research question that merits further attention is that of age as a moderator of media effects. A large proportion of studies on socializing influences of mass media have been conducted on college-aged adolescent and young adult populations, both for practical reasons and because of ethical concerns. More studies on children are needed to elucidate developmental differences in specific media effects. Further research also is needed on the neural bases of media effects. Finally, additional studies examining the impact of new technologies on socialization (such as cell phones and the Internet) are needed.

In sum, a broad research literature demonstrates that media are powerful socializing agents that can lead to numerous positive and negative outcomes. Given the extraordinary amount of time of children and adolescents spend interacting with media, increasing our understanding of both positive and negative media effects is an important research goal for practical reasons. Findings concerning the socializing influences of mass media have implications for theory development, for public policy decisions and for developing interventions that can promote healthier media habits among youth.

References

- Abraham, L. (2003). Media Stereotypes of African Americans, In P.M. Lester & S.D. Ross (2nd Ed.), *Images that injure: Pictorial stereotypes in the media*. Westport, CT: Praeger.
- Anderson, C.A., Berkowitz, L., Donnerstein, E., Huesmann, R. L., Johnson, J., Linz, D., Malamuth, N., & Wartella, E. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest*, 4, 81-110.
- Anderson, C.A., & Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.
- Anderson, C.A., Carnagey, N.L., & Eubanks, J. (2003). Exposure to violent media: The effects of songs with violent lyrics on aggressive thoughts and feelings. *Journal of Personality and Social Psychology*, 84, 960-971.
- Anderson, C.A., Gentile, D.A., & Buckley, K.E. (2007). *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy*. Oxford University Press.
- Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B.J., Sakamoto, A., Rothstein, H.R., & Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries. *Psychological Bulletin*, 136, 151-173.
- Anderson, D., Bryant, J., Wilder, A., Santomero, A., Williams, M., & Crawley, A. M. (2000). Researching Blue's Clues: Viewing behavior and impact. *Media Psychology*, 2, 179-194.
- Atkin, C., Greenberg, B., & Baldwin, T. (1991). The home ecology of children's television viewing: Parental mediation and the new video environment. *Journal of Communication*, 41, 40-52.
- Aubrey, J. S., Harrison, K., Kramer, L., & Yellin, J. (2003). Variety versus timing. Gender differences in college students' expectations as predicted by exposure to sexually oriented television. *Communication Research*, 30, 432-460.

- Austin, E. W. (1992). Parent-child TV interactions: The importance of perspective. *Journal of Broadcasting & Electronic Media*, 36, 359–361.
- Bailey, K., West, R., & Anderson, C. A. (2011). The influence of video games on social, cognitive, and affective information processing. In J. Decety & J. Cacioppo (Eds.) *Handbook of Social Neuroscience*. (pp. 1001-1011). New York: Oxford University Press.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barlett, C. P., & Anderson, C. A. (2013). Examining media effects: The General Aggression and General Learning Models. Chapter in E. Scharrer (Ed.), *Media Effects/Media Psychology*. Blackwell-Wiley.
- Barlett, C. P., Branch, O. L., Rodeheffer, C. D., & Harris, R. H. (2009). How long do the short-term violent video game effects last? *Aggressive Behavior*, 35, 225-236.
- Barlett, C. P., Gentile, D. A., Anderson, C. A., Suzuki, K., Sakamoto, A., Kumazaki, A., & Katsura, R. (in press). Cross-cultural differences in cyberbullying behavior: A short-term longitudinal study. *Journal of Cross-Cultural Psychology*,
- Bartholow, B. D., Anderson, C. A., Carnagey, N. L., & Benjamin, A. J. Jr. (2005). Interactive effects of life experience and situational cues on aggression: The weapons priming effect in hunters and nonhunters. *Journal of Experimental Social Psychology*, 41, 48-60.
- Beasley, B., & Collins-Standley, T.C. (2002). Shirts vs. skins: Clothing as an indicator of gender stereotyping in video games. *Mass Communication & Society*, 5, 279-293.
- Benotsch, E. G., Snipes, D. J., Martin, A. M., & Bull, S. S. (2013). Sexting, substance use, and sexual risk behavior in young adults. *Journal of Adolescent Health*, 52, 307-313.
- Berkowitz, L. (1990). On the formation and regulation of anger and aggression: A cognitive-neoassociationistic analysis. *American Psychologist*, 45, 494-503.
- Bleakley, A., Hennessy, M., & Fishbein, M. (2011). A model of adolescents' seeking of

- sexual content in their media choices. *Journal of Sex Research*, 48(4), 37-48.
- Bodenhausen, G. V., Schwarz, N., Bless, H., & Wänke, M. (1995). Effects of atypical exemplars on racial beliefs: Enlightened racism or generalized appraisals? *Journal of Experimental Social Psychology*, 31, 48-63.
- Borja, R. R. (2005, December 14). "Blogs" catching on as tool for instruction: Teachers use interactive Web pages to hone writing skills. *Education Week*. Retrieved March 7, 2013 from: <http://www.edweek.org/ew/articles/2005/12/14/15blogs.h25.html?qs=borja>
- Botta, R. A. (1999). Television images and adolescent girls' body image disturbance. *Journal of Communication*, 49, 22-41.
- Boyd, D. (2008). Taken out of context: American teen sociality in networked publics. Berkeley, CA: University of California. Retrieved March 7, 2013 from: <http://www.danah.org/papers/TakenOutOfContext.html>.
- Brodie, M., Foehr, U., Rideout, V., Baer, N., Miller, C., Flournoy, R., et al. (2001). Communicating health information through the entertainment media. *Health Affairs*, 20, 1-8.
- Brown J. D., Greenberg B. S., & Burkel-Rothfuss, N. L. (1993). Mass media, sex, and sexuality. *Adolescent Medicine*, 4, 511-525.
- Brown, S.J., Lieberman, D.A., Gemeny, B.A., Fan, Y.C., Wilson, D.M., & Pasta, D.J. (1997). Educational video game for juvenile diabetes: Results of a controlled trial. *Medical Informatics*, 22(1), 77-89.
- Bruner, G. C. (1990). Music, mood and marketing, *The Journal of Marketing*, 54, 94-104.
- Buckley, K. E., & Anderson, C. A. (2006). A theoretical model of the effects and consequences of playing video games. Chapter in P. Vorderer & J. Bryant (Eds.), *Playing video games - motives, responses, and consequences* (pp. 363-378). Mahwah, NJ: LEA.
- Buerkel-Rothfuss, N. L., & Strouse, J. S. (1993). Media exposure and perceptions of sexual

- behaviors: The cultivation hypothesis moves to the bedroom. In B. S. Greenberg, J. D. Brown, & N. L. Buerkel-Rothfuss (eds.), *Media, sex, and the adolescent* (pp. 225–247).
- Buijzen, M., & Valkenburg, P. M. (2005). Parental mediation of undesired advertising effects. *Journal of Broadcasting & Electronic Media*, 49, 153–165.
- Buijzen, M., Walma van der Molen, J. H., & Sondij, P. (2007). Parental mediation of children's emotional responses to a violent news event. *Communication Research*, 34, 212–230.
- Bushman, B. J., & Anderson, C. A. (2009). Comfortably numb: Desensitizing effects of violent media on helping others. *Psychological Science*, 20, 273–277.
- Bushman, B. J., & Huesmann, L. R. (2006). Short-term and long-term effects of violent media on aggression in children and adults. *Archives of Pediatrics & Adolescent Medicine*, 160, 348–352.
- Bushman, B. J., & Huesmann, L. R. (2012). Effects of violent media on aggression. Chapter in D. G. Singer, & J. L. Singer (Eds), *Handbook of Children and the Media*, 2nd Edition, (pp. 249–272). Thousand Oaks, CA: Sage.
- Carnagey, N. L., & Anderson, C.A., Bushman, B. J. (2007). The effect of video game violence on physiological desensitization to real-life violence. *Journal of Experimental Social Psychology*, 43, 489–496.
- Children Now. (2001). *Fair play? Violence, gender and race in video games*. Los Angeles, CA: Children Now.
- Christakis, D.A. & Zimmerman, F. J. (2007). Violent television viewing during preschool is associated with antisocial behavior during school age. *Pediatrics*, 120, 993–999.
- Collins, R. L., Ellickson, P., McCaffrey, D., & Hambarsoomians, K. (2007). Early adolescent exposure to alcohol advertising and its relationship to underage drinking, *Journal of Adolescent Health*, 40, 527–534.

- Collins, R. L., Elliott, M. N., Berry, S. H., Kanouse, E., & Hunter, S. B. (2003). Entertainment television as a healthy sex educator: The impact of condom-efficacy information in an episode of Friends. *Pediatrics*, 112, 1115–1121.
- Collins, R. L., Elliott, M. N., Berry, S. H., Kanouse, D. E., Kunkel, D., Sarah B. Hunter, S. B., & Miu, A. (2004). Watching sex on television predicts adolescent initiation of sexual behavior. *Pediatrics*, 114, e280–e289.
- Corbett, A. T., Koedinger, K. R., & Hadley, W. (2001). Cognitive tutors: From the research classroom to all classrooms. In P. S. Goodman (Ed.), *Technology enhanced learning* (pp. 235-263). Mahwah, NJ: Lawrence Erlbaum.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 113-126.
- Dalton, M. A., Sargent, J. D., Beach, M. L., Titus-Ernstoff, L., Gibson, J. J., Ahrens, M. B., et al. (2003). Effects of viewing smoking in movies on adolescent smoking initiation: A cohort study. *Lancet*, 362, 281–285.
- Dasgupta, N., & Greenwald, A. G. (2001). On the malleability of automatic attitudes: Combating automatic prejudice with images of admired and disliked individuals. *Journal of Personality and Social Psychology*, 81, 800-814.
- DeLisi, M., Vaughn, M. G., Gentile, D. A., Anderson, C. A., & Shook, J. (2013). Violent video games, delinquency, and youth violence: New evidence. *Youth Violence and Juvenile Justice*, 11, 132-142.
- DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2012). Aggression. Chapter in I. Weiner (Ed.), *Handbook of Psychology, 2nd Edition, Volume 5, 449-466*. New York: Wiley.
- Dill, K. E., Gentile, D. A., Richter, W. A., & Dill, J. C. (2005). Violence, sex, race and age in popular video games: A content analysis. In E. Cole and J. Henderson Daniel (Eds.),

- Featuring females: Feminist analyses of the media.* Washington, DC: American Psychological Association.
- Dixon, T.L. (2006). Schemas as average conceptions: Skin tone, television news exposure, and culpability judgments. *Journalism and Mass Communication Quarterly*, 83, 131-149.
- Dixon, T.L. (2007). Black criminals and White officers: The effects of racially misrepresenting law breakers and law defenders on television news. *Media Psychology*, 10, 270-291.
- Dixon, T. L. (2008). Crime news and racialized beliefs: Understanding the relationship between local news viewing and perceptions of African Americans and crime. *Journal of Communication*, 58, 106-125.
- Dixon, T. L., & Azocar, C. L. (2007). Priming crime and activating Blackness: Understanding the psychological impact of the overrepresentation of Blacks as lawbreakers on television news. *Journal of Communication*, 57, 229-253.
- Dixon, T. L., & Linz, D. (2000). Overrepresentation and underrepresentation of African American and Latinos as law breakers on television news. *Journal of Communication*, 50, 131-154.
- Dohnt, H., & Tiggemann, M. (2006). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology*, 42, 929–936.
- Dominick, J. R., & Greenberg, B. S. (1972). Attitudes towards violence: The interaction of television exposure, family attitudes, and social class. In G. A. Comstock & E. A. Rubinstein (Eds.), *Television and social behavior. Vol. III: Television and adolescent aggressiveness* (pp. 314-335). Washington DC: US Government Printing Office.
- DuRant, R. H., Wolfson, M., LaFrance, B., Balkrishnan, R., & Altman, D. (2006). An evaluation of a mass media campaign to encourage parents of adolescents to talk to their

- children about sex. *Journal of Adolescent Health*, 38, 2981–2989.
- Ennemoser, M., & Schneider, W. (2007). Relations of television viewing and reading: findings from a 4-year longitudinal study, *Journal of Educational Psychology*, 99, 349–68.
- Eschholz, S., Bufkin, J., & Long, J. (2002). Symbolic reality bites: Women and racial/ethnic minorities in modern film. *Sociological Spectrum*, 22, 299-334.
- Ellickson, P. L., Collins, R. L., Hambarsoomians, K., & McCaffrey, D. F. (2005). Does alcohol advertising promote adolescent drinking? Results from a longitudinal assessment. *Addiction*, 100, 235–246.
- Eron, L.D., Huesmann, L.R., Lefkowitz, M.M., & Walder, L.O. (1972). Does television violence cause aggression? *American Psychologist*, 27, 253-263.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Entman, R. & Rojecki, A. (2000). *The Black Image in the White Mind*. Chicago: The University of Chicago Press.
- Fearon, J. D. (1999). *What is identity (as we now use the word)?* Unpublished manuscript, Stanford University, USA. Available online at <http://www.stanford.edu/~jfearon/papers/iden1v2.pdf>. Accessed 14th March, 2013.
- Fischer, P., Greitemeyer, T., Kastenmüller, A., Vogrincic, C., & Sauer, A. (2011). The effects of risk-glorifying media exposure on risk-positive cognitions, emotions, and behaviors: A meta-analytic review. *Psychological Bulletin*, 137(3), 367-390.
- Fiske, S.T., & Taylor, S.E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Fried, R., & Berkowitz, L. (1979). Music that charms ... and can influence helpfulness. *Journal of Applied Social Psychology*, 9, 199-208.
- Fujioka, Y. (1999). Television portrayals and African-American stereotypes: Examination of television effects when direct contact is lacking. *Journalism and Mass Communication*

Quarterly, 76, 52-75.

Funk, J. B., Baldacci, H. B., Pasold, T. & Baumgardner, J. (2004). Violence exposure in real-life, video games, television, movies, and the Internet: is there desensitization?. *Journal of Adolescence*, Volume 27, Issue 1, 23-39.

Gentile, D. A., Anderson, C. A., Yukawa, N., Saleem, M., Lim, K. M., Shibuya, A., Liau, A. K., Khoo, A., Bushman, B. J., Huesmann, L. R., & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin*, 35, 752-763.

Gentile, D. A., Coyne, S. M., & Walsh, D. A. (2011). Media violence, physical aggression and relational aggression in school age children: A short-term longitudinal study. *Aggressive Behavior*, 37, 193–206.

Gentile, D. A., & Gentile, J. R. (2008). Violent video games as exemplary teachers: A conceptual analysis. *Journal of Youth and Adolescence*, 37, 127-141.

Gentile, D. A., Groves, C., & Gentile, J. R. (in press). The general learning model: Unveiling the learning potential from video games. In F. C. Blumberg (Ed.) *Learning by playing: Frontiers of Video Gaming in Education*. New York: Oxford University Press.

Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence*, 27, 5–22.

Gentile, D. A., Nathanson, A. I., Rasmussen, E. E., Reimer, R. A., & Walsh, D. A. (2012). Do you see what I see? *Parent and child reports of parental monitoring*. *Family Relations*, 61, 470-487.

Gilliam, Jr. F. D., & Iyengar, S. (2000). Prime suspects: The influence of local television news on the viewing public. *American Journal of Political Science*, 44, 560-574.

- Greenberg, B. S., Mastro, D. & Brand, J. E. (2002) Minorities and the mass media: Television into the 21st century. In J. Bryant & D. Zillmann (Eds.), *Media effects: advances in theory and research* (2nd Ed). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Greenwald, A. G. & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
- Greitemeyer, T. (2009a). Effects of songs with prosocial lyrics on prosocial behaviour: Further evidence and a mediating mechanism. *Personality and Social Psychology Bulletin*, 35, 1500-1511.
- Greitemeyer, T. (2009b). Effects of songs with prosocial lyrics on prosocial thoughts, affect, and behavior. *Journal of Experimental Social Psychology*, 45, 186-190.
- Greitemeyer, T. (2011). Exposure to music with prosocial lyrics reduces aggression: First evidence and test of the underlying mechanism. *Journal of Experimental Social Psychology*, 47, 28-36.
- Greitemeyer, T., Agthe, M., Turner, R., & Gschwendtner, C. (2012). Acting prosocially reduces retaliation: Effects of prosocial video games on aggressive behaviour. *European Journal of Social Psychology*, 42, 235-242.
- Greitemeyer, T., Hollingdale, J. & Traut-Mattausch, E. (2012). Changing the track in music and misogyny: Listening to music with pro-equality lyrics improves attitudes and behavior toward women. *Psychology of Popular Media Culture* (Nov 12, 2012, online).
- Greitemeyer, T., & Osswald, S. (2009). Prosocial video games reduce aggressive cognitions. *Journal of Experimental Social Psychology*, 45, 896-900.
- Greitemeyer, T., & Osswald, S. (2010). Effects of prosocial video games on prosocial behavior. *Journal of Personality and Social Psychology*, 98, 211-221.
- Greitemeyer, T., Osswald, S. & Brauer, M. (2010). Playing prosocial video games increases empathy and decreases schadenfreude. *Emotion*, 6, 796-802.

Grusec, J. E. Effects of co-observer evaluations on imitation: a developmental study.

Developmental Psychology, 1973, 8, 141.

Hanewinkel, R., Tanski, S. E., & Sargent, J. D. (2007). Exposure to alcohol use in motion pictures and teen drinking in Germany. *International Journal of Epidemiology*, 36, 1068–1077.

Harris, R. J. (2004). *A Cognitive Psychology of Mass Communication*. Mahwah, N.J.: L. Erlbaum.

Harris Interactive (2008). Teenagers: A generation unplugged. Retrieved January 15, 2013 from http://files.ctia.org/pdf/HI_TeenMobileStudy_ResearchReport.pdf

Hines, D., Saris, R. N., & Throckmorton-Belzer, L. (2000). Cigarette smoking in popular films: Does it increase viewers' likelihood to smoke? *Journal of Applied Social Psychology*, 30, 2246–2269.

Huesmann, L. R. & Kirwil, L. (2007). Why observing violence increases the risk of violent behavior in the observer. In D. Flannery (Ed.), *The Cambridge Handbook of Violent Behavior and Aggression*. Cambridge, UK: Cambridge University Press.

Huesmann, L. R., Moise-Titus, J., Podolski, C. P. & Eron, L. D. (2003). Longitudinal relations between childhood exposure to media violence and adult aggression and violence: 1977-1992. *Developmental Psychology*, 39(2), 201-221.

Hummer, T. A., Wang, Y., Kronenberger, W. G., Mosier, K. M., Kalnin, A. J., Dunn, D. W., & Mathews, V. P. (2010). Short-term violent video game play by adolescents alters prefrontal activity during cognitive inhibition, *Media Psychology*, 13, 136-154.

Jacob, C., Guéguen, N., & Boulbry, G. (2010). Effects of songs with prosocial lyrics on tipping behavior in a restaurant. *International Journal of Hospitality Management*, 29, 761-763.

Jhally, S., & Lewis, J. (1992). *Enlightened racism: The Cosby Show, audiences and the myth*

- of the American dream*. Boulder, CO: Westview.
- Johnson, J. D., Olivo, N. G., Reed, N., William Ashburn-Nardo, L. (2009). Priming media stereotypes reduces support for social welfare policies: The mediating role of empathy. *Personality and Social Psychology Bulletin*, 35, 463-476.
- Jones, S. & Fox, S. (2009). *Generations online in 2009*. Retrieved January 15, 2013 from <http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx>
- Kato, P.M., Cole, S.W., Bradlyn, A.S., & Pollock, B.H. (2008). A video game improves behavioral outcomes in adolescents and young adults with cancer: A randomized trial. *Pediatrics*, 122, 305-317.
- Kirsh, S.J., & Olczak, P.V. (2002). The effects of extremely-violent comic books on social information processing. *Journal of Interpersonal Violence* 17(11), 1160-1178.
- Krahe', B., & Bieneck, S. (2012). The effect of music-induced mood on aggressive affect, cognition and behavior. *Journal of Applied Social Psychology*, 42, 271-290.
- Krahé, B., & Möller, I. (2010). Longitudinal effects of media violence on aggression and empathy among German adolescents. *Journal of Applied Developmental Psychology*, 31, 401-409.
- Krahé, B., Möller, I., Huesmann, L. R., Kirwil, L., Felber, J., & Berger, A. (2011). Desensitization to media violence: Links with habitual media violence exposure, aggressive cognitions and aggressive behavior. *Journal of Personality and Social Psychology*, 100, 630-646.
- Krishna, S., Boren, S. A., & Balas, E. A. (2009). Healthcare via cell phones: A systematic review. *Telemedicine and eHealth*, 15, 231-240.
- Kulick, A. D., & Rosenberg, H. (2001). Influence of positive and negative film portrayals of drinking on older adolescents' alcohol outcome expectancies. *Journal of Applied Social Psychology*, 31, 1492-1499.

- Kunkel, D., Eyal, K., Finnerty, K., Biely, E., & Donnerstein, E. (2005). *Sex on TV 4*. Menlo Park, CA: Henry J. Kaiser Family Foundation.
- Kunkel, D., Farrar, K.M., Eyal, K., Biely, E., Donnerstein, E., & Rideout V. (2007). Sexual socialization messages in entertainment television: Comparing content trends 1997-2002. *Media Psychology*, 9, 595-622.
- Lemieux, A. F., Fisher, J. D., & Pratto, F. (2008). A music-based HIV prevention intervention for urban adolescents. *Health Psychology*, 27, 349-357.
- Lenhart, A. (2009). *Teens and Sexting*. Pew Internet & American Life Project Report. Retrieved from http://pewinternet.org/~media/Files/Reports/2009/PIP_Teens_and_Sexting.pdf
- Lenhart, A., Hitlin, P., & Madden, M. (2005). *Teens and Technology*. Pew Internet & American Life Project Report. Retrieved from www.pewinternet.org/~media/Files/Reports/2005/PIP_Teens_Tech_July2005web.pdf
- Lenhart, A., Kahne, J., Middaugh, E., Macgill, A. R., Evans, C., & Vitak, J. (2008). *Teens' Video Games, and Civics*. Washington D.C.: Pew Internet & American Life Project. Downloaded July 5, 2010 from <http://www.pewinternet.org/Reports/2008/Teens-Video-Games-and-Civics.aspx>.
- Lenhart, A., Ling, R., Campbell, S., & Purcell, K. (2010). *Teens and Mobile Phones*. Pew Internet & American Life Project Report. Retrieved from <http://pewinternet.org/~media/Files/Reports/2010/PIP-Teens-and-Mobile-2010-with-topline.pdf>
- Lenhart, A. (2012). *Teens, smartphones & texting*. A Pew Internet & American Life Project Report. Retrieved from http://pewinternet.org/~media/Files/Reports/2012/PIP_Teens_Smartphones_and_Texting.pdf

- Lett, M.D., Dipietro, A.L., & Johnson, D.I.(2004). Examining effects of television news violence on college students through cultivation theory. *Communication Research Reports*, 21, 39-46.
- L'Engle, K.L., Brown, J.D., & Kenneavy, K. (2006). Mass media are an important context for adolescents' sexual behavior. *Journal of Adolescent Health*, 36(3), 186-192.
- Lieberman, D. A. (2001). Management of chronic pediatric diseases with interactive health games: Theory and research findings. *Journal of Ambulatory Care Management*, 24, 26-38.
- Linder, J. R. & Gentile, D. A. (2009). Is the television rating system valid? Indirect, verbal, and physical aggression in programs viewed by fifth grade girls and associations with behavior. *Journal of Applied Developmental Psychology*, 30, 286-297.
- Linebarger, D. L. & Walker, D. (2005). Infants' and toddlers' television viewing and language outcomes. *American Behavioral Scientist*, 48, 624–625.
- Lou, C., Cheng, Y., Gao, E., Zuo, X., Emerson, M. R. & Zabin, L.S. (2012). Media's contribution to sexual knowledge, attitudes, and behaviors for adolescents and young adults in three Asian cities. *Journal of Adolescent Health*, 50(3), 26-36.
- Machin, D., & Suleiman, U. (2006). Arab and American computer war games: The influence of a global technology on discourse. *Critical Discourses Studies*, 3, 1–22.
- Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013). *Teens and Technology 2013*. Pew Internet & American Life Project Report. Retrieved from http://pewinternet.org/~media/Files/Reports/2013/PIP_TeensandTechnology2013.pdf
- Mares, M. L., & Woodard, E. (2005). Positive effects of television on children's social interactions: A meta-analysis. *Media Psychology*, 7, 301-322.
- Mastro, D. (2003). A social identity approach to understanding the impact of television messages. *Communication Monographs*, 70, 98-113.

- Mastro, D. & Behm-Morawitz, E. (2005). Latino representation on primetime television. *Journalism & Mass Communication Quarterly*, 82, 110-130.
- Mastro, D. & Greenberg, B.S. (2000). The portrayal of racial minorities on prime time television. *Journal of Broadcasting and Electronic Media*, 44, 690-703.
- Mastro, D. E. & Tropp, L. R. (2004). The effects of interracial contact, attitudes, and stereotypical portrayals on evaluations of Black television sitcom characters. *Communication Research Reports*, 21, 119-129.
- McNary, Dave. (2009). SAG stats: Diversity lags. *Variety*. Com. Retrieved March 1, 2013 from <http://www.variety.com/article/VR1118010361/?categoryid=1055&cs=1>
- Mitchell, K. J., Finkelhor, D., Jones, L.M., & Wolak, J. (2012). Prevalence and characteristics of youth sexting: a national study. *Pediatrics*, 129, 13-20.
- Möller, I., Krahe, B., Busching, R., & Krause, C. (2012). Efficacy of an intervention to reduce the use of media violence and aggression: An experimental evaluation with adolescents in Germany. *Journal of Youth and Adolescence*, 41, 105-120.
- Möller, I., & Krahe, B. (2009). Exposure to violent video games and aggression in German adolescents: A Longitudinal analysis. *Aggressive Behavior*, 35, 75-89.
- Mullin, C.R., & Linz, D. (1995). Desensitization and resensitization to violence against women: Effects of exposure to sexually violent films on judgments of domestic violence victims. *Journal of Personality and Social Psychology*, 69, 449-459.
- Murphy, S. T. (1998). The impact of factual versus fictional media portrayals on cultural stereotypes. In E. Katz & J. J. Strange (Eds.), *The Annals of the American Academy of Political and Social Science* (Vol. 560, pp. 165-178). Thousand Oaks, CA: Sage Publications.
- Murphy, R. F., Penuel, W. R., Means, B., Korbak, C., Whaley, A., & Allen, J. E. (2002). E-DESK: A review of recent evidence on the effectiveness of discrete educational software.

(Prepared for: Planning and Evaluation Service, U. S. Department of Education.) SRI International.

- Nacos, B. L., & Torres-Reyna, O. (2007). *Fueling our fears: Stereotyping, media coverage and public opinion of Muslim Americans*. Lanham: Rowman & Littlefield Publishers.
- Narvaez, D., Mattan, B., MacMichael, C., & Sqillace, M. (2008) Kill bandits, collect gold or save the dying: The effects of playing a prosocial video game. *Media Psychology Review* 1(1). Retrieved March 8 2013 from http://mprcenter.org/mpr/index.php?option=com_content&view=article&id=35&Itemid=121.
- Nathanson, A.I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. *Communication Research*, 26, 124–143.
- Nathanson, A. I. (2004). Factual and evaluative approaches to modifying children's responses to violent television. *Journal of Communication*, 54, 321–336.
- Nathanson, A. I., & Cantor, J. (2000). Reducing the aggression-promoting effect of violent cartoons by increasing children's fictional involvement with the victim: A study of active mediation. *Journal of Broadcasting and Electronic Media*, 44, 125–142.
- Nisbet, E. C., Ostman, R., & Shanahan, J. (2008). Public opinion toward Muslim Americans: Civil liberties and the role of religiosity, ideology, and media use. In A. Sinno (Ed.), *Muslims in Western politics* (pp. 161–199). Bloomington, IN: Indiana University Press.
- North, A. C., Tarrant, M., & Hargreaves, D. J. (2004). The effects of music on helping behavior: A field study. *Environment and Behavior*, 36(2), 266-275.
doi:<http://dx.doi.org/10.1177/0013916503256263>
- O'Keeffe, G. S., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and families. *Pediatrics*, 127, 800-804.
- Oppliger, P. A. (2007). Effects of gender stereotyping on socialization. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen & J. Bryant (Eds.), *Mass media effects research: Advances*

- through meta-analysis.* (pp. 199-214). Mahwah, NJ: L. Erlbaum Associates.
- Paik, H. & Comstock, G. (1994). The effects of television violence on antisocial behavior: A meta-analysis. *Communication Research*, 21(4), 516–546.
- Pea, R., Nass, C., Meheula, L., Rance, M., Kumar, A., Bamford, H., . . . Zhou, M. (2012). Media use, face-to-face communication, media multitasking, and social well-being among 8- to 12-year-old girls. *Developmental Psychology*, 48(2), 327-336.
- Pierce, J. P., Choi, W., Gilpin, E., Farkas, A., & Berry, C. (1998). Tobacco industry promotion of cigarettes and adolescent smoking. *Journal of the American Medical Association*, 279, 511–515.
- Pierce, J. P., Lee, L., & Gilpin, E. A. (1994). Smoking initiation by adolescent girls, 1944 through 1988: An association with targeted advertising. *Journal of the American Medical Association*, 271, 608–611.
- Prot, S., & Anderson, C. A. (2013). *Research methods, design, and statistics in media psychology* (109-136). Chapter in K. Dill (Ed.) *The Oxford Handbook of Media Psychology*. New York: Oxford University Press.
- Prot, S., Gentile, D. G., Anderson, C. A., Suzuki, K., Swing, E., Lim, K. M., Horiuchi, Y., Jelic, M., Krahe, B., Liuqing, W., Liao, A., Khoo, A., Petrescu, P. D., Sakamoto, A., Tajima, S., Toma, R. A., Warburton, W. A., Zhang, X., & Lam, C. P. (in press). Long-term relations between prosocial media use, empathy and prosocial behavior. *Psychological Science*,
- Ramasubramanian, S. (2011). The impact of stereotypical versus counterstereotypical media exemplars on racial attitudes, causal attributions, and support for affirmative action. *Communication Research*, 38, 497-516.
- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). *Generation M2: Media in the lives of 8-18 year olds*. Merlo Park CA: Henry J Kaiser Foundation.

- Roberts, D. F., Christenson, P. G., & Gentile, D. A. (2003). The effects of violent music on children and adolescents. In D. A. Gentile [Ed.], *Media violence and children: A complete guide for parents and professionals* (pp. 153-170). Westport CT: Praeger.
- Roe, K. (1996). Music and identity among European youth: Music as communication. In P. Rutten [Ed.], *Music in Europe* (pp. 85-97). Brussels: European Music Office. Available online from:
- Rosenkoetter, L. I. (1999). The television situation comedy and children's prosocial behavior. *Journal of Applied Social Psychology, 29*, 979–993.
- Saleem, M., & Anderson, C. A. (2013). Arabs as terrorists: Effects of stereotypes within violent contexts on attitudes, perceptions and affect. *Psychology of Violence, 3*, 84-99.
- Saleem, M., Anderson, C. A. & Gentile, D. A. (2012a). Effects of prosocial, neutral, and violent video games on college students' affect. *Aggressive Behavior, 38*, 263-271.
- Saleem, M., Anderson, C. A. & Gentile, D. A. (2012b). Effects of prosocial, neutral, and violent video games on children's helpful and hurtful behaviors. *Aggressive Behavior, 38*, 281-287.
- Salomon, G. (1977). Effects of encouraging Israeli mothers to co-observe Sesame Street with their five-year-olds. *Child Development, 48*, 1146–1151.
- Sargent, J. D., Wills, T. A., Stoolmiller, M., Gibson, J., & Gibbons, F. X. (2006). Alcohol use in motion pictures and its relation with teen drinking. *Journal of Studies on Alcohol, 67*, 54–65.
- Schmidt, C. S. (2006). Not just Disney: Destructive stereotypes of Arabs in children's literature. In D. A. Zabel (Ed.), *Arabs in the Americas: Interdisciplinary essays on the Arab Diaspora* (pp. 169–182). New York, NY: Peter Lang Publishing.
- Shaheen, J.G. (2009). *Reel Bad Arabs: How Hollywood Vilifies a People*. Brooklyn, New York. Olive Branch Press.

- Sharif, I., & Sargent, J. D. (2006). Association between television, movie, and video game exposure and school performance. *Pediatrics*, 118(4), e1061-1070.
- Singer, D.G., & Singer, J.L. (1976). Family television viewing habits and the spontaneous play of pre-school children. *American Journal of Orthopsychiatry*, 46, 496-502.
- Singer J. L., & Singer, D. G. (1998). Barney & Friends as entertainment and education. In J. K. Asamen & G. Berry (Eds.), *Research paradigms, television, and social behavior* (p.p. 305-367). Thousand Oaks, CA: Sage.
- Sisler, V. (2008). Digital Arabs: Representation in video games. *European Journal of Cultural Studies*, 11, 203–220.
- Singhal, A., Cody, M. J., Rogers, E. M., & Sabido, M. (2004). *Entertainment-Education and social change: History, research, and practice*. Mahwah, NJ: Erlbaum.
- Smith, S. L., & Cook, C. A. (2012). Gender Stereotypes: An Analysis of Popular Films and TV. Geena Davis Institute for Gender and Media. Downloaded 10/1/13 from: http://www.seejane.org/downloads/GDIGM_Gender_Stereotypes.pdf
- Sprafkin, J. N., & Rubinstein, E. A. (1979). Children's television viewing habits and prosocial behavior: A field correlational study. *Journal of Broadcasting*, 23, 265–276.
- Standley, J. (1995). Music as a therapeutic intervention in medical and dental treatment: Research and clinical applications. In T. Wigram, B. Saperston, & R. West [Eds.], *The art and science of music therapy: A handbook*. Langhorne US: Harwood Academic.
- Strasburger, V. C. (2005). Adolescents, sex and the media: Ooooo, Baby, Baby-a Q & A. *Adolescent Medicine*, 16, 269-288.
- Thomsen, S. R., Weber, M. M., & Brown, L. (2002). The relationship between reading beauty and fashion magazines and the use of pathogenic dieting methods among adolescent females. *Adolescence*, 37(145), 1.
- Thompson, T.L., & Zerbinos, E. (1995). Gender roles in animated cartoons. Has the picture

- changed in 20 years? *Sex Roles*, 32, 651-673.
- Thurlow, C., & Brown, A. (2002). Generation txt? The sociolinguistics of young people's text-messaging. *Discourse analysis online*, 1(1).
- Valente, T.W., Kim, Y.M., Lettenmaier, C., Glass, W., & Dibba, Y. (1994). Radio promotion of family planning in the Gambia. *International Family Planning Perspectives*, 20, 96-100.
- Valkenburg, P. M., Krcmar, M., & deRoos, S. (1998). The impact of a cultural children's program and adult mediation on children's knowledge of and attitudes toward opera. *Journal of Broadcasting & Electronic Media*, 42, 315-326.
- Van Buren, C. (2006). Critical analysis of racist post 9/11 Web animations. *Journal of Broadcasting & Electronic Media*, 50, 537-554.
- Warburton, W. A. (2012a). Growing up fast and furious in a media saturated world. In W. A. Warburton & D. Braunstein [Eds.], *Growing up fast and furious: Reviewing the impacts of violent and sexualised media on children* (pp. 1-33). Sydney: The Federation Press.
- Warburton, W. A. (2012b). How does listening to Eminem do me any harm? What the research says about music and anti-social behaviour. In W. A. Warburton & D. Braunstein [Eds.], *Growing up fast and furious: Reviewing the impacts of violent and sexualised media on children* (pp. 85-115). Sydney: The Federation Press.
- Warburton, W. A., & Highfield, K. (2012). Children, media and technology. In J. Bowes, K. Hodge & R. Grace [Eds.], *Children, families and communities* (pp. 142-161). London: Oxford University Press.
- Ward, L. M. (2002). Does television exposure affect emerging adults' attitudes and assumptions about sexual relationships? Correlational and experimental confirmation. *Journal of Youth & Adolescence*, 31, 1-15.
- Ward, L. M., & Rivadeneyra, R. (1999). Contributions of entertainment television to

- adolescents' sexual attitudes and expectations: The role of viewing amount versus viewer conceptual issues. *European Journal of Social Psychology*, 23, 39–52.
- Weis, R., & Cerankosky, B. C. (2010). Effects of video-game ownership on young boys' academic and behavioral functioning: A randomized, controlled study. *Psychological Science* 21(4), 463-470.
- Weisskirch, R. S. (2009). Parenting by Cell Phone: Parental Monitoring of Adolescents and Family Relations. *Journal of Youth and Adolescence*, 38, 1123-1139.
- Whitaker, J. L., & Bushman, B. J. (2013). “Remain calm. Be kind.” Effects of relaxing video games on aggressive and prosocial behaviour. *Social Psychological and Personality Science*, 3, 88-92.
- Wills, T. A., Sargent, J. D., Gibbons, F. X., Gerrard, M., & Stoolmiller, M. (2009). Movie exposure to alcohol cues and adolescent alcohol problems: A longitudinal analysis in a national sample. *Psychology of Addictive Behaviors*, 23(1), 23-35.
- Wroblewski, R., & Huston, A. C. (1987). Televised occupational stereotypes and their effects on early adolescents: Are they changing? *Journal of Early Adolescence*, 7, 283–298.
- Ybarra, M. L., Mitchell, K. J., Hamburger, M., Diener-West, M., & Leaf, P. J. (2011). X-Rated material and perpetration of sexually aggressive behavior among children and adolescents: Is there a link? *Aggressive Behavior*, 37, 1–18.
- Zhao, Y., Qiu, N. & Xie, N. (2012). Chapter in D. G. Singer, & J. L. Singer (Eds), *Handbook of Children and the Media*, 2nd Edition, (pp. 97-112). Thousand Oaks, CA: Sage.

Table 1. A summary of main research findings on mass media as agents of socialization.

Positive Effects	Evidence
Prosocial (nonviolent) media Increase prosocial behavior Increase empathy Decrease aggression Civic engagement	Fairly strong causal, both short & long term Moderate causal, both short & long term Fairly strong causal short term Weak causal, only cross-sectional support
Educational media teach specific knowledge and skills	Fairly strong causal, short & long term
Media can promote multicultural awareness and weaken stereotypes	Weak short & long term evidence
Social media promote social networking	Weak long term evidence, conflicting evidence of negative effects on social functioning
Parental involvement in media use protects against negative media effects	Moderate correlational long term effects, weak experimental long term evidence
Negative Effects	Evidence
Violent media Increase aggressive behavior Increase violent behavior Increase aggressive cognitions Increase aggressive affect Desensitize to violence Decrease empathy Decrease prosocial behavior Civic engagement	Very strong causal, both short & long term Fairly strong long-term; moderate causal short-term Very strong causal, both short & long term Very strong causal, both short & long term Very strong causal, both short & long term Very strong causal, both short & long term Very strong causal, both short & long term Very strong causal, both short & long term Weak causal, only cross-sectional support
Risk-glorifying media Increase positive attitudes towards risky behaviors Increase likelihood of risky behaviors in real life	Fairly strong causal, short & long term Fairly strong causal, short & long term
Stereotypical portrayals of women and ethnic minorities strengthen stereotypes	Fairly strong causal, short & long term
Other Domains in Need of Research	
Identity development	Effects of cell phones, texting, & sexting
Social networking & social functioning	MMORPGs
Media and brain function	

* Labels:

Strong evidence: Over 20 methodologically strong studies exist that provide evidence of the effect.

Moderate evidence: A total of 10 to 20 methodologically strong studies exist that provide evidence of the effect.

Weak evidence: Less than 10 methodologically strong studies exist that provide evidence of the effect.

Causal evidence: Multiple methodologically strong studies provide clear evidence of causality.

Figure 1. Long-term processes in the General Learning Model (from Gentile, Groves & Gentile, in press).

