

WHAT ARE YOUR CHILDREN WATCHING? A DPICS-II ANALYSIS OF
PARENT-CHILD INTERACTIONS IN TELEVISION CARTOONS

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WHAT ARE YOUR CHILDREN WATCHING? A DPICS-II ANALYSIS OF
PARENT-CHILD INTERACTIONS IN TELEVISION CARTOONS

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Lori Jean Klinger, daughter of Chester Klinger and JoAnn (Fetterolf) Bachrach, was born October 24, 1965, in Ashland, Pennsylvania. She graduated from Owen J. Roberts High School as Valedictorian in 1984. She graduated from the United States Military Academy in 1988 and served as a Military Police Officer in the United States Army until 1992. She earned a M.B.A from East Tennessee State University in 1996 and a M.A. in Clinical Psychology from East Tennessee State University in 2000. She entered the clinical psychology doctoral program at Auburn University in August 2000.

DISSERTATION ABSTRACT

WHAT ARE YOUR CHILDREN WATCHING? A DPICS-II ANALYSIS OF
PARENT-CHILD INTERACTIONS IN TELEVISION CARTOONS

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The immense proliferation of cartoons on television provides children with a variety of cartoon models, many engaging in family life. The purpose of this study was to conduct a content analysis on parent-child interactions in family-oriented cartoons using the Cartoon DPICS.

Twenty-eight parent-child cartoon dyads were identified cartoons across 23 broadcast and cable channels and 2.5 minute segments of parent-child interactions were coded using Cartoon DPICS. Parent cartoon characters displayed significantly more

prosocial behavior than child characters. Parent cartoon characters did not differ from children cartoon characters in the frequency of inappropriate behavior. Father cartoon characters displayed a higher frequency of both prosocial behavior and inappropriate behavior than did mother cartoon characters. Son and daughter characters did not differ significantly in the frequency of prosocial behavior or inappropriate behavior depicted in the cartoons. The ratio of prosocial behavior to inappropriate behavior varied across individual cartoons and networks.

The findings of this study confirm the importance of parents scrutinizing their children's cartoon programs, because not all family-oriented cartoons are "family friendly." The results also provide support for professionals to explore children's television viewing habits to gain an understanding of social messages young viewers observe in their favorite programs. Given the shortcomings of the television rating codes and V-chips, the Cartoon DPICS was a reliable tool to evaluate and rate the content of children's cartoons systematically and without bias.

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INTRODUCTION

Since the 1950's television has undergone scrutiny from parents, legislators, child developmental experts, communication media specialists, and a host of other social critics as to the potential effects of the medium on viewers' behaviors, particularly children's. Television's influence on children's cognitive, social, emotional, and behavioral responses has been well-documented (Hearold, 1986; Mares & Woodard, 2001; Paik & Comstock, 1994; Villani, 2001). In addition to the facilitation of aggressive and prosocial behaviors, past television research has investigated the impact of children's television viewing on imaginative play (Valkenburg & Van der Voort, 1994), creativity (Singer et al., 1984), educational influences (Huston et al., 1999), psychological trauma (Singer et al., 1998), fear (Cantor & Omdahl, 1991), sexual activity (Brown & Newcomber, 1991), and risky behaviors in general (Klein, Childers, Oliveri, Porter, & Dykers, 1993). While a great body of empirical research exists on both the potential hazards and values of children's programming, the extent and degree to which this medium impacts children is still not definitive (Mares & Woodard, 2001). What is known, however, is that the average child watches 3 ½ hours of television a day. Indisputably, television is an environmental stimulus that is a daily source of entertainment and enjoyment for a vast majority of children in the U.S. (Comstock & Scharrer, 1999; Paik, 2001).

Television acts as a venue for children to witness numerous examples of interpersonal interactions, many in the context of family life. In particular, it provides an ample source of child characters for children to observe. Schmitt, Anderson, and Collins (1999) found that children tend to pay more attention to the television when child characters are present. In general, children often take notice of information that defines valued personal characteristics (Erikson, 1968) and attend to information that promises a valued image that they admire or strive to become (Elkind & Bowen, 1979). In regards to television-watching, a vast majority of elementary-aged children list a child character under the age of 18 as their favorite character (Hoffner, 1996). They also seem to prefer characters that are similar to themselves. Children report that they like same-sex characters more than opposite-sex characters and identify more with characters of similar race or ethnicity (Comstock, 1991; Greenberg & Brand, 1994; Signorielli, 1991a).

Young children, particularly those under the age of 6, identify cartoons as their favorite type of television program (Huston, Wright, Marquis, & Green; 1999; Sprafkin, Gadow, & Abelman, 1992). As a television genre, cartoons have evolved dramatically since their inception. Traditionally grounded in slapstick comedy and superheroes, cartoons have become more sophisticated in their use of humor and their portrayal of a more realistic view of life (Desmond, 2001; Tracy, 2003). Cartoons have also been created to target adult audiences. While still very appealing to children, adult cartoons, such as *The Simpsons*, *King of the Hill*, and *South Park*, have been well received by adults for their high quality and “edgy” comedy (Cohen, 2004; Martin, 1998).

Despite the tremendous popularity of cartoons, very few content analyses have been conducted on this television genre in the past decade (Ogletree & Matile, 2001). As pervasive as cartoons are on broadcast and cable networks, it seems warranted that cartoons, particularly those that contain parent-child dyads, be analyzed to better understand the potential socializing behaviors children may be observing in animated parent-child relationships. Being familiar with how families are depicted in popular cartoons may be very beneficial to psychologists working with children and families. Children exposed to the interpersonal dynamics and problem-solving skills of appealing child cartoon characters may model these behaviors in their own family interactions. This may be of particular clinical concern to psychologists, because children diagnosed with disruptive behaviors are more susceptible to the antisocial effects of television content than pathology-free children (Grimes, Bergen, Nichols, Vernberg, & Fonagy, 2004; Grimes, Vernberg, & Cathers, 1997). Research also indicates that children with emotional problems, learning disabilities, and mental retardation are high consumers of television, especially cartoons, and at risk to be reactive to televised aggression (Sprafkin, Gadow, & Abelman, 1992). Additionally, preschoolers and young children may readily imitate televised behaviors, because they lack the ability to associate behavioral acts with motives and consequences (Evra & Kline, 1990). While there is growing support for healthcare professionals to assess children's media histories (Rich & Bar-on, 2001; Tanner, Haddock, Zimmerman, & Lund, 2003), information on the types of social messages and interpersonal behaviors presented in the cartoons children watch is limited due to the general lack of current research on this type of television programming.

Examining the messages presented in television content is a pertinent first step in media research (Signorielli, 2001). Content analysis provides the foundation for determining what effects television content may have on viewers. Content analyses also provide insight into how effective various institutional forces are in shaping television's content. In the following section, a review of the history of children's programming in the U.S. will be provided to help the reader gain an appreciation for the institutional forces that impact the content of children's television. Additionally, theoretical perspectives applied in the investigation of media effects will be discussed as well as viewer factors and program characteristics that are specific to the child audience. Finally, a presentation of empirical findings related to the types of family images depicted in children's programming will be discussed to address the current empirical findings on family interactions in cartoons.

History of children's television programming

American families are described as being "saturated" by television in the 21st century, but this medium is a relatively new socialization phenomenon. In the past sixty years, television's place in the American household has significantly changed. Television programming, especially the content of children's programming, has been shaped by several institutional forces that are intertwined but often driven by different agendas. These forces include government regulation, the media industry, marketing and economic demands, public interest groups, congressional legislation, and parental mediation (Signorielli, 1991a).

Government and Industry Regulation

Television made its debut at the 1939 World's Fair in New York City and evolved from a clever novelty to a practical communication device in the late 1940's. The federal government's involvement with television programming originated from the Communications Act of 1934. The Communications Act established that the public owns the airwaves and in order to use these airways, broadcasters must obtain a license from the federal government to ensure that their stations serve the "public interest, convenience, and necessity" (Signorielli, 1991a).

Two government agencies, the Federal Communications Commission (FCC) and the Federal Trade Commission (FTC), were designated to monitor broadcasters and ensure that they served the public interest. The FCC's main responsibility is to regulate station licensing. The FCC, however, can not interfere with the right to free speech, meaning it does not have the "power of censorship." The FTC's function is to regulate interstate commerce and in regards to television, its primary role is to regulate "truth in advertising." The Wheeler-Lea Act of 1938 gave the FTC enforcement powers to deal with violators that used deception or unfair advertising practices. Initially, the FTC's regulation of the television did not include monitoring or previewing commercials. Their primary role was to investigate claims made by an interested party but not to actually initiate claims of illegal advertising practices. Over the years, however, the FCC and FTC have been criticized as "regulating very little" in regards to children's television programming and advertising to children (Condry, 1989).

To counterbalance federal influence, the television industry relied on its lobbying organization, the National Association of Broadcasters (NAB), to address proposed increased governmental regulation. In 1952 NAB established an industry code to assist networks in self-regulation and provide guidelines for voluntary limits on commercials during children's programming. The three major networks, ABC, NBC, and CBS, created a standards and practices department within their organizations to censor programming that might be offensive to the FCC, audiences, advertisers, and affiliated stations (Signorielli, 1991a).

Economic and Marketing Factors

In the early 1950's, most televisions were expensive and only about 9% of households owned a television set. Families often used the pretense that "the children wanted one" to justify this extravagant purchase. Coincidentally, from 1950-1957 a majority of the programming was targeted toward children. At that time children's programs, such as *Howdy Doody* and *Buffalo Bob*, utilized live characters (Condry, 1989).

With technological advances, televisions became more affordable and television ownership rose at an exponential rate resulting in 90% of American households having a television set by 1960 (Condry, 1989). To reach a broader audience, more sophisticated adult programs were developed. The number of children's programming shown on television gradually decreased throughout the 1950's and remained relatively stagnant during the early 1960's. During this time period, broadcast networks viewed children's programming as economically weak and relegated them to Saturday and Sunday

mornings (Signorielli, 1991a).

Inadvertently, this weekend scheduling created a large audience of regular child viewers. Cereal and toy advertisers became involved in children's programming to capitalize on this targeted audience. Consequently, the number of programs for children dramatically increased in the mid-1960's (Condry, 1989). Additionally, the popularity of Walt Disney's animated movies in theaters, the introduction of color television, and cost-effective technological advancements by animators, such as Hanna-Barbera, created a paradigm shift in the content of children's programs shown on Saturday and Sunday mornings (Paik, 2001; Signorielli, 1991a). This resulted in a proliferation of very profitable cartoons, such as *Bugs Bunny*, *Porky Pig*, and *Bullwinkle*, and a decrease in live programs, such as *The Mickey Mouse Club* and *Kukla, Fran, and Ollie* (Signorielli, 1991a). By the late 1960's, low-cost cartoons, particularly those with action adventure stories featuring characters that could be commercialized into toys, became the staple of children's programming while most educational shows, viewed as dull and boring by many children, fell by the wayside (Condry, 1989; Signorielli, 1991a).

To address the demise of educational programming, the Corporation for Public Broadcasting (CPB) and the Public Broadcasting System (PBS) were established in 1967. Creative programs like *Sesame Street*, *Electric Company*, and *Mr. Rogers's Neighborhood* were funded and broadcast by CPB and PBS and have become long-running programs favored by preschoolers and parents (Signorielli, 1991a). The major commercial networks responded with educational/informational cartoon "pop ups" such as *Schoolhouse Rock* and *The Metric Marvels*. Many of the Saturday morning cartoons

during this time period were action-packed but lacked commercial success. *Deputy Dawg*, *The Brady Kids*, and *Archie's Funhouse* are examples of a host of short-run cartoons that failed to attract advertisers and large child audiences during the 1970's.

Emergence of Public Interest Groups

Public interest groups and governmental reviews of television emerged in the late 1960's and early 1970's. The most pertinent public concerns centered on advertising to children and the portrayal of violence on television. Action for Children's Television (ACT), formed in 1968 by a group of mothers, became active in raising public consciousness and advocated for standards in advertising to children and increasing the number of hours of quality programming by the major networks. In 1969 the National Association for Better Broadcasting drew public attention to violence in children's programming by calling for a ban against popular cartoons, such as *Spiderman*, *Batman*, and *Aquaman*. The growth and activity of public interest groups and television's growing reputation as a "vast wasteland" resulted in Congress directing the U.S. Surgeon General to formally research the effects of television violence on children (Condry, 1989; Signorielli, 1991a).

The FCC and FTC came under public pressure to be more involved in regulating children's programming as a result of ACT's grassroots efforts in the early 1970's. The FCC created a special children's unit in 1972 and published the Children's Television Report and Policy Statement in 1974 that encouraged responsible broadcasting to children. The FTC, in turn, adopted its first regulation to restrict advertising to children to specific time limits (12 minutes per hour on weekdays and 9.5 minutes per hour on

weekends). Additionally, the FTC required a clear separation between the program and a commercial (e.g., not broadcasting the Flintstones cereal, Cocoa Pebbles, during *The Flintstones*). NAB tried to circumvent additional FCC and FTC regulation by adjusting its television codes to reduce the amount of advertising to children. NAB also created a “family hour” from 8:00 P.M. -9:00 P.M. to ensure programs judged appropriate for families could be broadcast in prime time (Signorielli, 1991a).

The prevalence of child-oriented network programming maintained a relatively stable rate of 13% throughout the 1970’s and into the 1980’s. Afternoons and weekend mornings remained the prime time for child audiences (Signorielli, 1991a). Despite the Surgeon General’s Report on the Impact of Television Violence in 1972, over 90% of Saturday morning children’s programs contained violence, averaging 5.77 acts per show (Gerbner, Gross, Morgan, & Signorielli, 1980).

Cable television was in its infancy in the 1970’s and the development of the children’s cable network, Nickelodeon, in 1979 launched a new era for children’s programming. During this time, cartoons underwent a style change influenced by the success of *Speed Racer*, a Japanese anime (Desmond, 2001). This Japanese cartoon style portrays cartoon characters as regular people in “everydayness” who experience a “secret life” to defeat foes (Iwaza, 1995). Other Japanese animes, such as *Transformers* of the 1980’s and *Pokemon* of the 1990’s, elevated the complexity and reality of cartoon story lines as well as their toy marketing power (Desmond, 2001).

Deregulation of Television

The presidency of Ronald Reagan in the 1980's led to sweeping deregulation of federal agencies and gave broadcasters sole responsibility for children's programming. This included eliminating time restrictions on commercials targeting children. As such, cartoons became omnipresent during this period with one study indicating that all weekday children's shows on commercial television were cartoons as well as 90% of children's weekend programs. Sixty-six percent of these cartoons were toy-related (Wartella, Heintz, Aidman, & Mazzarella, 1990). The billion-dollar payout from children's television advertisements, the spread of cable television into family households, and the popularity of Nickelodeon generated an even greater financial interest in children's programming by the television industry. The success of Cartoon Network, the Disney Channel, and Fox Family Channel in the 1990's firmly established the monetary durability of cable networks aimed at child audiences (Allen, 2001).

Legislative Response

As a result of deregulation, educational programs became almost nonexistent on commercial broadcast stations by the late 1980's. The television industry contended that educational programs were too expensive to produce and claimed that children older than 6 do not like to watch educational shows, making viewership and advertising limited for this type of programming (Jordan, 1996). The response of ACT, advocacy groups, parents and other interested parties was to lobby Congress for more socially responsible television for children. The Children's Television Act of 1990 (CTA) made the renewal of commercial broadcast station's licenses contingent on these stations providing

educational and informational programming for children age 16 or younger.

Under the CTA, the FCC was given the power to ensure that appropriate programming was made available and that children were protected from overcommercialization. The FCC vaguely defined educational and informational programming as programs that promoted positive development in children by addressing their cognitive/intellectual or social/emotional needs (Kunkle & Wilcox, 2001). Broadcast stations initially reported an increase in children's programming from 2 hours to 3.5 hours per week but did little to change their program offerings (Jordan, 1996). Commercial broadcasters were criticized for not upholding the spirit of "educational and informational" programming. For example, some stations claimed *The Jetsons* provided children information on future technology and *The Flintstones* conveyed important history lessons (Kunkel & Canepa, 1994; Szulc & Tchaicha, 1995).

The Three- Hour Rule

During this time period, scientific reports on violence and television were issued by the American Psychological Association (1993), the National Academy of Sciences (Reiss & Roth, 1993), the American Academy of Pediatrics (1995), and the American Medical Association (Walsh, Goldman, & Brown, 1996). The conclusions presented in these reports were consistent: "viewing televised violence poses a risk of harmful effects on children" (Kunkel & Wilcox, 2001, p.592). Under President Clinton's administration, revisions were made to the CTA resulting in the 1996 Children's Television Rules. The Rules require a minimum of 3 hours a week of educational content in regularly scheduled programs that are targeted at an identified audience and have an educational/information

(E/I) symbol listed on-screen during the program. Additionally, each broadcast station has to designate a children's programming liaison who is responsible for the station's adherence to the Rules as well as submitting a quarterly Children's Television Report to the FCC outlining E/I objectives of its designated children's programs (Hill-Scott, 2001).

TV Parental Guidelines

Concurrent with the CTA revisions, a second form of legislation, The Telecommunications Acts, was also passed in 1996 to convey the age-appropriateness of programs. Age-appropriateness was based on the presence of violent content, sexual content, and/or strong language in the television show. The rating system developed by the FCC involved two tiers, the first tier for children's program and the second one for programs intended for the entire family. The first tier used TV-Y to designate shows created for children under age 7 and TV-Y7 for children older than age 7. The second tier ratings consist of TV-G (all audiences), TV-PG (parent guidance), TV-14 (viewer should be at least 14) and TV-MA (mature audiences) (Greenberg & Rampoldi-Hnilo, 2001).

The Telecommunications Act also mandated that new televisions contain a V-chip, a silicone sentry that parents can set to interfere with the reception of designated programs they deem inappropriate (Kunkel & Wilson, 2001). In 1997 more detailed content information was added to the rating system with FV (fantasy violence) applied to TV-Y7 as needed and V (violence), L (language), S (sex), D (adult dialogue), and FV (fantasy violence) used in the second tier family ratings (Greenberg & Rampoldi-Hnilo, 2001).

Industry's Response to Content Compliance

The television industry's response to legislation to make children's programming more socially responsible has been mixed. Cable networks, since they do not use public airwaves, do not fall under the review of the FCC although some cable broadcaster such as Nick Jr. and Noggin voluntarily offer E/I programming. The FCC has been criticized as using "good-faith judgment" with broadcasters to create eligible programs (Hill-Scott, 2001).

In the early 1990's PBS initially benefited from "the preschool gold rush," launching very successful educational programs like *Barney and Friends* and *The Magic School Bus*. By the end of the 1990's, however, PBS, due to limited funding and strong competition from Nick Jr., the Learning Channel, and Discovery Kids, lost its status as "the only safe haven for children's programming" (Franklin, Rifkin, & Pascual, 2001). Six commercial broadcast networks, ABC, CBS, NBC, Fox, UPN, and WB, provide about 80% of the E/I programming (Schmitt, 1999). Most E/I programming is animated and predominantly targeted at children ages 6 to 11. In an attempt to comply with the CTA and still maintain a level of self-regulation, the six major networks utilize advisory panels and/or external consultants to review programming issues and provide feedback on educational content. For example, in 1999 ABC used 20 external consultants across its six E/I programs and employed a Ph.D. level educator as its network director for standards and practices for children's programming. The CTA and the Television Rules provide specific times and core purposes for the content of children's shows, but the kind of content appropriate for specific ages is still undefined (Hill-Scott, 2001).

Parents' Awareness of Television Content

The average American household has television reception for more than 50 channels, making it difficult for parents to monitor their children's television viewing. Parents report being more concerned about what their children watch than how much they watch (Woodard, 2000). Less than 17% of parents say there is "a lot" of good television for their children to watch. Two-thirds of parents report supervising a "great deal" what their children watch although about 25% report that their children watch inappropriate programs a "great deal" (Woodard, 1999).

Parental supervision of program selection is made even more difficult, because 57% of children have a television in their own bedroom. This includes 24% of preschoolers (Woodard, 2000). Most parents have television restrictions on violent content, but children report that television restrictions by their parents are inconsistently enforced (Holtz, 1998; Krcmar & Cantor, 1996). Parental co-viewing usually occurs when watching both adult and children's programming, but parents who co-view children's programming are typically parents of preschoolers who watch shows created for that age group (Woodard, 2000). Eighty-seven percent of parents report talking about the content of programs sometimes when co-viewing (Woodard, 2000), but past research suggests that parental discussion of program content is rare (Dorr, Kovaric, & Doubleday, 1989; Jordan, 2001). In regards to steering their children's program selection, 43% of parents could not list a program they encouraged their children to watch and 38% could not identify a program they discouraged their child from watching (Woodard, 2000).

The CTA and the Telecommunications Act also seem to have had limited benefit for parents in monitoring children's programs. Four years after the implementation of the guidelines, only 51% of parents reported that they were aware of the TV Parental Guidelines rating system and only 45% were knowledgeable about children's programs being rated as educational. Most parents report that they determine the suitability of programs for their children by watching the programs. Twenty-three percent of parents report using the on-screen television symbols as a guide to select children's programming and only 18% use the guidelines listed in *TV Guide*. In terms of V-chip use, 40% of families have a television with program blocking technology but only 51% of those families have programmed their televisions to block selected programs (Woodard, 2000).

While parents express concern about the content of television programs that their children watch, they are challenged by the vast selection of television programs available and the convenient access their children have to televisions. Parents' interest in supervising television-watching also varies based on their general opinion of television programming and the age of their children. While legislation and technology promote more socially responsible television programming for children, most parents are not familiar with guidelines or utilize program-blocking devices. Despite legislative, technological, and parental mediation efforts, parents are often unaware of the content of the television programs their children are watching.

Theoretical Perspectives on Television's Influence

While media socialization lacks face-to-face interactions, children's programming offers examples of experiences children might be familiar with, have yet to experience

first-hand, or might never be exposed to otherwise. Television provides information about how people behave in different environments – both realistic and fantasy-based. Additionally, program content incorporates various beliefs, attitudes, and values about interpersonal relationships (Condry, 1989; Signorielli, 2001). Several psychological theories have been posited to explain how television’s content can impact behavioral and/or cognitive processes in young viewers.

Social Learning Theory

Bandura’s social learning theory supports the view “...that human behavior is transmitted whether deliberately or inadvertently, largely through exposure to social models” (Bandura, 1971, p.1). According to social learning theory, learning is a continuous process and observed outcomes of others’ actions influence one’s behavior in much the same way as having experienced the consequences personally. Observed behaviors that are rewarded increase the likelihood that the particular behavior will be modeled and observed behaviors that are punished decrease the likelihood that the behavior will be modeled. However, observed behaviors that are considered transgressions but do not have consequences are more likely to be modeled as if the behavior had been rewarded (Bandura, 1973). According to Bandura, television has become a “superb tutor” for children to learn a variety of behaviors (Bandura, 1973). Children, in general, search for role models to guide their own behaviors and advances in media have allowed children’s social learning to extend beyond real-life models to symbolic models on television and films (Bandura, 1986).

Observational learning has been investigated extensively since the 1960’s, and

empirical documentation from laboratory studies indicates that children can learn violent behavior from observing aggressive models on film (Bandura, Ross, & Ross, 1961; Bandura, Ross, & Ross, 1963). Bandura and colleagues (1961, 1963) demonstrated that children were more likely to imitate a model when the model was rewarded rather than punished for displaying aggressive behavior. While Bandura's experiments have been criticized for lack of ecological validity (i.e., the films were not similar to the format of television shows and hitting an inflatable doll is not typical aggressive behavior), later studies have provided additional support that children who watch violent television content behave more aggressively immediately after viewing the program than do children who watch nonviolent content (Boyatzis, Matillo, & Nesbit, 1995; Bushman & Huesmann, 2001; Friedrich- Cofer & Huston, 1986; Josephson, 1987; Paik & Comstock, 1994).

The most common criticism of media effects research, regardless of theoretical orientation, is that the long-term effects of television viewing are based on correlational studies which do not establish a causal relationship. In their meta-analyses, Paik and Comstock (1994) reported that the average size for the immediate effect produced in experiments investigating violent content and aggressive behavior was equivalent to a .4 correlation. Interestingly, the overall effect size for all studies, including longitudinal studies, in Paik and Comstock's (1994) meta-analysis was .31, suggesting that to some degree immediate effects may be sustained over time.

Empirical support for social learning of prosocial behaviors after viewing prosocial content has mixed results (Mares & Woodard, 2001). While some field

experiments indicate that viewing prosocial content results in significantly more prosocial behavior in children or a reduction in aggression (Bankart & Anderson, 1979; Collins & Getz, 1976; Polous, Rubinstein, & Liebert, 1979), most correlational studies report very weak effects of prosocial viewing (Mares & Woodard, 2001). Unfortunately, studies focusing on prosocial content are not as abundant as the research on aggressive content. Many questions relating to social learning theory and prosocial content have yet to be investigated. For example, the use of an extrinsic reward for modeling prosocial behavior after viewing it on television has not been addressed (Mares & Woodard, 2001; Bushman & Huesmann, 2001). Empirical support for social learning of television content exists but falls short of addressing issues related to nonobservable psychological processes, such as how a viewer's beliefs and attitudes are influenced by television.

Social Cognitive Theory

Bandura's social learning theory evolved to address cognitive constructs that individuals create to organize information obtained from a variety of environmental influences. These environmental influences include family, peers, schools, and religious institutes as well as television and other forms of media. In Bandura's social cognitive theory, cognitive modeling results in the development of schema, "mental filing cabinets" that represent an individual's understanding of events and objects (Bandura, 1986; Entman & Rojecki, 1998). Schemas act as detailed rules to guide an individual's behavior in certain situations. Additionally, a person is not just a "reactive organism" but an agent that uses self-reflection and self-regulation to operate within an integrated and causal social structure. According to social cognitive theory, television characters present

as models for children to evaluate. By observing the self-evaluative standards used by television characters and watching how these models react to each other, young viewers learn strategies for social interactions that they may apply to their own real-world situations (Bandura, 1986).

Social cognitive theory is often cited in the discussion of social role attitudes that children acquire from stereotypical portrayals in television programs. Greenberg and Atkin (1982) contend that televised stereotypes alter cognitions and expectations of viewers. Inaccurate beliefs and unflattering stereotypes observed on television may result in the development of prejudiced social role schemas (Entman & Rojecki, 1998). The findings from Hearold's (1986) meta-analysis of 230 studies indicate that television viewing has a strong effect on role stereotyping. Numerous studies have investigated social role stereotypes on television in regards to gender, (Durkin & Nugent, 1998; Thompson & Zerbinos, 1997), race (Berry, 1998; Entman & Rojecki, 1998), aging (Kovacic, 1993), sexual activity (Lowry & Shidlern, 1993; Peterson, Moore, Furstenberg, 1991), marital status (Signorielli, 1991b) and occupation (Elasmar, Hasegawa, & Brian, 1999; Vande-Berg & Streckfuss, 1992).

Providing empirical support for social cognitive theory is challenging due to limitations in measuring cognitive modeling and schema formation. For example, Eyal and Rubin (2003) proposed that a viewer's trait aggression is related to social cognitive modeling. They reported that viewer's attitude about aggression, measured by having the viewer complete a questionnaire on trait aggression, predicts a viewer's identification with aggressive characters in television. The question remains whether reported trait

aggression equates to cognitive schema. Research findings also are limited by the inability to isolate schemas formed only due to television viewing as opposed to other third variables such as parental supervision and peer interactions. Another methodological shortcoming with research related to social cognitive theory is that it is nearly impossible to obtain a control group as most children have watched television and may have already formed social role schemas. Finally, a common criticism is that media research that focuses on content analyses provides needed information on the stereotypes and images depicted on television but does not address the causal relationship of the media's effect on viewers (Huntman & Morgan, 2001).

Script Theory

Huesmann (1986, 1988) expanded the concept of social scripts to explain how children may learn aggressive behaviors by observing violent behavior in the media. Huesmann proposed that social behavior is controlled by “cognitive programs or scripts” that are stored in memory and provide rules and strategies for solving social problems. For example, a child learns an aggressive script by observing aggressive behavior in a television program and encodes this behavior into an internal representation. The script is rehearsed through fantasy play, making the script easier to access and allowing it to become more generalized than the original script. The child can retrieve and act out the script when a specific cue that was present during encoding becomes present in the environment at the time of retrieval (Huesmann, 1986, 1988). Sanson and diMuccio (1993) elaborated that

exposure to violent cartoon characters and subsequent play with toys

based on the cartoon series will influence children's behaviour by providing them with an opportunity to rehearse the aggressive scripts initially stored in memory or strengthened through viewing the cartoon (p. 93).

Scripts that are chronically accessed are strengthened, become less resistant to modification, and generalized across various settings (Huesmann, 1988).

Aspects of script theory have been supported by research. Dillman, Anderson, Anderson, and Deuser (2000) reported that aggressive individuals created more ambiguous stories with aggressive content than nonaggressive individuals. In another investigation of media's influence on cognitive scripts, Bushman and Anderson (2002) reported that individuals who played violent video games used a significantly greater amount of aggressive content in story-telling than individuals who did not play violent video games. Research based on script theory is limited and primarily used to address aggressive behaviors. Additional investigation into television viewing and script-completion tasks is needed to strengthen script theory's empirical base.

Neoassociation Theory

Berkowitz (1984, 1990) also focused on cognitive processes in his neoassociation theory by addressing the concept of environmental cues and priming. He theorized that aggressive behaviors learned from past experiences not related to the media may be "triggered" by violent television programming. An individual may associate violent television content with the recall of a previous aggressive incident. This recall may "prime" other semantically related thoughts and increase the probability of the individual

having additional aggressive thoughts. These cognitive associations may extend to emotional and behavioral reactions and become an impetus for future aggressive behaviors. An environmental cue, such as weapon or aggressive peer, may stimulate aggressive ideas that are more readily accessible because they have been primed by viewing violent programming (Berkowitz, 1984).

Several studies have investigated the priming effects of violent television content on children's behavior (Roskos-Ewoldensen, Oroskos-Ewoldensen, & Dillman Carpenter, 2001). For example, Josephson (1987) reported that viewing a violent television program primed boys who were rated by their teachers as high in aggressiveness to display more violent behavior during a game of floor hockey than aggressive boys who viewed a nonviolent program. Additionally, the effect was greater when violent programming was coupled with a violence-related cue and when frustration occurred after viewing the aggressive television program. When the boys were assessed during later periods of play, violent programming and a violence related cue did not influence the level of aggression displayed while play floor hockey, suggesting that the priming effect lessens over time. Anderson (1997) reported findings consistent with Josephson (1987). Anderson (1997) investigated the priming effect of violent programming with college undergraduates and the results of this study support Berkowitz's neoassociation theory in that the violent programming primed aggressive feelings and aggressive thoughts in research participants.

Media priming research has also extended to other contexts than media violence. Stereotypic media images involving gender (Hansen & Hansen, 1988), rape myths

(Malamuth & Check, 1985), and teenage smoking (Pechman & Ratneshwar, 1994) can have a priming effect that results in stereotypic impressions with viewers. These studies provide support for media priming, but the empirical research has several shortcomings. One theoretical shortcoming that needs to be addressed is understanding how the priming effect, which appears to lessen over time (Josephson, 1987), has long-term influence. Additionally, many studies on media priming do not include a control condition in their design, compromising the findings of a priming effect (Roskos-Ewoldensen, Oroskos-Ewoldensen, & Dillman Carpenter, 2001).

Cultivation Theory

Another well-known theoretical orientation that is relevant to media socialization is cultivation theory (Gerbner, Gross, Morgan, & Signorielli, 1980). According to this theory, viewers' expectations about experiences in life are influenced by events and experiences they have observed on television. Gerbner and colleagues (1982) proposed that television has a "backward" effect, meaning television content can shape viewers' perceptions of society according to what is portrayed on television.

Television provides...a shared daily ritual of highly compelling and informative content ... its drama, commercials, news, and other programs bring a relatively coherent world of common images and messages into every viewing home (Gerbner et al., 1982, p.102).

According to cultivation theory, television "cultivates" mainstream outlooks into "a homogenization of divergent views and a convergence of disparate views." Additionally,

television content that has a particular salience or personal relevance may resonate with viewers, amplifying the cultivation of the television message (Gerbner et al., 1980).

Cultivation theory is often associated with the heavy-viewing of television violence and “the mean world” hypothesis. For example, Shrum (1996) found that heavy viewers of television reported significantly higher frequencies of real-life crime and marital discord than light viewers. In another study, heavy viewers were found to have more interpersonal distrust and a heightened sense of danger (Signorielli, 1990).

Television’s cultivation effects, however, have been studied for a variety of cultural messages (Huntemann & Morgan, 2001; Signorielli, 2001). Buerkel-Rosffuss, Greenberg, Atkin, and Neuendorf (1992) found that the more real a television portrayal is perceived by children, the more they expected real life to be consistent with this portrayal. Children who were heavy viewers of family shows did not believe that real-life families experienced frequent conflicts. A content analysis of family shows used in this study found that most television family relationships were portrayed as affiliative with very few family conflicts, contrary to the challenges experienced by real-life families.

As with most media effects research, Gerbner’s cultivation theory has been widely criticized. Many critics contend that television is not homogeneous. The expansion of cable stations and satellite television services during the past decade has made diversity and multicultural programming more accessible. Signorielli and Bacue (1999), however, found support for the premise of homogeneous content as they found considerable consistency in characterizations in television programs over the past 30

years. A second criticism is that most content analyses do not distinguish between types of television programs. For example, some critics object to violence in cartoons being equated to violence in drama and horror movies (Potter, 2003).

A third concern is that cultivation theory neglects to address how viewers interpret media portrayals. Gunter's (1985) position is that there is no evidence to suggest that "messages" identified in content analysis are the same "messages" perceived by viewers. The psychological mechanisms related to cultivation effects have been described as occurring in a "black box" in cultivation research (Hawkins & Pingree, 1990).

Additionally, contrary to Signorielli's (1990) findings that the amount of television-viewing influences one level of distrust, Rubin and colleagues (1988) reported that age, socioeconomic level, gender, and perceived realism predict the level of trust in others more so than the amount of television viewing. Factors, such as program choice and other differences between heavy and light viewers may influence viewers' perceptions of reality (Dominick, 1987). Similarly, Potter (1986) contends that cultivation effect is a function of more complex variables than just the level of viewing and that factors such as the level of identification with television characters, viewer's developmental ability, and experience with television, need to be addressed to understand whether cultivation effect actually occurs.

The theories presented – social learning, social cognitive, script, neoassociation, and cultivation – have made major contributions to the understanding of television's influence on viewers. Regardless of theoretical orientation, there are several general criticisms of media research. One methodological problem stems from a literature base

with varying operational definitions for violence, aggression, and prosocial behaviors. Another criticism is that the samples used are often small in size and not representative. Finally, the theories presented each focus on relatively narrow explanations of the psychological mechanisms involved in media socialization (Carnagey & Anderson, 2003).

Factors Influencing Television's Effect on Viewers

While the various theoretical orientations attempt to explain behavioral and cognitive processes that facilitate television's socialization effect, media research has also investigated numerous variables that influence children's understanding of television content. Two influential factors – those related to the viewer and those related to programming -- contribute to children's learning from television. Viewer factors include the age of the child, gender, race, and socioeconomic status. These variables are relevant to the amount of attention children pay to television programming and their comprehension of content. Programming factors, such as pace, action, perceptual salience, type of character, and type of content also contribute to the amount of time and attention children commit to their television viewing.

Viewer factors

Research indicates that what children get out of television depends heavily on what personal characteristics they bring to the viewing experience (Clifford, Gunter, & McAleer, 1995). Television is a near-constant presence in most children's homes. Two-thirds of parents with children under the age of 6 report the television being turned on at least half the time and one-third report that the television is almost always left turned on

during the day (Rideout, Vandewater, & Wartella, 2003). Infants as young as 6 months are aware of television's presence and reportedly like looking at televisions (Hollenbeck & Slaby, 1979). Meltzoff (1988) reported that older infants, age 18-24 months old, can imitate a television stimulus, even after a 24-hour delay. The amount of time spent watching television increases through the elementary years and declines after age 12 (Comstock & Scharrer, 2001). Program preferences also change with age. Preschool children prefer television shows with appealing animal characters. Over 50% of children ages 3 to 5 named a cartoon as their favorite program (Comstock, 1991) and over 90% of the top 30 programs viewed by children ages 2 to 11 years old are cartoons (Vasquez, 2004).

Children's comprehension of television is diverse and related to their level of cognitive development (Van Evra, 1998). Children's vigilance during television viewing increases sharply from age 1 to 5 and then more gradually through the rest of childhood (Anderson et. al, 1986). Young children monitor television primarily through auditory attention and visually focus on the screen based on auditory cues (Pingree, 1986). In general children spend only about 66% of their time looking at the screen with children 7 to 10 years of age attending to the screen mainly when it was necessary to understand the storyline (Baer, 1997). At age 7, most children can understand the story schemata presented in a television program whereas children from 2 to 6 years of age require story content that is simple and causal links that are very clear (Mandler & Johnson, 1997).

Younger children also have more difficulty distinguishing fictitious television stories from reality and may overgeneralize television content to the real world. By age 4

or 5, most children have a rough concept of what is real (Dorr, 1983) although Quarforth (1979) reported that children 4-6 years old could barely make the distinction between dolls, cartoon characters, and real people. A clearer understanding of the reality of television programs appears to develop when children are in the 6th grade (Dorr, 1983). Children with learning disabilities also appear to have more difficulty distinguishing fantasy from reality (Gadow, Sprafkin, Kelly, & Ficarrotto, 1988). Van der Voort (1986) suggests that other factors such as the amount of viewing and gender may also contribute to children's ability to make the distinction between reality and television fiction.

The findings on viewing frequency and gender are mixed. Nielson Media Research (1999) reported no gender differences in children age 2 to 11 while other studies indicate that a gender difference occurs around age 4 and increases with age (Bianchi & Robinson, 1997; Carpenter, Huston, & Spera, 1989). Mauldin and Meeks (1991) and Timmer, Eccles, and O'Brien (1985) reported that boys watch more television but mainly on weekends. Van der Voort (1986) found that boys and girls differ mainly in their program preference with boys preferring violent programs and girls enjoying violence less and perceiving it as less realistic. For example, preschool girls prefer family cartoons, such as the *Flintstones*, whereas preschool boys listed a violent cartoon as their favorite program (Comstock, 1991).

Race, as well as socioeconomic status, appear to be factors in the amount of television a child watches. African American children watch almost twice as much television as Caucasian children (Tagney & Feshbach, 1988; Stroman, 1984). Among Caucasian viewers, socioeconomic status is inversely related to the amount of television

viewing. For African American viewers, socioeconomic status appears to play a lesser role and the relationship may occasionally be direct rather than inverse (Comstock, 1991). African American children also watch programs featuring African American characters more often than Caucasian children (Gunter & McAleer, 1997). In addition to watching more television, children from low socioeconomic class watch more violent television programming than children from middle to upper socioeconomic classes (Milvalsky, Kessler, Stipp, & Rubens, 1982).

Television's Influence: Program Factors

Viewer variables contribute to the types of program variables used in creating children's television programs. In general, children's programs are designed to direct children's attention to the television. Children's perceptual systems resonate to stimulation differently from adults. As such, children's programs are tailored so auditory and visual features and their storyline attract targeted child audiences (Van Evra, 1990; Condry, 1989).

The two main visual dimensions of children's programs are action and pace. Action refers to physical movement and pace to the speed of the storyline (Condry, 1989). Rapid action holds the attention of young children while moderate action is slower and helps older children follow a plot. Cartoons and programs designed for younger children often incorporate running, jumping, flying, and "zippity-bang whizzing" to maintain their viewers' interest. Similarly, fast pace is integral to children's programs. Numerous changes in scenes and characters are appealing to children (Huston et al., 1981). The fast pace in animated and live children's programs, however, is often

criticized for not allowing the opportunity for reflection, rehearsal or verbal explanations that might enhance comprehension (Wright et al., 1984). There is evidence to suggest that children's attraction to violent cartoons and their reduced interest in educational programs is related more to the level of action and pace in these programs than to the actual violent content (Huston-Stein, Fox, Green, Watkins, & Whitaker, 1981).

In addition to visual features, auditory techniques draw a viewer's attention to the television. Rhyming, singing, sound effects, peculiar voices, and auditory changes are common features used in children's programs, especially cartoons (Wright et al., 1984). Salient auditory stimuli can help younger children in their comprehension and retention of television content (Wright & Huston, 1983). Older children also tend to use salient auditory features as learned cues that relevant or interesting content is being presented and they should attend to the screen (Calvert et al., 1982).

The types of characters used in the storyline, for the most part, determine the extent of viewership for that program. The degree to which a child identifies with a character may influence whether a child imitates or incorporates values from that character (Durkin, 1985). Preschool children tend to pay more attention to animated characters and women characters (Anderson, Alit, Lurch, & Levin, 1979). Younger children typically identify with characters that are similar to themselves while older children tend to identify with characters that they emulate (Feilitzen, & Linne, 1975). Forty percent of the violent acts on television are initiated by characters portrayed as heroes or attractive role models for children (Kunkel, Wilson, Donnestein, & Blumenthal, 1995).

Research indicates that children's perceptions of women and minorities can be negatively effected by frequent stereotypic portrayals while under representation of these groups reduces opportunities for children to observe positive role models (Van Evra, 1990). In general, male characters outnumber female characters in children's programming, and one study reported a 5:1 ratio in cartoons (Signorielli, 1991a). In a study commissioned by Children Now (Heintz-Knowles, 1995), the findings indicate that, across all forms of television, 70% of child characters display prosocial behaviors and 40% engage in antisocial acts (multiple behaviors for each child character). The boy characters are 60% more likely than the girl characters to display physical aggression, and the girl characters are twice as likely as the boy characters to display affection. Child characters with varied ethnic backgrounds are also underrepresented on television. While there has been some improvement in the number of African American youth depicted (13.7% of child characters), only 2.1% of child characters are Hispanic/Latino, and only 4.1% Asian American (Heintz-Knowles, 1995).

The characters in children's television contribute to the type and quality of the content presented to young viewers. Huston, Watkins, and Kunkel (1989) reported that the average child will have observed 8,000 murders and 100,000 violent acts on television by the time the youngster completes elementary school. Additionally, 95% of all antisocial acts depicted on television are found in programs from commercial broadcast networks (Heintz-Knowles, 1995). In regards to prosocial content, a survey of children's shows from 1998-1999 indicated that 50% of them contained a storyline with a social lesson. Woodward (2000), however, reported that of the top 20 shows watched by

children ages 2 to 17, only four contained one or more episodes with a social lesson.

In their meta-analysis of television programs with aggressive and prosocial content, Mares and Woodard (2001) concluded that the combination of aggressive and prosocial behaviors in a program may result in greater negative effects in young viewers' behavior than programs with just aggressive content. In Mares and Woodard's analysis, a comparison of studies involving children who watched only aggressive content and children who watched only prosocial content resulted in an average effect size (r) of .26. A comparison of studies involving children who watched aggressive-prosocial content and children who watched only prosocial content, the average effect size (r) was .39. Mares and Woodard described this difference as "troubling," because in their interpretation of the findings, children who watched prosocial-aggressive content displayed more problem behaviors than children who only watched aggressive content when both groups were compared to children who watched only prosocial content (2001).

Silverman and Sprafkin (1980) reported findings consistent with Mares and Woodard (2001) in their research on *Sesame Street*. In Silverman and Sprafkin's study, children viewed selected segments of *Sesame Street* program involving content depicting conflicts that were resolved using positive solutions, content containing only prosocial behavior, or neutral content involving no social lessons. While playing a marble game, the children who watched only prosocial content displayed the same level of cooperation as the children who had viewed the neutral. Children who had watched the conflict-resolution content displayed less cooperation than the children who watched the neutral content (Silverman & Sprafkin, 1980). These findings suggest aggressive-prosocial

content, even in the context of an educational program such as *Sesame Street*, may contain aggressive content that is more salient to young viewers than the prosocial lessons incorporated into the storyline. Roberts and Bachen (1981) propose that aggressive content combined with a moral message may be too complex for young children to understand. Unfortunately, most children's programming tends to contain a mixture of aggressive and prosocial behaviors (Wiegman, Kuttschreuter, & Baarda, 1992). Cartoons, in particular, have been described as a "gray world" where good-versus-evil themes justify "good" characters using violence to resolve conflict (Condry, 1989).

Research on content of children's programming

Content-specific research in children's television programs has historically been connected to issues concerning the amount of violent programming viewed by children. Over the years the scope of behaviors examined in content analyses of children's programming has broadened to include altruistic acts (Liss & Reinhardt, 1980), intrapersonal skills (Woodard, 1999), interpersonal skills (Woodard, 1999), sibling interactions (Larson, 1991), and gender roles (Matelski, 1985; Signorielli, 1991b).

Content Analyses of Family Interactions

The portrayal of family relationships on television has also received review by television researchers (Bryant, 1990). Some social critics have criticized television's role in the decay of the conventional family due to the depiction of nontraditional families in television programs (Kubey & Donovan, 2001). Other critics claim that television families are presented as idealized models that "leave people [viewers] failing as both spouses and as parents" (Birdwhistell, 1977, p. 312).

Early research on prime time television families revealed a general lack of violent or disruptive behaviors among family members (Kubey & Donovan, 2001). Akins' comparative analysis of television families from the 1960's and the 1980's (as cited in Skill, Wallace, & Cassata, 1990) indicated that television family members of the 1980's were more supportive and showed more concern for each other. Additionally, child characters of the 1980's initiated more interactions with their parents than the 1960's, but the child characters also initiated more conflicts with adults.

Douglas (1996) found that in domestic comedies parents tend to be portrayed as appropriate role models but children are shown more negatively. Contrary to Douglas' findings, some critics describe programs appealing to teenagers, such as *Buffy the Vampire Slayer*, as depicting parents as

adult characters [that] are completely oblivious to the dangerous world of the teens, leaving children to survive evil among doltish and useless adults (Kubey & Donovan, 2001, p. 330).

A 2000 content analysis of children's prime-time programs indicated that only 12% of child characters deal with family issues in the program's storyline. Additionally, parent characters are often absent, uninvolved or ineffective in these programs. Children are often portrayed as self-reliant and not needing support from their family or community (Heintz-Knowles, 2000).

Two recent content analyses on the portrayal of families on television were completed by Skill and Wallace (1990) and Bundy, Thompson, and Strapp (1997). In a

content analysis of 25 different family programs, Skill and Wallace (1990) identified three family configurations: intact families (only married couples living in household with children); nonintact families (one or both birth parents are not living in household); and mixed-family portrayals (both intact and nonintact families portrayed in show). Intact families were portrayed in 39.5% of the family roles, nonintact families in 29.7%, and mixed-family, 22.4%. Across all family types, the greatest portion of parent-child interactions was rated as neutral acts. Conflict resolving acts (37.2% of communicative acts) occurred more often than conflict escalating acts (22%). Giving reassurance was the most frequent individual act by mothers and fathers. Fathers and daughters displayed the most conflict escalating acts, but fathers and sons used attacking and disparaging remarks more often than mothers and daughters.

Skill and Wallace (1990) also investigated the relationship between family configurations and the types of family interactions. Intact families were portrayed in more conflict resolving acts and less conflict escalating acts than the other family units. Nonintact families were depicted in less conflicting resolving acts than other family configurations and mixed-family units displayed the most conflict escalating acts. Skill and colleagues concluded that television families were portrayed, for the most part, as harmonious and supportive families. Additionally, the interpersonal interactions of the different family configurations were more similar than different in nature.

Bundy, Thompson, and Strapp (1997) analyzed parenting behaviors depicted in situational comedies. Their content analysis focused on the types of parenting behavior portrayed in family series identified as “antifamily” or controversial (e.g., *Roseanne* and

Married with Children) and noncontroversial (e.g., *Full House* and *Family Matters*).

Parenting behaviors were classified as either beneficial (e.g., parent met at least one of five identified developmental needs, such as the need for a loving, supportive relationship) or detrimental (e.g., parent did not meet one of the five identified developmental needs). Controversial programs represented only 20% of the family series but contained 30% of detrimental parenting behaviors. Parents who displayed detrimental parenting behaviors in controversial programs received more reinforcement from others for their parenting behavior than parents who displayed detrimental parenting behavior in noncontroversial programs. Noncontroversial programs had considerable variation in types of parenting behaviors portrayed across individual programs. Three of the noncontroversial programs had more detrimental parenting behaviors than one of the controversial programs. Across both types of series, one-third of parenting behaviors was identified as inappropriate. Additionally, two-fifths of the consequences of parenting behaviors were identified as inappropriate (beneficial parenting behaviors associated with a punishing consequence or detrimental parenting behaviors associated with reinforcing consequence).

Overall, two-thirds of parenting behaviors portrayed in both controversial and noncontroversial family comedies were beneficial. Bundy and colleagues raised several concerns about television parenting based on their findings. First, parents who favor controversial family series are being exposed to a significant amount of detrimental parenting behaviors. Second, parents who view some noncontroversial programs may actually observe more detrimental behaviors and inappropriate consequences for

parenting than if they watched controversial programs. Finally, regardless of program type, parents are being exposed to beneficial parenting behaviors that are punished and detrimental parenting behaviors that are rewarded. According to Bundy et al., these messages, based on social learning theory, may facilitate the adoption of detrimental parenting behavior in viewers (1997).

Content Analyses of Cartoons

Surprisingly, very little research has been conducted on the content analysis of animated programs in the past decade (Ogletree, Grahmann, Mason, & Raffeld, 2001). Research on family interactions in cartoon programming is almost nonexistent. In a 1995 “Day in the life of TV entertainment” survey, the children’s cartoon, *VR Troopers*, ranked as the seventh most violent program on television with 64 violent scenes. The popular *X-Men* and *GI Joe* cartoons followed not too far behind with 44 and 39 violent acts, respectively (Center for Media and Public Affairs, 1995). In another 1995 study, researchers singled out eight Saturday morning shows (such as *X-Men* and *Mighty Morphin Power Rangers*) as having “sinister combat violence” as opposed to “slapstick violence” (*Bugs Bunny*) and “tame combat violence” (*Spiderman*) (Lawthon, 1995). Although recent content analyses of cartoons have investigated gender-stereotyped content (Lambert & Clancy, 2004; Leaper, Breed, Hoffman, & Perlman, 2002; Ogletree et al., 2001; Thomas & Zerbino, 1995), the depiction of mental illness, (Wilson, Nairn, Coverdale, & Panapa, 2000), the portrayal of the elderly (Park , Klinger, & Brestan, 2003), and the promotion of health messages (Byrd-Bredbenner, 2004).

Content Analyses of Family Interactions in Cartoons

In a review of the research literature, only one published content analysis of family life in a cartoon currently exists, and it examined the well-known and long-running cartoon, *The Simpsons*. The Simpsons have been characterized by critics as being the “squalid underbelly of domestic life” and a “grungy, bickering lot” (Zoglin, 1990). The cartoon, however, has been described as “realistic” by 9- and 10- year-olds, because the show depicts characters and situations that they judge to be similar to real life (Howard, 1993).

Larson’s (1993) analysis compared the family communication styles of two popular, nuclear families portrayed on television in the 1990’s, the Simpsons and the Huxtables of *The Cosby Show*. Larson’s findings indicate that communication in both families was notably affiliative but the families had different patterns of communication. The Simpsons’ communication patterns were consistent with the model of an adult-centered family in which parents support and actively direct their children. As spouses, Homer and Marge Simpson were found to be supportive of each other and actively set the tone for family unity and direction. In comparison with the Huxtable spouses, Homer and Marge had less conflictive communication (25.7% for the Simpsons versus 34.4% for the Huxtables). The Simpson siblings were found to be informing and supportive of each other although 30% of their communication with each other was conflictive. This rate of conflictive sibling communication was consistent with the Huxtable siblings. These findings by Larson are surprising given the negative reputation the Simpsons have as a dysfunctional family

A recent report concerning children's television by the Parents Television Council (2006) indicated that in cartoons child characters treat parent characters with respect only slightly more often than with disrespect. Additionally, parent cartoon characters were portrayed positively 106 times and negatively 94 times during a three-week study period. Other than Larson's (1993) study and the Parents Television Council's 2006 report, information on parent-child interactions in individual cartoons is limited to small pilot studies. Initial investigations about the nature of parent-child interactions in cartoons indicate there is a range of prosocial and inappropriate behaviors depicted by parent and child cartoon characters. A pilot study of 5 child-targeted cartoons (i.e., created primarily for child audiences) suggests that child cartoon characters display more inappropriate behaviors than prosocial behaviors, and parent cartoon characters display more prosocial than inappropriate behaviors (Klinger, Brestan, Park, & Denholm, 2002).

In another study comparing parent-child interactions in child-targeted cartoons (i.e., created primarily for a child audience; e.g., *Rugrats* and *Little Bill*) with those in adult-targeted cartoons (i.e., created primarily for adult audiences; e.g., *The Simpsons* and *King of the Hill*), the child characters in adult-targeted cartoons displayed more prosocial behavior and less inappropriate behavior than child characters portrayed in the child-targeted cartoons (which all aired on Saturday mornings). Additionally, the parent characters in adult-targeted cartoons displayed fewer prosocial behaviors than the child cartoon characters in the adult-targeted cartoons and the child-targeted cartoons (Klinger, Brestan, Park, & Star, 2002).

A larger study analyzing 21 cartoons (Klinger, Park, & Brestan, 2003) resulted in a relatively even mixture of child prosocial and inappropriate behavior displayed by child characters. Across all cartoons, parent characters were portrayed engaging in a significantly greater amount of prosocial behavior than inappropriate behavior. There was also variation across cartoons with regards to the level of inappropriate and prosocial behavior portrayed by the child characters. In the cartoons analyzed, adolescent female characters were depicted as displaying the most inappropriate behaviors.

These pilot studies indicate that parent-child dyads in cartoons are depicted as engaging in a variety of inappropriate and prosocial behaviors (Klinger et al., 2002, 2003). These initial studies, however, have several limitations. The largest sample size was 21 cartoons and this sampling included cartoons aired on only 8 television channels. Additionally, only one parent-child dyad was analyzed per cartoon, limiting the number of parent-child dyads examined from the cartoon samples. As such, the types of cartoon role models children observe when watching parent and child cartoon characters interact is still a relatively unexplored media and social learning question that may have clinical implications for psychologists addressing parent-child interactions in real life.

Statement of the Problem

Extensive scientific support exists to show that television is a very accessible and omnipresent source of information and one of the earliest socializing agents to which children are exposed (Paik, 2000; Van Evra, 1990). The content of television programs consists of behaviors and messages that can influence children's belief systems and behavior responses to a variety of issues - including interpersonal interactions within their

family. Recent legislative initiatives require the television industry to present more socially responsible programming as well as educational and informational television shows for children. However, the type of content in many children's programs, especially cartoons, has not been investigated even though preliminary research indicates that some children, particularly preschoolers and children experiencing disruptive behaviors, may be vulnerable to television's influence and imitate inappropriate behaviors modeled by appealing television characters. Certain children's cartoons may depict more prosocial behaviors than other shows but are not recognized for this due to limited content analyses of cartoons.

The intent of this study was to examine parent-child interactions in family-oriented cartoons. A content analysis of interactions between child and parent cartoon characters will provide information on the quality of parent-child interactions that children observe in this popular type of children's programming. The primary areas of interest were:

- 1) What types of behaviors do cartoon parents and children display when interacting with each other?
- 2) Which cartoons depict more prosocial parent-child interactions than inappropriate parent-child interactions?
- 3) Which television networks televise cartoons with more prosocial parent-child interactions than inappropriate parent-child interactions?

Based on the findings of family interactions in content analyses by Larson (1993), Skill and Wallace (1990) and Klinger et al.'s (2002, 2003) pilot studies, the following hypotheses were proposed:

1a. Parent cartoon characters would display more prosocial behaviors than child cartoon characters.

1b. Parent cartoon characters would display fewer inappropriate behaviors than child cartoon characters.

2a. Mother cartoon characters would display more prosocial behaviors than father cartoon characters.

2b. Mother cartoon characters would display fewer inappropriate behaviors than father cartoon characters.

3a. Daughter cartoon characters would display more prosocial behaviors than son cartoon characters.

3b. Daughter cartoon characters would display fewer inappropriate behaviors than son cartoon characters

METHOD

Procedure

Children's cartoon programming was identified on 23 broadcast and cable networks available through expanded basic cable with the family tier and movie option. Using *TV Guide* and the programming guide for the local Charter Communication service, cartoons were identified that portrayed at least one child character with human-like characteristics. A cartoon was defined as an animated program with a series of episodes scheduled for television viewing on a regular basis. A child cartoon character was defined as a cartoon character that appeared to be between the ages of 3 to 18 years old and was capable of talking. Human-like characteristics were defined as basic body features similar to humans. Deviations in skin tone or hair color (e.g., yellow skin or blue hair), slight body irregularities (e.g., no distinct neck), or nonhuman abilities (e.g., surviving a fall from an extreme height or being run over by a car) were acceptable as long as the overall character portrayal was human-like in nature. Exclusion criteria for this study included: (a) animated characters that were animals, monsters, creatures from outer space, or objects (e.g., *Sponge Bob*); (b) animated programs created in a movie-format; (c) animated characters intermixed with real actors in a program (e.g., *Lizzie McGuire*); and (d) animated human-like characters that could "morph" into nonhuman-like characters, such as robots or animals (e.g., *Teen Titans*), during the course of the program. This did not exclude cartoon characters that maintained human-like

characteristics while also displaying “superhero” qualities, such as flying through the air or having extreme strength. Eighty-eight cartoon programs containing child characters with human-like characteristics were videotaped for one week. These cartoons were televised on 21 broadcast or cable networks. All targeted cartoons from the same television network were taped during the same week (i.e., all targeted cartoons on Cartoon Network were taped the same week). Due to limited videotaping capabilities, no more than five different television stations were taped during a one-week time period. Television stations were randomly selected for recording. Weekly videotaping continued until all selected stations were taped. The hours of taping were from 5:00 a.m. (C.T.) to 12:00 a.m. and started on Mondays and ended on Sundays.

From a total sample of 88 cartoons with child-like characters, a sample of 51 family-oriented cartoons was identified. A family-oriented cartoon was defined as a television cartoon that portrayed at least one adult cartoon character and one child cartoon character as a parent and child from the same family. The parent-child dyad was part of the storyline at least once during the week-long sampling of that cartoon series. All the parent-child interactions in each family-oriented cartoon were identified and the time frames of each interaction were recorded. For each cartoon program, the total time of parent-child interactions was the accumulation of parent-child time frames identified for each dyad across the week of videotaped episodes. A parent-child interaction was defined as a period of time in which both the parent and child were present during a particular scene in an episode. A scene was defined as a segment of the cartoon that had a distinct beginning and an ending caused by a programming transition to a commercial or

a time-leap to another location or period of time in the cartoon's storyline. The parent-child interaction began when both characters appeared in the same scene or the characters' voices were heard interacting with each other regardless of whether both characters were on-screen to the viewer (e.g., Homer portrayed yelling for Bart who was not visible in the scene). The interaction terminated when a member of the dyad departed from the scene and there was no further sound of verbal or physical activity with the other dyad character.

During the parent-child interaction, the dyad did not have to be actively engaged one-on-one with each other and other cartoon characters could be present during the scene. If a parent or child was involved in an interaction with one another as well as with other characters, only the verbal and physical behaviors between the target parent and child were identified as being part of the dyad interaction. For example, if Bart was talking to Homer and his sister, Lisa, only the dialogue between Bart and Homer was the identified parent-child interaction. This included comments by Bart that were directed jointly to Homer and Lisa, such as Bart saying "Holy Cow, no one understands me!" However, communication between Bart and Lisa was not coded. More than one parent-child dyad could be identified within the same cartoon or same family. For example, across the week of videotaped episodes of *The Simpsons*, four dyads were involved in parent-child interactions: Homer-Bart, Homer-Lisa, Marge-Bart, and Marge-Lisa. Parent-child interactions involving the Simpson's baby, Maggie, were not included, because Maggie does not talk and does not meet the operational definition of a child cartoon character. In any scene with multiple dyads interacting with each other, only one

dyad was identified for that family interaction. For example, if Bart was talking to both Homer and Marge, one dyad was randomly selected, such as the Bart-Homer dyad, and the interactions between the Bart-Marge dyad during that particular scene were not used for analysis when identifying Bart-Homer interactions for that cartoon episode.

The primary investigator identified all parent-child interactions in the 51 videotaped family-oriented cartoons. Cartoons containing less than 2.5 minutes of accumulated parent-child interactions were not used in the content analysis. From this sample, 44 parent-child dyads in 28 cartoons across 17 broadcast or cable networks were identified that portrayed at least 2.5 cumulative minutes of parent-child interactions. Only one dyad per cartoon was selected. In order to have cell sizes (i.e., mother-daughter, mother-son, father-daughter, and father-son combinations) approximately the same size for analysis, the dyads from cartoons with only one dyad were first assigned to a cell based on their gender combination. The remaining dyads were assigned to cells based on random selection of dyads with gender combinations needed to keep cell sizes as equal as possible. Table 1 displays the 28 dyads selected for this study. There were 6 mother-daughter dyads, 6 father-daughter dyads, 7 mother-son dyads, and 9 father-son dyads.

For each parent-child dyad in a cartoon, 2.5 minutes of identified interactions were transcribed for coding. The time frames of parent-child interactions were accumulated based on a random selection of the televised episodes. No more than 1.5 minutes of parent-child interactions per cartoon episode were used in the 2.5 minute cartoon segment so that at least two different storylines could be coded for analysis. Two cartoons, *Liberty Kids* and *Kim Possible*, however, only had one cartoon episode for their

dyad's 2.5 minute segment. A second coder randomly selected three of the cartoons and identified parent-child interactions in the episodes that the primary investigator had used to obtain the 2.5 minutes of parent-child interactions. Across the three 2.5 minute segments, the second coder and the primary investigator had a 95% agreement on the minutes identified as parent-child interactions. The primary investigator then transcribed the verbal and physical behaviors displayed by the parent and child cartoon characters. The transcripts of the dyad interactions were coded by coders as they observed the selected videotaped parent-child interactions. The primary investigator also estimated the child character age based on the following categories: preschooler (3 to 5 years old or attending preschool or kindergarten); child (6 to 11 years old or attending 1st grade to 5th grade); and adolescent (12 to 18 years old or attending 6th to 12th grade). The actual ages of the child cartoon character were then verified using Internet references (e.g., www.TV.com, www.Nick.com, and www.Wikipedia.com).

Coders

Primary coders were graduate student research assistants trained on the Dyadic Parent-Child Interaction Coding System II (DPICS-II; Eyberg, Bessmer, Newcomb, Edwards, & Robinson, 1994). The DPICS-II is an observational coding system that has been used clinically and in research to describe parent-child interactions (see Table 2). The DPICS-II's validity and reliability as an observation system has been empirically supported. Bessmer (1996) and Foote (2000) examined the validity and reliability of the DPICS-II in parent-child dyads by comparing the behavior interactions between dyads in which the children had been clinically referred for conduct problems with dyads in which

the children were non-referred. Specifically, Bessmer (1996) investigated mother-child dyads and Foote (2000), father-child dyads. In both studies, identified DPICS-II codes and composite categories demonstrated convergent validity by accounting for a significant portion of the variance in scores on the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999), the Parenting Stress Index (PSI; Abidin, 1995), and the Parenting Locus of Control Scale (PLOC; Campis, Lyman, & Prentice-Dunn, 1995). In these studies, the DPICS-II codes had acceptable reliability estimates and selected DPICS-II composite categories demonstrated that these variables could discriminate between clinic-referred and non-referred families. Initial pilot studies (Klinger et al., 2002, 2003) suggest that the DPICS-II coding system can be a useful investigative tool for identifying and categorizing parent-child interactions portrayed by parent and child cartoon characters depicted in family-oriented cartoons.

Standard training consisted of completing the *Workbook: A coder training manual for the Dyadic Parent-Child Interaction Coding System II* (Eyberg, Edwards, Bessmer, & Litwins, 1994). This training procedure involved reading the coding manual and attaining a 90% grade on all quizzes presented in the workbook. Additionally, coders attended weekly coding meetings with graduate students who had previously achieved mastery of the DPICS-II. During these training sessions, coders discussed any difficulties they had with particular codes and clarified subtle distinctions between codes. To be considered reliable with the DPICS-II, coders had to attain an overall kappa value of .80 when their codes were compared to the codes for a criterion tape. If coders failed to attain an overall kappa value of .80, they were given feedback regarding their kappa scores for each code.

If coders were unsuccessful at attaining an overall kappa of .80 after two attempts, they were given the opportunity to attain inter-rater reliability using a second criterion tape.

Coders also underwent training on the Cartoon DPICS (Klinger, 2004, see Appendix). This coding system consists of all the DPICS-II codes plus the addition of five codes (Laugh-Inappropriate, Cry, Yell-Activity, Yell-Positive, and Cheer) that were adapted for use with cartoons. Laugh-Inappropriate was added to Cartoon DPICS, because laughing is coded in typical DPICS-II observations only if it is positive and appropriate in nature. Since humor in cartoons is often related to inappropriate or aggressive behavior, identifying negative, inappropriate laughter may provide additional behavioral information about the dyad's interactions. Another vocalization, crying, is coded using DPICS-II with either the Whine or Yell code. Silent crying with tears, however, is not coded as defined by these two vocalization codes. The Cry code in Cartoon DPICS was added to address the presentation of tears during silent crying, because this type of crying behavior sometimes occurs in cartoons and may reflect the quality of the parent-child interaction.

Since traditional DPICS-II observations occur in a clinic environment, a yell is coded as inappropriate in this context. In cartoons, however, yelling may be appropriate if it is congruent with activities related to the cartoon storyline. For example, appropriate yelling may occur due to distance between the dyad (i.e., Yell-Activity) or if a character, out of happiness, exclaims something in a positive but loud manner to the other dyad member (i.e., Yell-Positive). The Cheer code addresses vocalizations of cheering by the dyad in a positive response to an activity which does not directly evaluate the behavior of

either dyad member (e.g., dyad cheers at fireworks display) or if a dyad member cheers for his or her own self (e.g., child cheers as he wins a trophy). Similar to the composite categories proposed by Bessmer (1996) and Foote (2000), composite categories for Cartoon DPICS were created to quantify prosocial and inappropriate behaviors. Table 3 displays the initial definitions for the Prosocial Behavior and Inappropriate Behavior composite categories for Cartoon DPICS.

Coders were considered reliable with the Cartoon DPICS when they achieved an overall kappa of .80 when their codes were compared to the coding of the cartoon criterion tape. During the course of coding the cartoon parent-child interactions, coders attended coders meetings in order to review any coding questions and prevent observer drift. The reliability coder coded each tape after the primary coder completed his or her coding, and each tape not meeting an .80 alpha level was re-coded by the primary coder.

Coders also completed a brief survey to assess their level of familiarity with the cartoons used in this study. The coders used the following rating scale to report their viewing history of the cartoons: (a) 1 indicated the coder never heard of the cartoon; (b) 2 indicated that the coder had heard of the cartoon but never watched an episode; (c) 3 indicated that the coder had seen less than five episodes of the cartoon; (d) 4 indicated that the coder had seen more than five episodes but less than ten; and (e) 5 indicated that the coder had seen more than ten episodes of the cartoon. The coders had never heard of, or had not seen, many of the cartoons. To reduce possible bias gained from past viewing experiences, coders were randomly assigned to code cartoons for which they had not seen

more than five episodes. All coders had viewed at least ten episodes of *South Park* and *The Simpsons*. Coders for these two cartoons were selected based on who had viewed these cartoons the least in the past year.

RESULTS

Prevalence and rate of family-oriented cartoons

A sample of 51 family-oriented cartoons were identified during the weekly taping of 23 broadcast and cable television stations that televised cartoons. The prevalence of family-oriented cartoons was calculated based on the number of family-oriented cartoons identified divided by the number of cartoons available during a one-week period of television viewing. A total of 185 cartoons of various genres were televised during this time period. The prevalence of all family-oriented cartoons was 27.7%. The prevalence of the family-oriented cartoons analyzed in this study was 15.1% of all cartoons televised during one week and 54.9% of family-oriented cartoons televised that week.

The rate of family-oriented cartoons shown during the one-week time period was calculated based on the number of minutes of family-oriented cartoons shown on the 23 television channels divided by the total number of minutes of all cartoons shown on these channels during the one-week time frame. The 28 family-oriented cartoons selected for analysis were televised during a total of 459 30-minute episodes (cartoons with two 15-minute episodes per half hour were counted as one 30-minute episode) each week. The total air time of the 28 family-oriented cartoons was 10,098 minutes of actual cartoon content (a 30-minute cartoon typically has 22 minutes of actual cartoon content per episode) or 420.75 hours. The 28 family-oriented cartoons were televised at a rate of

28.3% of all cartoons televised during a one-week period. The rate at which the 28 family-oriented cartoons were televised was almost twice their prevalence during a typical week. Table 4 lists the family-oriented cartoons and networks that were analyzed in this study. Table 1 summarizes the demographics of the dyads used in this study.

Reliability of Coders

Cohen's kappa (1960) was computed to determine the reliability of the parent and child codes of the Cartoon DPICS codes and composite categories. The reliability estimates were obtained from a random selection of ten (approximately 33%) of the 2.5-minute cartoon segments that were coded independently by a primary and reliability coder. The kappa statistic was computed using a computer program (Kappa IV, Jang, 2003) created originally for the DPICS-II but adapted to also include codes for the Cartoon DPICS. The kappa values were evaluated based on guidelines suggested by Fleiss (1981). Kappa values greater than .75 were classified as representing excellent agreement beyond chance; values ranging from .60 to .74 were categorized as being indicative of good agreement beyond chance; values from .40 to .59 were classified as fair agreement; and values below .40 were considered poor agreement. The overall reliability estimate for the ten randomly selected cartoon segments was .88, indicating excellent agreement beyond chance. Table 5 summarizes the kappa values and the classification of kappa using Fleiss' (1981) guidelines for the Cartoon DPICS codes and composite categories.

Analyses of Cartoon DPICS codes and composite categories

The frequencies of the Cartoon DPICS codes and composite categories were calculated for each parent and child cartoon character. The mean frequencies and standard deviation of the Cartoon DPICS codes and composite categories for the parent and child cartoon characters are displayed in Table 6. The frequency of each behavioral code used by the primary coder across the 28 cartoon samples and the number of cartoon characters that displayed each behavioral code are listed on Table 7.

Cartoon DPICS codes that had poor reliability or were observed less than five times by the primary coders were dropped from their respective composite category. Laugh-Inappropriate had poor reliability and Behavioral Description, Cry, and Yell-Positive were observed less than five times. As result, these codes were eliminated from composite categories for Prosocial Behavior (Acknowledgement + Information Description + Labeled Praise + Unlabeled Praise + Reflection + Laugh + Physical Positive + Cheer) and Inappropriate Behavior (Criticism + Smart Talk + Yell + Whine + Physical Negative + Destruction). The mean of Prosocial Behavior codes identified in the cartoon segments was 46.06 ($SD = 10.41$) and the mean of Inappropriate Behavior was 8.29 ($SD = 5.43$). Prosocial Behavior codes represented 51% of the total behavior codes identified and Inappropriate Behavior codes represented 9%.

Paired t test analyses of the Cartoon DPICS composite categories were completed between the parent and child cartoon characters. Parent cartoon characters displayed significantly more Prosocial Behavior, $t(27) = 4.03$, $p = .00$, than did child cartoon

characters. Parent cartoon characters did not display significantly less Inappropriate Behavior, $t(27) = .317, p = .38$ than child cartoon characters.

Independent t test analyses of the Cartoon DPICS composite categories were completed between father and mother cartoon characters and between son and daughter cartoon characters. Equal variances were assumed. The results of an independent t test analysis indicated that father cartoon characters displayed significantly more Prosocial Behavior, $t(26) = 2.12, p = .04$, than mother cartoon characters. Father cartoon characters also displayed significantly more Inappropriate Behavior, $t(26) = 2.73, p = .01$, than mother cartoon characters. In regards to the child cartoon character's behavior, there were no significant differences between son and daughter cartoon characters for Prosocial Behavior, $t(26) = .69, p = .25$ or Inappropriate Behavior, $t(26) = -.71, p = .24$.

The frequencies for Prosocial Behavior and Inappropriate Behavior of parent and child cartoon characters were calculated for each cartoon and are displayed on Table 8 and 9. Table 10 displays the ratio of Prosocial Behavior to Inappropriate Behavior for each cartoon used in the study.

Due to range of cell sizes created by an unequal number of family-oriented cartoons across networks, statistical analysis of the Cartoon DPICS composite categories across networks was not conducted. Table 11 displays the rankings of the networks based on the ratio of Prosocial Behavior to Inappropriate Behavior. Since some networks are owned by the same parent company, several cartoon programs are shared by networks. The mean of behaviors displayed in a shared cartoon was included in all the networks that broadcast that cartoon. For example, *The Proud Family* is televised on ABC, Disney,

and Toon Disney networks and the frequencies of the Prosocial and Inappropriate Behavior composite categories for *The Proud Family* were included in the calculation of the means for these three networks. Table 11 also lists the number of family-oriented cartoons broadcast on each network.

DISCUSSION

The purpose of this study was to identify parent-child interactions in family-oriented cartoons across various networks. The study's results indicate that family-oriented cartoons are prevalent and display a mixture of prosocial and inappropriate behaviors by child and parent cartoon characters. Additionally, the Cartoon DPICS-II coding system provided behavioral descriptions to analyze the parent-child interactions of the cartoon characters according to various characteristics (i.e., gender of cartoon character) and conditions (i.e., network broadcasting the cartoon).

From a sample of 23 broadcast and cable television channels, approximately 28% of cartoons televised can be described as family-oriented cartoons. The 28 family-oriented cartoons analyzed in this study included over half of the family-oriented cartoons televised during a one-week period. The rate (28.3 % of all cartoons) at which this sample of family-oriented cartoons was televised was almost twice their prevalence during a typical week (15.1%). The popularity of these cartoons is also supported by Nielsen Media Research data. Table 12 displays the rankings of seven of these family-oriented cartoons as the top 30 programs viewed by either teens or children during one week of taping. During this same time period, Nickelodeon, Cartoon Network, and Disney were ranked as the top three cable networks viewed during the total day (Worrell,

2004). The family-oriented cartoons used in this study appear to be a staple of children's regular cartoon viewing choices.

Comparison of parent and child cartoon behaviors

The first hypothesis was partially supported as parent cartoon characters displayed significantly more prosocial behavior ($f = 748$) than child cartoon characters ($f = 541$). This was predicted based on past cartoon studies (Klinger, Park, & Brestan, 2003; Klinger, Brestan, & Denholm, 2002) that found more parent prosocial behaviors than child prosocial behavior. In comparison with the child cartoon characters, 55% of the parent codes were prosocial versus 47 % of the child codes observed in this study. However, the second part of the first hypothesis was not supported because parent cartoon characters did not display a significantly lower frequency of inappropriate behaviors ($f = 112$; $M = 4.0$, $SD = 3.86$) than did child cartoon characters ($f = 120$; $M = 4.29$, $SD = 3.46$). The parent cartoon characters' inappropriate behavior codes consisted of 8% of the parent Cartoon DPICS codes and the child cartoon characters' inappropriate behavior codes represented 10% of the child Cartoon DPICS codes. This finding is consistent with Klinger and colleagues' (2002) pilot study of parent-child interactions in adult-targeted cartoons such as *The Simpsons* and *King of the Hill*. In Klinger et al.'s 2002 study, parent and child cartoon characters displayed the same amount of inappropriate behavior, but the child cartoon characters displayed significantly more prosocial behavior than parent cartoon characters. Future research could investigate what factors contribute to the likelihood that a parent cartoon character will display more inappropriate behavior than a child cartoon character. For example, in this study the eight

cartoons that depicted parent cartoon characters engaged in more inappropriate behavior than their child cartoon character contained predominantly father characters (88%), son characters (75%), and a low overall Prosocial Behavior to Inappropriate Behavior ratio (75% had a ratio of 6:1 or less).

The lack of support for the first hypothesis that parent cartoon characters would display significantly fewer inappropriate behaviors than child cartoon characters is somewhat surprising. The results, however, are consistent with Bundy, Thompson, and Strap's (1997) study which found that detrimental parenting is a common theme in situational comedies. Typically, parents are the role models for prosocial behaviors in families. However, in the world of family-oriented cartoons, some cartoon parents are depicted as ineffective parents who do not use better judgment than children and engage in similar levels of inappropriate behavior. Again, these results are not consistent across all family-oriented cartoons, but it does raise concern that parent cartoon characters display negative behaviors consistent with the child cartoon characters' negative behaviors. Based on past research on mixed aggressive-prosocial content (Mares & Woodard, 2000; Silverman & Sprafkin, 1980), negative parenting behaviors may be more salient to children than the positive parenting behaviors.

Comparison of mother and father cartoon characters

Another surprising finding was that hypothesis two was only partially supported. Mother cartoon characters did not display more prosocial behaviors than father cartoon characters. Independent *t* test analysis indicated that father cartoon characters had more Prosocial Behavior ($M = 29.33$, $SD = 6.49$) than mother cartoon characters ($M = 23.85$,

$SD = 6.76$). The second part of hypothesis two was supported in that mother cartoon characters ($M = 2.08, SD = 1.71$) displayed fewer Inappropriate Behavior than father cartoon characters ($M = 5.67, SD = 4.45$). Previous research suggests that female characters in television programming tend to be associated with prosocial behaviors more often than male characters (Heintz-Knowles, 1995). While it was expected that father cartoon characters would display more inappropriate behaviors than mother cartoon characters, the high frequency of prosocial and inappropriate behaviors by father cartoon characters makes their parent-child interactions complex and perhaps confusing to younger viewers. Father cartoon characters displayed extremes in behavior, displaying more inappropriate behaviors than the mother cartoon characters but also exceeding the mother cartoon characters in the amount of positive interactions with the child characters. These findings are consistent with criticism that television fathers are often portrayed as “well-intentioned but bumbling and ignorant.” Television fathers have also been criticized for having a “3D image - dumb, dangerous, and disaffected” (Gildemeister, 2006). While the range of behaviors by the father cartoon character may contribute to the humor of the cartoon, young viewers may receive a mixed message about a father’s expected interactions with his child. Additionally, these cartoon fathers may present as male role models that young boys can not relate to or do not want to become (Gildemeister, 2006). One possible explanation for father cartoon characters’ higher frequency of prosocial behavior may be associated with father cartoon characters displaying significantly more behaviors in this study than mother cartoon characters. Future research may want to address whether father cartoon characters play more

prominent roles than mother cartoon characters in cartoons. For example, six of the dyads in this study represented one-parent families, four of which included single fathers.

Comparison of daughter and son cartoon characters

It was hypothesized that daughter cartoon characters would engage in more prosocial behavior and less inappropriate behavior than son cartoon characters. This hypothesis was not supported, suggesting that gender was not a factor in how child cartoon characters are depicted in this sample. There was no significant difference in Prosocial Behavior between son ($M = 18.50$ $SD = 7.72$) and daughter ($M = 20.42$ $SD = 6.53$) cartoon characters. There was also no significant difference in Inappropriate Behavior between the son ($M = 3.86$ $SD = 3.42$) and daughter ($M = 4.83$ $SD = 3.59$) characters. These findings do not support past media research that found that female characters in television programming were more prosocial and male characters acted more aggressive (Heintz-Knowles, 1995), but it may reflect a post-1980's trend to incorporate changing gender roles into television programming and televise less stereotypic characters (Ogletree, Grahmann, Mason, & Raffeld, 2001). Some of the family-oriented cartoons in this sample did depict the child cartoon character's behavior as more aligned with traditional gender roles. However, daughter and son cartoon characters varied across cartoons and on average, they were observed to behave similarly.

Comparison of cartoon behaviors across cartoons

A second aim of this study was to identify cartoons that displayed parent-child dyads engaged in more prosocial behaviors than inappropriate behaviors. *Clifford* contained the most prosocial behavior by a parent-child dyad ($f = 65$) and *Weekenders*

had the fewest prosocial behaviors by a parent-child dyad ($f = 31$). *Liberty's Kids* and *South Park* displayed the highest frequency of Parent Prosocial Behavior ($f = 40$) and *The Neverending Story* displayed the highest frequency of Child Prosocial Behavior ($f = 31$). *Weekenders* displayed the lowest frequency of Parent Prosocial Behavior ($f = 16$) and *Danny Phantom* and *Jimmy Neutron* displayed the lowest frequency of Child Prosocial Behavior ($f = 8$).

In terms of inappropriate behavior, *Static Shock* and *Hey Arnold* each contained the most inappropriate behaviors displayed by a parent-child dyad ($f = 19$) and *Liberty's Kids* displayed no inappropriate behaviors by its parent-child dyad. *Hey Arnold* displayed the highest frequency of Parent Inappropriate Behavior ($f = 14$) and *Rugrats* displayed the highest frequency of Child Inappropriate Behavior ($f = 13$). Five cartoons, *Clifford*, *Wild Thornberrys*, *Caillou*, *Liberty Kids*, and *Kenny the Shark*, displayed no Parent Inappropriate Behavior and five cartoons, *Danny Phantom*, *The Neverending Story*, *The Grim Adventures of Billy and Mandy*, *George Shrinks*, and *Liberty's Kids*, displayed no Child Inappropriate Behavior.

Interestingly, some cartoons, such as *South Park* and *Static Shock*, ranked high on both Prosocial Behavior and Inappropriate Behavior or low on both of them, such as *Pelwick*. One explanation for this may be due to the Cartoon DPICS definition of Prosocial Behavior. It contains Information Description, the code observed the most often in this study (see Table 7). Cartoons with older child characters, cartoons targeted toward adolescent or adult audiences, or cartoons containing more dialogue than action, may display more verbal behaviors that can be coded as Information Description and

contribute to a high Prosocial Behavior value. Since most cartoons contain a mixture of aggressive and prosocial behaviors, perhaps the ratio of Prosocial Behavior to Inappropriate Behavior, as displayed in Table 9, provides a better understanding of a cartoon's content. For example, eight cartoons (*Clifford*, *George Shrinks*, *Rocket Power*, *Stanley*, *Wild Thornberrys*, *Kenny the Shark*, and *Little Bill*) have a 10:1 ratio or higher of Prosocial Behaviors to Inappropriate Behaviors whereas three cartoons (*Hey Arnold*, *The Simpsons*, and *Rugrats*) have a 2:1 ratio of Prosocial Behaviors to Inappropriate Behaviors.

Based on the findings of past research on aggressive-prosocial content (Mares & Woodard, 2000; Silverman & Sprafkin, 1980), it is unclear whether the inappropriate behaviors in the parent-child interactions are more salient than the prosocial behaviors or if the combination of these behaviors make any positive message about parent-child interactions too complex for young viewers to understand. Future research could address this issue by investigating whether inappropriate behaviors are more salient to children than prosocial behaviors and if so, whether the prosocial behaviors become more salient if there is a higher ratio of prosocial behaviors to inappropriate behaviors in the depicted parent-child interaction.

Comparison of cartoon behaviors across networks

A third aim of the study was to identify networks that televised cartoons containing more prosocial parent-child interactions than inappropriate. Except for *The Liberty Kids*, the cartoons in this study contained a mixture of prosocial and inappropriate behaviors with some depicting a higher ratio of prosocial to inappropriate behaviors. A

possible general guide for viewers appears to be the ranking of these ratios of the Prosocial Behavior and Inappropriate Behavior composite categories across networks. Family-oriented cartoons televised by WB, CBS, HBO Family and PBS top the rankings of these ratios while Cartoon Network and FOX have the lowest ratio of Prosocial Behavior to Inappropriate Behavior for parent-child interactions. Many networks, like Nickelodeon and Toon Disney, televise cartoons with a range of behaviors and require more parental scrutiny of individual cartoons.

Given that most cartoons contain a mixture of prosocial and inappropriate behaviors, parents often have a difficult time evaluating the content of children's programming despite new legislation to make this a more feasible process. Analyses of the 28 family-oriented cartoons by the age of the child character and television rating codes did not result in any significant findings that might assist parents in evaluating the content of family-oriented cartoons in terms of prosocial and inappropriate parent-child interactions. For example, *Stanley* depicts a preschool-aged boy character and was ranked in the top ten prosocial family-oriented cartoons while four-year-old Angelica of the *Rugrats* displayed the most inappropriate behaviors of all child cartoon characters. The television rating codes also did not offer any discriminating factors to distinguish cartoons with more prosocial behaviors from cartoons with more inappropriate behaviors. Using the family-oriented cartoons with preschool-aged cartoon characters as an example, *Rugrats*, which depicts the child cartoon character who displayed the most inappropriate behaviors in this study, is rated TVY while *Caillou*, which had no inappropriate parent behaviors, is rated more stringently with TVY7. Additionally, *The*

Simpsons and *South Park*, two of the cartoons ranked with a low Prosocial Behavior to Inappropriate Behavior ratio had no television rating listed. These results are consistent with the Parents Television Council's critical position that television ratings are meaningless to parents because they lack intra-network and inter-network consistency (Parents Television Council, 2006). Additionally, the ability of the V-chip to accurately block programming is also compromised, because the V-chip devices rely on television ratings to identify potentially undesirable content (Parents Television Council, 2005). This means that a parent who sets their V-chip device to block TY-Y7 and higher tier codes could prevent their child from viewing *Caillou* but not *South Park* or *The Simpsons*. As such, the results of this study call into question the reliability and validity of the current U.S. TV Parental Guidelines rating system.

Who knows what children are watching?

The current study provides support that family-oriented cartoons, perhaps deemed the safer cartoons for children to view, are all not "family-friendly." The TV Parental Guidelines rating system and program-blocking devices currently are not adequate substitutes for parental supervision of their children's cartoon viewing choices. Given that parents rarely discuss program content with their children and parents admit that 25% of programs that children watch are "inappropriate" (Woodard, 1999), a more thorough understanding of children's daily media exposure appears warranted. The American Academy of Pediatrics (AAP) has taken a leading role in encouraging pediatricians to make media recommendations as part of anticipatory guidance during well-child visits. While most pediatricians are aware of the AAP media

recommendations, 77% of pediatricians surveyed were not familiar with the AAP media history form and 88% had never asked a parent to complete the media history form about their child. Similarly, 79% had never provided AAP media use brochures to parents (Gentile, Oberg, Sherwood, Story, Walsh, & Hogan, 2004).

Child psychologists could also educate parents about the influence of media on children's behavior. In particular, the link between watching television and subsequent child interactions with family members and peers could be discussed. For the most part, a child's television history is typically not assessed as a psychosocial factor during psychological evaluations. Television watching, however, is the one unsupervised activity many parents feel comfortable allowing their child to do for extended periods of time on a daily basis. Given that children with disruptive behaviors are more susceptible to the antisocial effects of the televisions content than pathology-free children (Grimes, Bergen, Nichols, Vernberg, & Fonagy, 2004) and that children with emotional problems tend to be high consumers of cartoons (Sprafkin, Gadow, Abelman, 1992), child psychologists may benefit by understanding more about a child's television viewing habits. Additionally, future research could investigate whether a child's cartoon preference contributes to his or hers expectation of family communication and interaction styles as well as other psychosocial concerns, such as eating habits, school performance, and attitudes about violence, race, sexual activity, and substance abuse.

Cartoon DPICS as a media research tool

The Cartoon DPICS evolved from the DPICS-II with the intent that an existing coding system with established reliability and validity might be an effective tool to

classify human-like behaviors depicted by cartoon characters. In terms of a research tool for analyzing family-oriented cartoons, the Cartoon DPICS provided composite categories that described parent-child interactions with a high degree of inter-rater reliability. Overall, a majority of the Cartoon DPICS codes demonstrated adequate reliability. Twenty-two of the parent codes and 21 of the child codes were classified as “excellent” or “good.” Four parent codes and two child codes were classified as “fair.” Laugh Inappropriate had no reliability between coders and was observed only twice by a primary coder. The Behavioral Description code was not used for either parent or child cartoon characters. Labeled Praise, Physical Negative, Laugh Inappropriate, and Yell-Positive were child codes not used by either the primary or reliability coder.

Given that reliability estimates based on multiple measurements are more reliable and more representative of a population mean than reliability estimates from a single measurement or infrequent measurements (Fleiss, 1981), some changes to the Cartoon DPICS are warranted. Behavior Description, Laugh-Inappropriate, Yell-Positive, and Cry should be eliminated due to infrequent use. Yell-Activity and Cheer, however, were two of the new codes created for the Cartoon DPICS that should remain given their high frequency and robust reliability. Yell-Activity and Cheer are important codes to include because they provided descriptions for loud verbal behaviors that were not negative in nature.

Overall, the Cartoon DPICS provided innovative behavior descriptors for parent-child interactions in cartoons. While one criticism of this coding system may be learning the numerous behavior codes, coders may benefit by using the shorter, clinical version of

the DPICS-II to create the Cartoon DPICS. Unlike other coding systems used in media research, the Cartoon DPICS stems from a behavior coding system with an established research base in human parent-child interactions. The prosocial and inappropriate behaviors identified in the cartoons in this study are similar in definition to the prosocial and inappropriate behaviors that child viewers and their parents may display.

Limitations and Future Directions

Several limitations of this study need to be addressed. One limitation is the small sample size. While the 28 family-oriented cartoons used in this study consist of 55% of the family-oriented cartoons aired each week of the study period, only one dyad per cartoon was selected whereas many family-oriented cartoons have several parent-child dyads depicted. Future studies that incorporate more dyads per cartoon may be more representative of the total cartoon dyad population. The small sample size may have limited the findings of the composite categories. In particular, the differences between parent and child cartoon characters and differences between child genders may have been affected by low power.

Additionally, an accumulation of 2.5 minutes of parent-child interactions was the designated time frame for analysis. This limited the number of dyads used in the study. Most cartoon studies analyze cartoon behavior per cartoon episode. The length of a parent-child interaction in this sample of family-oriented cartoons, however, ranged from being very brief to encompassing entire episodes. The 2.5-minute accumulation used in this study allowed for parent-child interactions across several episodes to be included. The random selection of the parent-child interactions per cartoon increased the likelihood

that a variety of behaviors would be depicted based on different storylines in each episode. Future research should address the best method for analyzing specific behaviors, such as parent-child interactions, in order to compare across cartoons. One possible alternative would be to designate an accumulative time frame for the interactions per cartoon without limiting it to episodes televised in one week. Family-oriented cartoons that are shown less frequently each week, such as *As Told by Ginger* and *All Grown Up*, could be included in this type of analysis.

Reruns of cartoon episodes also were not used in this study. This reduced the number of available episodes for certain cartoons that have frequent reruns. In future studies, additional episodes could be taped to replace the rerun episodes. Alternatively, including reruns may be warranted for studies investigating the effects of children's exposure to cartoons. Such a study could address whether repeated exposure to the same behaviors may make these behaviors more salient to the viewer.

Another shortcoming of the Cartoon DPICS was that it was developed from a coding system that targeted behaviors between one parent-child dyad. The cartoon dyads often were portrayed in the presence of others and other cartoon characters sometimes interjected during the parent-child interaction. Since an attempt was made to analyze mainly isolated parent-child interactions, this eliminated some dyad interactions from analysis. On occasion, though, other cartoon characters that did not interfere with the parent-child interactions were present and these interactions were included in the study. Future research may involve a family-interaction coding systems that include other forms of family communication or address different categories of behavior. For example, lying

by the child cartoon characters frequently occurred in episodes. Although the Cartoon DPICS offered this current study a variety of behavioral codes, it was not able to capture this type of verbal behavior.

Coding systems like the Cartoon DPICS may become an added resource to evaluate and rate the content of children's cartoons systematically and without bias. Having evolved from the DPICS-II, the Cartoon DPICS was a useful coding system to identify specific verbal and physical behaviors in cartoon parent-child interactions that human dyads display. While cartoons have a rich research history, current content analyses are lacking despite the proliferation of cartoons now available on television 24 hours a day. This study provided preliminary information on the parent-child interactions depicted in cartoons. The Cartoon DPICS results indicate that family-oriented cartoons depict a range of parent-child interactions with prosocial behaviors being more prevalent than inappropriate behaviors. The study identified several family-oriented cartoons with predominately positive parent-child interactions, but the findings also confirm the importance of parents co-viewing cartoons with their children. Despite television rating codes and V-chips, parents need to scrutinize individual cartoons to identify "family-friendly" shows and not make assumptions based on superficial factors, such the age of the child cartoon character or that fact that the cartoon is portraying a family. Professionals working with children can also contribute to the psychoeducation of families by addressing children's television viewing habits and exploring the social messages that the characters of popular programming, such as cartoons, present to children.

REFERENCES

- Abidin, R. R. (1995). *Parenting Stress Index manual* (Third Edition). Odessa, FL: Psychological Assessment Resources.
- Allen, J. C. (2001). The economic structure of the commercial electronic children's media industries. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 477-493). Thousand Oaks, CA: Sage Publications.
- American Psychological Association, Commission on Violence and Youth (1993). *Violence & youth: Psychology's response (Vol. 1) [Summary Report]*. Washington, DC: Author.
- Anderson, C. A. (1997). Effects of violent movies and trait hostility on hostile feelings and aggressive thoughts. *Aggressive Behavior*, 23, 161-178.
- Anderson, D. R., Fields, D., Collins, P. A., & Nathan, J. G. (1985). Estimates with young children's time with television: A methodological comparison of parent reports with time-lapse video home observation. *Child Development*, 56, 1345-1357.
- Anderson, D. R., Alwitt, L. F., Lorch, E. P., & Levin, S. R. (1979). Watching children watch television. In G. Hale & M. Lewis (Eds.), *Attention and development of cognitive skills* (pp. 331-361). New York: Plenum.
- Anderson, D. R., Lorch, E. P., Field, D. E., Collins, P. A., & Nathan, J. G. (1986). Television viewing at home: Age trends in visual attention and time with TV.

- Child Development*, 57, 1024-1033.
- Baer, S. A. (1997). Strategies of children's attention to and comprehension of television. *Dissertation Abstracts International*, 57 (11-B), 7243. Abstract retrieved December 16, 2004 from PsycINFO database.
- Bandura, A. (1971). *Psychological Modeling*. Chicago: Aldine & Atherton.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1973). *Aggression: A Social Learning Analysis*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-582.
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology*, 66, 3-11.
- Bankart, P. C., & Anderson, C. C. (1979). Short-term effects of prosocial television viewing on play of preschool boys and girls. *Psychological Reports*, 44, 935-941.
- Berkowitz, L. (1984). Some thoughts on anti-social and prosocial influences in the media: A cognitive-neoassociation analysis. *Psychological Bulletin*, 95, 410-427.
- Bergen, L., Nichols, K., Vernberg, E., & Fonagy, P. (2004). Is psychopathology the key to understanding why some children become aggressive when they are exposed to violent television programming? [Electronic version]. *Human Communication Research*, 30, 153-181.

- Berry, G. (1998). Black family life on television and the socialization of the African American child: Images of marginality. [Electronic version]. *Journal of Comparative Family Studies*, 2, 233-242.
- Bessmer, J. (1996). *The Dyadic Parent-child Interaction Coding System II (DPICS-II): Reliability and validity*. Unpublished doctoral dissertation, University of Florida, Gainesville.
- Bianchi, S. M., & Robinson, J. (1997). What did you do today? Children's use of time, family composition, and acquisition of social capital. *Journal of Marriage and Family*, 59, 332-344.
- Birdwhistell, R. L. (1977). The idealized model of the American family. In P. Stein, J. Richman, & N. Hannon (Eds.), *The family: Functions, conflicts, and symbols* (pp. 310-313). Reading, MA: Addison Wesley.
- Boyatzis, C. J., & Matillo, G. M., & Nesbit, K. M. (1995). Effects of *The Mighty Morphin Power Rangers* on children's aggression with peers. *Child Study Journal*, 25, 45-55.
- Brown, J. D., & Newcomber, S. F. (1991). Television viewing and adolescents' sexual behavior. *Journal of Homosexuality*, 21, 77-91.
- Bryant, J. (1990). *Television and the American family*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Buerkel-Rothfuss, N. L., Greenberg, B. S., Atkin, C. K., & Neuendorf, K. (1982). Learning about family from television. *Journal of Communication*, 32, 191-201.
- Bundy, K. A., Thompson, K. L., & Strapp, C. M. (1997). Parenting behaviors: A content

- analysis of situational comedies based on TV fictional families. *Psychological Reports*, 80, 1123-1137.
- Bushman, B. J., & Anderson, C. A. (2002). Violent video games and hostile expectations: A test of the general aggression model. *Personality & Social Psychology Bulletin*, 28, 1679-1686.
- Bushman, B. J. & Huesmann, L. R. (2001). Effects of televised violence on aggression. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 223-2254). Thousand Oaks, CA: Sage Publications.
- Byrd-Bredbenner, C. (2004). An internationally shared health frame of reference created by a television program: The Simpsons, a content analysis of health messages. [Electronic version]. *Health Education*, 104, 18-25.
- Calvert, S., Huston, A. C., Watkins, B.A., & Wright, J.C. (1982). The effects of selective attention to television forms on children's comprehension of content. *Child Development*, 53, 601-610.
- Campbell, C. & Hoem, S. (2001). Prime time's disabled images. [Electronic version]. *Television Quarterly*, 32, 44-51.
- Campis, L. K., Lyman, R. D., & Prentice-Dunn, S. (1986). The Parental Locus of Control Scale: Development and Validation. *Journal of Clinical Child Psychology*, 15, 260-267.
- Cantor, J., & Omdahl, B. L. (1991). Effects of fictional media depictions of realistic threats on children's emotion responses, expectations, worries, and liking for related activities. *Communication Monographs*, 63, 384-401.

- Carnagey, N. L., & Anderson, C. (2003). Theory in the study of media violence: The General Aggression Model. In D. Gentile (Ed.), *Media violence and children* (pp. 245-262). West Port, CT: Praeger.
- Center for Media and Public Affairs, CMPA Archive: Day of TV Violence 1995. (September, 1995). *Study finds rise in TV guns and violence*. Retrieved November 3, 2004, from <http://www.cmpa.com/archive/viol95.htm>
- Clifford, B., Gunter, B., & McAleer, J. L. (1997). Children's memory and comprehension of two science programmes. [Electronic version]. *Journal of Educational Media*, 23, 25-50.
- Cohen, N. (2004). The animation generation. [Electronic version]. *Brandweek*, 45, 21.
- Collins, W. A., & Getz, S. K. (1976). Children's social responses following modeled reactions provocation: Prosocial effects of a television drama. *Journal of Personality*, 44, 488-500.
- Committee on Communication, American Academy of Pediatrics (1995). Media violence. [Electronic version]. *Pediatrics*, 96, 786-787.
- Comstock, G. (1991). *Television and the American child*. San Diego, CA: Academic Press.
- Comstock, G., & Scharrer, E. (1999). *Television: What's on, who's watching, and what it means*. San Diego, CA: Academic Press.
- Condry, J. (1989). *The psychology of television*. Hillsdale, NJ: Erlbaum.
- Coyne, S., & Archer, J. (2004). Indirect aggression in the media: A content analysis of British Television Programs. [Electronic version]. *Aggressive Behavior*, 30, 254-

271.

- Desmond, R. (2001). Free reading: Implication for child development. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 29-45). Thousand Oaks, CA: Sage Publications.
- Dominick, J. R. (1987). *The dynamics of mass communication*. New York: Random House.
- Dorr, A. (1983). No short-cuts to reality. In J. Bryant & D. R. Anderson, (Eds.), *Children's understanding of television* (pp. 199-220). New York: Academic Press.
- Dorr, A., Kovaric, P., & Doubleday, C. (1989). Parent-child coviewing of television. *Journal of Broadcasting and Electronic Media*, 33, 35-51.
- Douglas, W. (1996). The fall from grace? The modern family on television. *Communication Research*, 23, 675-702.
- Drabman, R. S., & Thomas, M. H. (1974). Does media violence increase children's toleration of real-life aggression? *Developmental Psychology*, 10, 418-421.
- Durkin, K., & Nugent, B. (1998). Kindergarten children's gender-role expectations for television actors. *Sex Roles: A Journal of Research*, 38, 387-403.
- Elasmar, M., Hasegawa, K., & Brain, M. (1999). The portrayal of women in the U.S. prime time television. *Journal of Broadcasting and Electronic Media*, 43, 20-34.
- Elkind, D. (1993). Adolescents, parenting, and media in the twenty-first century. *Adolescent Medicine: State of the Art Reviews*, 4, 599-606.
- Elkind, D., & Bowen, K. (1979). Imaginary audience behavior in children and

- adolescents. *Developmental Psychology*, 15, 38-44.
- Entman, R. M., & Rojecki, A. (1998). Minorities in mass media: A status report. In A. K. Garmer (Ed.), *Investing in diversity: Advancing opportunities for minorities and media* (pp. 67-85). Washington, D.C.: Aspen Institute.
- Erikson, E. (1968). *Identity, Youth and Crisis*. New York: W. W. Norton.
- Eyal, K., & Rubin, A. (2003). Viewer aggression and homophily, identification, and parasocial relationships with television characters. [Electronic version]. *Journal of Broadcasting & Electronic Media*, 47, 77-99.
- Eyberg, S., Bessmer, J., Newcomb, K., Edwards, D., & Robinson, E. (1994). *The Dyadic Parent-child Interaction Coding System II (DPICS-II): A manual*. Social and Behavior Documents (Ms. No. 2897).
- Eyberg, S., Edwards, D., Bessmer, J., Litwins, N. (1994). *Workbook: A coder training manual for the Dyadic Parent-Child Interaction Coding System II*. Social and Behavioral Sciences Documents. (Ms. No. 2898).
- Eyberg, S. & Pincus, D. (1999). *Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory. Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Feilitzen, C., & Linne, O. (1975). Identifying with television characters. *Journal of Communication*, 25, 51-55.
- Foote, R. C. (2000). *The Dyadic Parent-child Interaction Coding System II (DPICS-II): Reliability and validity with father-child dyads*. Unpublished doctoral dissertation, University of Florida, Gainesville.

- Franklin, J., Rifkin, L., & Pascual, P. (2001). Serving the very young and restless: Children's programming on public television. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 507-520). Thousand Oaks, CA: Sage Publications.
- Friedrich- Cofer, L., & Huston, A. C. (1986). Television violence and aggression: The debate continues. *Psychological Bulletin*, *100*, 364-371.
- Gadow, K. D., Sprafkin, J., Kelly, E., & Ficarrotto, T. (1988). Reality perceptions of television: A comparison of school-labeled learning-disabled and nonhandicapped children. *Journal of Child Psychology and Psychiatry*, *17*, 25-33.
- Gentile, D., Oberg, C., Sherwood, N., Story, M., Walsh, D., & Hogan, M. (2004). Well-child visits in the video age: Pediatricians and the American Academy of Pediatrics' Guidelines for children's media use. [Electronic version]. *Pediatrics*, *114*, 1235-1241.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980). The mainstreaming of America: Violence profile no. 11. *Journal of Communication*, *30*, 10-29.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1982). Charting the mainstream: Television's contribution to political orientations. *Journal of Communication*, *32*, 100-127.
- Gildemeister, C. (2006, June). *Culture Watch*. Retrieved June 18, 2006 from the Parents Television Council Web site: <http://www.parentstv.org/PTC/publications/culturewatch/2006/0619.asp>
- Graves, S. B. (1993). Television, the portrayal of African Americans, and the

- development of children's attitudes. . In G. L. Berry & J. K. Asamen (Eds.), *Children and television: Images in a changing sociocultural world* (pp. 179-190). Newbury Park, CA: Sage.
- Greenberg, B. S., & Atkin, C. K. (1982). Learning about minorities from television. A research agenda. In G. L. Berry & C. M. Kernan (Eds.), *Television and socialization of the minority child* (pp. 215-243). New York: Academic Press.
- Greenberg, B. S., & Brand, J. E. (1994). Minorities and the mass media: 1970s to 1990s. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 273-314). Hillsdale, NJ: Lawrence Erlbaum.
- Greenberg, B. S., & Rampoldi-Hnilo, L. (2001). Child and parent responses to the age-based and content-based television ratings. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 621-634). Thousand Oaks, CA: Sage Publications.
- Grimes, T., Bergen, L., Nichols, K., Vernberg, E., & Fonagy, P. (2004). Is psychopathology the key to understanding why some children become aggressive when they are exposed to violent television programming. [Electronic version]. *Human Communication Research, 30*, 153-181.
- Grimes, T., Vernberg, E., & Cathers, T. (1997). Emotionally disturbed children's reactions to violent media segments. *Journal of Health Communication, 2*, 157-168.
- Gunter, B. (1985). *Dimensions of television violence*. Aldershot, England: Gower.
- Gunter, B., & McAleer, J. (1997). *Children and television*. London: Routledge.

- Hansen, C. H., & Hansen, R. D. (1988). How rock videos can change what is seen when boy meets girl: Priming stereotypic appraisal of social interaction. *Sex Roles, 19*, 287-316.
- Hawkins, R., & Pingree, S. (1990). Divergent psychological processes in constructing social reality from mass media content. In N. Signorielli & M Morgan (Eds.), *Cultivation analysis: New directions in media effects research*. Newbury Park, CA: Sage Publications.
- Hearold, S. (1986). A synthesis of 1043 effects of television on social behavior. In G. Comstock (Ed.), *Public communication and behavior* (Vol. 1, pp. 65-133). New York: Academic Press.
- Heffner, C. (1996). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting and Electronic Media, 40*, 389-403.
- Heintz-Knowles, K. (1995). *Reflections on the screen: Television's representation of children* (Research Report). Oakland, CA: Children Now.
- Heintz-Knowles, K. (2000, April 9). *Images of youth: A content analysis of adolescents in prime-time entertainment programming*. Retrieved May 25, 2006 from <http://www.frameworksinstitute.org/products/youth.pdf>
- Hill-Scott, K. (2001). Industry standards and practices: Compliance with the Children's Television Act. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 605-620). Thousand Oaks, CA: Sage Publications.
- Hole, J. (1998). *Measuring the child audiences: Issues and implications for educational*

- programming (Survey No. 3)*. Philadelphia: University of Pennsylvania, Annenberg Public Policy Center.
- Hollenbeck, A. R., & Slaby, R. G. (1979). Infant visual and vocal responses to television. *Child Development, 50*, 41-45.
- Howard, S. M. (1993). How real is television? Modality judgments of children. *Media Information Australia, 70*, 33-47.
- Huesmann, L. (1986). Psychological processes promoting the relation between exposure to media and aggressive behavior by the viewer. *Journal of Social Issues, 42*, 125-139.
- Huesmann, L. (1988). An information processing model for the development of aggression. *Aggressive Behavior, 14*, 13-24.
- Huntemann, N., & Morgan, M. (2001). Mass media and identity development. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 309-322). Thousand Oaks, CA: Sage Publications.
- Huston, A., Watkins, B., & Kunkel, D. (1989). Public policy and children's television. *American Psychologist, 44*, 424-433.
- Huston, A. C., Wright, J. C., Marquis, J., & Green, S. (1999). How young children spend their time: Television and other activities. *Developmental Psychology, 35*, 912-925.
- Huston, A. C., Wright, J. C., Rice, M. L., Kerkman, M. L., & St. Peters, M. (1990). Development of television viewing patterns in early childhood: A longitudinal investigation. *Developmental Psychology, 26*, 409-420.

- Huston, A. C., et al. (1981). Communication more than content: Formal features of children's television programs. *Journal of Communication, 31*, 32-48.
- Huston-Stein, A., Fox, S., Green, D. Watkins, B. A., & Whitaker, J. (1981). The effects of TV action violence in children's social behavior. *Journal of General Psychology, 138*, 183-191.
- Iwata, E. (1995). *What are manga and anime?* Retrieved March 29, 2005 from <http://www.mit.edu/people/rei/Expl.htm/>
- Jang, M. (2003). Kappa IV [Computer software]. Auburn University, AL.
- Jordan, A. (1996). *The state of children's television: An examination of quantity, quality, and industry beliefs*. Philadelphia: University of Pennsylvania, Annenberg Public Policy Center.
- Jordan, A. (2001). Public policy and private practice: Government regulations and parental control of children's television use in the home. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 651-662). Thousand Oaks, CA: Sage Publications.
- Josephson, W. (1987). Television violence and children's aggression: Testing the priming, social script, and disinhibition predictions. *Journal of Personality and Social Psychology, 53*, 882-890.
- Klein, J. D., Brown, J. D., Childers, K. W., Oliveri, J., Porter, C., & Dykers, C. (1993). Adolescents' risky and mass media use. *Pediatrics, 92*, 24-31.
- Klinger, L. J. (2004). *Cartoon DPICS*. Unpublished Manual. Auburn University, AL.
- Klinger, L. J., Brestan, E. V., Park, H., & Denholm, S. (2002, March). *Parent-child*

interactions in cartoons: An analysis using DPICS-II. Poster session presented at the annual meeting of the Southeastern Psychological Association, Orlando, Florida.

Klinger, L. J., Park, H., & Brestan, E. V. (2003, July). *What are your children watching in family-oriented cartoons? A DPICS-II analysis*. Poster session presented at the Fourth Annual Parent-Child Interaction Therapy Conference, Sacramento, California.

Klinger, L. J., Park, H., Brestan, E. V., & Starr, J. (2002, June). *What are your children watching: A DPICS-II analysis of adult cartoons*. Poster session presented at the annual meeting of the Alabama Psychological Association, Fort Walton, Florida.

Kovacic, P.M. (1993). Television, the portrayal of the elderly, and children's attitudes. In G. L. Berry & J.K. Asamen (Eds.), *Children and television: Images in a changing sociocultural world* (pp. 243-254). Newbury Park, CA: Sage Publications.

Krcmar, M., & Cantor, J. (1997). The role of television advisories and ratings in parent-child discussion of television viewing choices. *Journal of Broadcasting and Electronic Media*, 41, 393-412.

Kubey, R., & Donovan, B. W. (2001). Media and the family. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 309-322). Thousand Oaks, CA: Sage Publications.

Kunkel, D., & Canepa, J. (1994). Broadcasters' license renewal claims regarding children's educational programming. *Journal of Broadcasting and Electronic Media*, 38, 397-416.

- Kunkel, D., Cope, K. M., & Colvin, C. (1996). *Sexual messages on family hour television: Content and context*. Menlo Park and Oakland Park, CA: Children Now and Kaiser Family Foundation.
- Kunkel, D., & Wilcox, B. (2001). Children and media policy. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 589-604). Thousand Oaks, CA: Sage Publications.
- Kunkel, D., Wilson, B., Donnerstein, E., & Blumenthal, E. (1995). Measuring violence: The importance of context. *Journal of Broadcasting and Electronic Media*, 39, 284-291.
- Lambert, E. B., & Clancy, S. (2004). Children's animated TV programs: A content analysis. [Electronic version]. *Australian Journal of Early Childhood*, 29, 19-24.
- Larson, M. S. (1991). Sibling interactions in 1950s versus 1980s sitcoms: A comparison. *Journalism Quarterly*, 68, 381-387.
- Larson, M. S. (1993). Family communication on prime-time television. *Journal of Broadcasting and Electronic Media*, 37, 349-357.
- Lawthon, M. (1995). Children's TV still too violent, report says. *Education Week*, 15. Retrieved October 19, 2004 from <http://www.edweek.org/ew//vol-5/04tv.h15>
- Leaper, C., Breed, L., Hoffman, L., & Perlman, C.A. (2002). Variations in the gender-stereotyped content of children's television cartoons across genres. [Electronic version]. *Journal of Applied Social Psychology*, 32, 1653-1663.
- Liss, M. B., & Reinhardt, L. C. (1980). Aggression on prosocial television programs. *Psychological Reports*, 46, 1065-1066.

- Lowry, D. T., & Shidlern, J. A. (1993). Prime time TV portrayals of sex, conception, and venereal disease. *Journalism Quarterly*, *66*, 347-352.
- Lyle, J., & Hoffman, H. R. (1972). Children's use of television and other media. In E. A. Rubenstein, G. A. Comstock, & J. P. Murray (Eds.), *Television and social behavior: Vol. 4. Television in day-to-day life: Patterns of use* (pp. 257-273). Washington, D.C.: U.S. Government Printing Office.
- Malamuth, N. M., & Check, J. V. P. (1985). The effects of aggressive pornography on beliefs in rape myths: Individual differences. *Journal of Research in Personality*, *19*, 299-320.
- Mandler, J., & Johnson, N. (1977). Remembrance of things parsed: Story structure and recall. *Cognitive Psychology*, *9*, 111-151.
- Mares, M., & Woodard, E. (2001). Prosocial effects on children's social interactions. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 183-205). Thousand Oaks, CA: Sage Publications.
- Martin, J. (1998, May 5). A tale of three cities. [Electronic version]. *America*, *178*, 21-22.
- Mauldin, T., & Meeks, C. B. (1991). Mother's employment status, family income, and children's time allocation. *Home Economics Research Journal*, *19*, 271-281.
- Meltzoff, A. N. (1983). Imitation of televised models by infants. *Child Development*, *59*, 1221-1229.
- Milvasky, J. R., Kessler, R., Stipp, H. H., & Rubens, W. S. (1982). Television and aggression: A panel study. As cited in D. Gentile (2003) *Media violence and children*. Westport, CT: Praeger.

- Ogletree, S. M., Grahmann, T., Mason, B., & Raffeld, P. (2001). Perceptions of two television cartoons: *Powerpuff Girls* and *Johnny Bravo*. *Communication Research Reports, 18*, 307-314.
- Osborn, D. K., & Endsley, R. C. (1971). Emotional reactions of young children to TV violence. *Child Development, 42*, 321-331.
- Paik, H. (2001). The history of children's use of electronic media. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 7-27). Thousand Oaks, CA: Sage Publications.
- Paik, H., & Comstock, G. (1994). The effects of television violence on antisocial behavior: A meta-analysis. *Communication Research, 21*, 516-546.
- Parents Television Council. (2005, April 18). *PTC study finds TV ratings system a failure*. Retrieved April 3, 2006 from [http:// www.parentstv.org/PTC/publications/release/2005/0418.asp](http://www.parentstv.org/PTC/publications/release/2005/0418.asp)
- Parents Television Council. (2006, March 2). *Wolves in sheep's clothing: A content analysis of children's television*. Retrieved April 3, 2006 from <http://www.parentstv.org/PTC/publications/reports/childrensstudy/main.asp>
- Park, H., Klinger, L. J., & Brestan, E. V. (2003). *Portrayals of the elderly in child-oriented cartoons: A DPICS-II analysis*. Poster session presented at the Fourth Annual Parent-Child Interaction Therapy Conference, Sacramento, California.
- Pechmann, C., & Ratneshwar, S. (1994). The effects of anti-smoking and cigarette advertising on young adolescents' perceptions of peers who smoke. *Journal of Consumer Research, 21*, 236-251.

- Peterson, J. L., Moore, K. A., & Furstenberg, F. F. (1991). Television viewing and early initiation of sexual intercourse: Is there a link? *Journal of Homosexuality, 21*, 93-118.
- Pingree, S. (1986). Children's activity and television comprehensibility. *Communication Research, 13*, 239-256.
- Potter, W. J. (1999). Perceived reality in cultivation analysis. *Journal of Broadcasting and Electronic Media, 30*, 159-174.
- Potter, W. J. (2003). The frontiers of media research. In D. Gentile (Ed.), *Media violence and children* (pp. 245-262). West Port, CT: Praeger.
- Poulos, R. W., Rubinstein, E. A., & Liebert, R. M. (1979). Saturday morning television: A profile of the 1974-75 children's session. *Psychological Reports, 39*, 1047-1057.
- Quarforth, J. M. (1979). Children's understanding of the nature of television characters. *Journal of Communication, 29*, 210-218.
- Reiss, A., & Roth, J. (1993). *Understanding and preventing violence (Vol. 1)*. National Research Council, Commission on Behavioral and Social Sciences and Education. Washington, D.C.: U. S. National Academy Press. <http://www.nap.edu>
- Rich, M., & Bar-on, M. (2001). Child health in the information age: Media education of pediatricians. [Electronic version]. *Pediatrics, 107*, 156 - 162.
- Rideout, V., Vandewater, E., & Wartella, E. (2003, October 10). *Zero to six: Electronic media in the lives of infants, toddlers, and preschoolers*. Retrieved April 9, 2005 at <http://www.kff.org/entmedia/upload/Zero-to-six-Electronic-Media-in-the->

- Roberts, D., & Bachen, C. M. (1981). Mass communication effects. *Annual Review of Psychology*, 32, 307-356.
- Roskos-Ewoldsen, D. R., Roskos-Ewoldsen, B., & Carpentier Dillman, F. (2002). Media priming: A synthesis. In B. Jennings & D. Zillmann (Eds.), *Media effects: Advances in theory and research (2nd ed.)*. LEA's communication series. (pp. 97-120). Mahwah, NJ, US: Lawrence Erlbaum Associates, Publishers.
- Rubin, A. M., Perse, E. M., & Taylor, D. S. (1988). A methodical examination of cultivation. *Communication Research*, 15, 107-133.
- Sanson, A., & diMuccio, C. (1993). The influence of aggressive and neutral cartoons and the toys on the behavior of preschool children. *Australian Psychologist*, 28, 93-99.
- Schmitt, K. L., Anderson, D. R., & Collins, P. A. (1999). Form and content: Looking at visual features of television. *Developmental Psychology*, 44, 1156.
- Shrum, L. J. (1996). Psychological processes underlying cultivation effects: Further tests of construct accessibility. *Human Communication Research*, 22, 402-509.
- Signorielli, N. (1990). Television's mean and dangerous world: A continuation of the Cultural Indications perspective. In N. Signorielli & M. Morgan (Eds.), *Cultivation analysis: New directions in media effects research*. Newbury Park, CA: Sage Publications.
- Signorielli, N. (1991a). *A sourcebook on children and television*. New York: Greenwood Press.

- Signorielli, N. (1991b). Adolescents and ambivalence toward marriage: A cultivation analysis. *Youth and Society, 24*, 314-341.
- Signorielli, N. (2001). Television's gender role images and contribution to stereotyping: Past, present, future. In D. Singer & J. Singer (Eds.), *Handbook of children's media* (pp. 341-359). Thousand Oaks, CA: Sage Publications.
- Signorielli, N., & Bacue, A. (1999). Recognition and respect: a content analysis of prime-time television characters across three decades. *Sex Roles, 40*, 527-544.
- Silverman, L.T., & Sprafkin, J.N. (1980). The effects of *Sesame Street's* prosocial spots on cooperative play between children. *Journal of Broadcasting, 24*, 135-147.
- Singer, M.I., Anglin, T.M., Song, L.Y., & Lunghofer, L. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *The Journal of the American Medical Association, 273*, 477-483.
- Singer, D.G., & Singer, J. L. (Eds.). (2001). *Handbook of children and the media*. Thousand Oaks, CA: Sage Publications.
- Skill, T., & Wallace, S. (1990). Family interactions on primetime television: A descriptive analysis of assertive power interactions. *Journal of Broadcasting and Electronic Media, 34*, 243-262.
- Skill, T., Wallace, S., & Cassata, M. (1990). Families on prime-time television: Patterns of conflict escalation and resolution across intact, nonintact, and mixed-family settings. In J. Bryant (Ed.), *Television and the American family* (pp. 129-164). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Sprafkin, J., Gadow, K. D., & Grayson, P. (1987). Effects of aggressive cartoons on the

- behavior of learning disabled children. *Journal of Child Psychology and Psychiatry*, 28, 387-398.
- Stroman, C. A. (1984). The socialization influence of television on black children. *Journal of Black Studies*, 15, 79-100.
- Surgeon General's Scientific Advisory Committee on Television and Social Behavior. (1972). *Television and growing up: The impact of television violence*. (Report to the Surgeon General, US Public Health Service). Washington, DC: US Government Printing Office.
- Szulc, P., & Tchaicha, J. (1995). A public policy perspective on televised violence and youth: From a conversation with Peggy Charren (interview with Action for Children's Television Founder). *Harvard Educational Review*, 65, 282-292.
- Tangney, J. P., & Feshbach, S. (1988). Children's viewing frequency: Individual differences and demographic correlates. *Personality and Social Bulletin*, 14, 145-158.
- Tanner, L. R., Haddock, S. A., Zimmerman, T. S., & Lund, L. K. (2003). Images of couples and families in Disney feature-length animated films. [Electronic version]. *The American Journal of Family Therapy*, 31, 355-373.
- Thompson, T. L., & Zerbino, E. (1997). Television cartoons: Do children notice it is a boy's world. *Sex Roles*, 37, 415-432.
- Tracy, K. (2003). Animation grows up and targets adults. *Video Age International*, 23, 32.
- Valkenburg, P.M., & Van der Voort, T. (1994). Influence of TV on daydreaming and

- creative imagination: A review of research. *Psychological Bulletin*, 116, 316-339.
- Vande-Berg, L., & Streckfuss, D. (1992). Prime-time television's portrayal of women and the world of work: A demographic profile. *Journal of Broadcasting & Electronic Media*, 36, 195-208.
- Van der Voort, T. (1986). *Television violence: A child's eye view*. Amsterdam: North-Holland.
- Van Evra, J. (1998). *Television and child development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Vasquez, D. (2004, November). 'Rudolph,' that legacy of Christmas TV: It's been a long sleigh ride, for sure, 40 years. *Media Life*. Retrieved May 17, 2006 from http://www.medialifemagazine.com/news2004/nov04/nov01/5_fri/news4friday.html
- Villani, S. (2001). Impact of media on children and adolescents: A 10-year review of the research. [Electronic version]. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 392-492.
- Walsh, D., Goldman, I. S., & Brown, R. (1996). *Physicians guide to media violence*. Chicago: American Medical Association.
- Wartella, E., Heintz, K. E., Aidman, A. J., & Mazzarella, S. R. (1990). Television and beyond: Children's video media in one community. *Communication Research*, 17, 45-64.
- Wiegman, O., Kuttschreuter, M., & Baarda, B. (1992). A longitudinal study of the effects of television viewing on aggressive and prosocial behaviors. *British Journal of*

Social Psychology, 31, 147-164.

Wilson, C., Nairn, R., Coverdale, J., & Panapa, A. (2000). How mental illness is portrayed in children's television. [Electronic version]. *The British Journal of Psychiatry*, 176, 440-443.

Woodard, E.H. (1999). *The 1999 state of children's television (Report No. 28)*. Philadelphia: The Annenberg Public Policy Center.

Woodard, E. H., & Gridina, N. (2000). *Media in the home 2000: The fifth annual survey of parents and children*. Retrieved June 20, 2004, from the University of Pennsylvania: The Annenberg Public Policy Center Website:
<http://www.appcpenn.org/mediainhome/survey/survey7.pdf>

Worrell, N. (2004, November 8). The rating wizard. *TelevisionWeek*. Retrieved May 14, 2006 from <http://www.tvweek.com/docs/pdfs/2000-01-26.pdf>

Wright, J. C., & Huston, A. C. (1983). A matter of form: Potentials of television for young viewers. *American Psychologist*, 38, 835-843.

Wright, J.C., et al., (1984). Pace and continuity of television programs: Effects on children's attention and comprehension. *Developmental Psychology*, 20, 653-666.

Zoglin, R. (1990, April 16). Home is where the venom is. *Time*, 85-86

APPENDIX

Cartoon DPICS

1. YA (Yell Activity-Related): A yell activity-related is a screech, scream, shout, or verbalization that is loud due to the nature of the activity that the individual is engaged in and is appropriate or congruent with the activity. If the yell activity-related is so loud that the vocalization is aversive to others, code YE.

Example: Child and parent are on opposite sides of the street with traffic going by them.

Child: (yelling over sound of traffic) Bye Mom! (YA)

Example: Child and parent are skiing down a mountain

Child: (yells to father) I am beating you! (ID; YA)

Priority rule: Code YE if unclear if YA.

2. YP (Yell Positive): A yell positive is a screech, scream, or shout, or any vocalization that is loud but not aversive and is positive and appropriate in context of the dyad interaction.

Example: Child is excited when he receives a gift from parent.

Child: (yells loudly) You're the best! (UP; YP)

Example: Father watches daughter who is learning to ride a bike

Parent: (yells loudly) You look great! (UP; YP)

Priority Rule: Code YE if unclear if YP.

3. CH (Cheer): A congratulatory vocalization that continues beyond one vocalization or involves hands clapping, arms being raised, or "thumbs up" in the form of celebration. Cheering should be coded only when both members of the dyad are engaged in the vocalization or if one member of the dyad cheers for him- or herself. If one dyad member is cheering and uses a praise in regards to the behavior of the other dyad member, the appropriate praise code is used followed by YP. Code CH at the end of the cheering episode. Do not code each individual vocalization of cheering unless interrupted by a verbalization or a pause of 2 seconds. Code CH if clapping, arms being raised, or

giving a thumbs up occur without any verbal praise.

Example: Son wins award and goes to receive trophy in front of a crowd

Parent (clapping as part of crowd who as a group are cheering):

Great job Bart! (UP; YP)

Child (excited by winning, raises arms up and down):

Yahoo! Yahoo! Yahoo! (CH)

Parent (clapping as Bart receives the trophy): (CH)

Priority Rule: Code YP if unclear if CH

4. LI (Laugh Inappropriate): laughter that occurs during a criticism or smart talk or occurs in the context of humor that is condescending or derogatory toward another individual

Example: Child trips and falls

Parent: (laughs) LI

5. CY (Cry): tears appearing without any vocalization are coded as crying. Crying with tears and vocalization are coded as WH or YE based on the loudness of the vocalization, as defined in the DPICS-II. Do not code each individual presentation of crying unless interrupted by a verbalization by another person or a pause of 2 seconds of crying. Code CY at the initiation of crying. If person talks while crying, code CY only at the initiation of tears unless interrupted by a verbalization by another person or a pause of 2 seconds of crying.

Priority Rule: If unclear CY, code WH or YE

Table 1

Demographics of Family-oriented Cartoons

Cartoon	Child	Parent	Race	Age of Child
<i>Braceface</i>	Sharon	Mother	Caucasian	Adolescent
<i>Caillou</i>	Caillou	Mother	Caucasian	Preschooler
<i>Clifford</i> *	Emily Elizabeth	Father	Caucasian	Child
<i>Danny Phantom</i>	Danny	Father	Caucasian	Adolescent
<i>Fairly Oddparents</i>	Timmy	Mother	Caucasian	Child
<i>Family Guy</i>	Chris	Father	Caucasian	Adolescent
<i>George Shrinks</i>	George	Father	Caucasian	Child
<i>Grim Adventures of Billy and Mandy</i>	Billy	Father	Caucasian	Child
<i>Hey Arnold</i>	Helga	Father	Caucasian	Child
<i>Jimmy Neutron: Boy Genius</i>	Jimmy	Mother	Caucasian	Child
<i>Kenny the Shark</i>	Kat	Mother	Caucasian	Child
<i>Kim Possible</i>	Junior	Father	Caucasian	Adolescent
<i>King of the Hill</i>	Bobby	Mother	Caucasian	Adolescent
<i>Liberty's Kids</i>	Sarah	Father	Caucasian	Adolescent
<i>Little Bill</i>	Little Bill	Mother	African American	Preschooler
<i>Pelwick</i>	Pelwick	Father	Caucasian	Adolescent
<i>Proud Family</i>	Penny	Mother	African American	Adolescent

Note. * indicates that *Clifford* includes *Clifford the Big Red Dog* and *Clifford the Puppy Days* cartoons.

Table 1 - continued

Demographics of Family-oriented Cartoons

Cartoon	Child	Parent	Race	Age of Child
<i>Rocket Power</i>	Reggie	Father	Caucasian	Child
<i>Rugrats</i>	Angelica	Father	Caucasian	Preschooler
<i>South Park</i>	Stanley	Mother	Caucasian	Child
<i>Stanley</i>	Stanley	Mother	Caucasian	Preschooler
<i>Static Shock</i>	Virgil	Father	African American	Adolescent
<i>Stuart Little</i>	George	Father	Caucasian	Child
<i>The Neverending Story</i>	Bastian	Father	Caucasian	Child
<i>The Simpsons</i>	Lisa	Father	Caucasian	Child
<i>Tutenstein</i>	Cleo	Mother	African American	Child
<i>Weekenders</i>	Tishie	Mother	Caucasian	Child
<i>Wild Thornberrys</i>	Eliza	Mother	Caucasian	Child

Note. * indicates that *Clifford* includes *Clifford the Big Red Dog* and *Clifford the Puppy Days* cartoons.

Table 2

Categories of the Dyadic Parent-Child Coding System II (DPICS-II)

Parent Behavior	Child Behavior
Acknowledgement	Acknowledgement
Answer	Answer
Behavioral Description	Behavioral Description
Compliance	Compliance
Contingent Labeled Praise	Contingent Labeled Praise
Criticism	Criticism
Descriptive/Reflective Question	Descriptive/Reflective Question
Destructive	Destructive
Direct Command	Direct Command
Indirect Command	Indirect Command
Information Description	Information Description
Information Question	Information Question
Labeled Praise	Labeled Praise
Laugh	Laugh
No Answer	No Answer
No Opportunity for Answer	No Opportunity for Answer
No Opportunity for Compliance	No Opportunity for Compliance
Physical Negative	Physical Negative

Table 2 - continued

Categories of the Dyadic Parent-Child Coding System II (DPICS-II)

Parent Behavior	Child Behavior
Physical Positive	Physical Positive
Playtalk	Playtalk
Reflective Statements	Reflective Statements
Smart Talk	Smart Talk
Unlabeled Praise	Unlabeled Praise
Yell	Yell
Whine	Whine
Warning	

Table 3

The Cartoon DPICS Parent and Child Composite Categories

Inappropriate Behavior	Prosocial Behavior
Criticism	Acknowledgement
Smart Talk	Information Description
Yell	Behavior Description
Physical Negative	Labeled Praise
Destruction	Laugh
Laugh-Inappropriate	Reflection
Cry	Physical Positive
	Cheer
	Yell-Positive

Table 4

Networks, Cartoons, and Television Rating

Network	Cartoons	TV Rating
ABC	<i>Proud Family</i>	TV-G
Cartoon Network	<i>Family Guy</i>	TV-14
	<i>Grim Adventures of Billy and Mandy</i>	TV-Y7
	<i>Static Shock</i>	TV-Y7
CBS	<i>Little Bill</i>	TV-Y7
Comedy Central	<i>South Park</i>	—
Discovery Kids	<i>Kenny the Shark</i>	TV-Y7
	<i>Tutenstein</i>	TV-Y7
Disney	<i>Kim Possible</i>	TV-G
	<i>Proud Family</i>	TV-G
	<i>Stanley</i>	TV-Y
	<i>Braceface</i>	TV-G

Note. — denotes that no television rating code was displayed on the cartoon or listed in the television guide at the time of taping.

Table 4 - continued

Network	Cartoons	TV Rating
Fox	<i>King of the Hill</i>	TV-PG
	<i>The Simpsons</i>	—
FX	<i>King of the Hill</i>	TV-PG
HBO Family	<i>Stuart Little</i>	TV-Y7
	<i>The Neverending Story</i>	TV-Y7
NBC	<i>Kenny the Shark</i>	TV-Y7
	<i>Tutenstein</i>	TV-Y7
Nickelodeon	<i>Danny Phantom</i>	TV-Y
	<i>Fairly Oddparents</i>	TV-Y7
	<i>Hey Arnold</i>	TV-Y7
	<i>Jimmy Neutron: Boy Genius</i>	TV-Y
	<i>Little Bill</i>	TV-Y7
	<i>Rocket Power</i>	TV-Y
	<i>Rugrats</i>	TV-Y
	<i>Wild Thornberrys</i>	TV-Y7

Note. — denotes that no television rating code was displayed on the cartoon or listed in the television guide at the time of taping.

Table 4 - continued

Network	Cartoons	TV Rating
Nick Jr	<i>Danny Phantom</i>	TV-Y
	<i>Fairly Oddparents</i>	TV-Y7
	<i>Hey Arnold</i>	TV-Y7
	<i>Jimmy Neutron: Boy Genius</i>	TV-Y
	<i>Little Bill</i>	TV-Y7
	<i>Rocket Power</i>	TV-Y
	<i>Rugrats</i>	TV-Y
	<i>Wild Thornberrys</i>	TV-Y7
Nick Toon	<i>Pelswick</i>	—
	<i>Fairly Oddparents</i>	TV-Y7
	<i>Hey Arnold</i>	TV-Y7
	<i>Jimmy Neutron: Boy Genius</i>	TV-Y
	<i>Rocket Power</i>	TV-Y
	<i>Rugrats</i>	TV-Y
	<i>Wild Thornberrys</i>	TV-Y7

Note. — denotes that no television rating code was displayed on the cartoon or listed in the television guide at the time of taping.

Table 4 - continued

Network	Cartoons	TV Rating
PBS	<i>Caillou</i>	TV-Y7
	<i>Clifford*</i>	TV-Y7
	<i>George Shrinks</i>	TV-Y7
Toon Disney	<i>Proud Family</i>	TV-G
	<i>Weekenders</i>	TV-Y
TBS	<i>Family Guy</i>	TV-14
WB	<i>Liberty's Kids</i>	TV-Y7

Note. * *Clifford* includes *Clifford the Big Red Dog* and *Clifford the Puppy Days* cartoons.

— denotes that no television rating code was displayed on the cartoon or listed in the television guide at the time of taping.

Table 5

Reliability Estimates for Cartoon DPICS Composite Categories and Codes

Variable	Parent		Child		Total	
Prosocial Behavior	.8404	Excellent	.7788	Excellent	.7952	Excellent
Answer	.8128	Excellent	.6569	Good	.7549	Excellent
Acknowledgement	.8174	Excellent	.8280	Excellent	.8819	Excellent
Behavioral Description	—	—	—	—	—	—
Information Description	.9226	Excellent	.9159	Excellent	.9217	Excellent
Laugh	1.0000	Excellent	.6000	Good	.6667	Good
Labeled Praise	1.0000	Excellent	—	—	1.0000	Excellent
Unlabeled Praise	.8367	Excellent	.8074	Excellent	.7650	Excellent
Physical Positive	.8477	Excellent	1.0000	Excellent	.8620	Excellent
Reflective Statement	.6667	Good	.5000	Fair	.6000	Good
Cheer	1.0000	Excellent	1.0000	Excellent	1.0000	Excellent
Yell-Positive	.5000	Fair	—	—	.5000	Fair
Inappropriate Behavior	.6784	Good	.8609	Excellent	.7597	Excellent
Criticism	.6962	Good	.7598	Excellent	.7694	Excellent
Smart Talk	.9813	Excellent	.5670	Fair	.8149	Excellent
Yell	1.0000	Excellent	.8386	Excellent	.9417	Excellent
Whine	.7500	Excellent	1.0000	Excellent	.9707	Excellent
Destructive	1.0000	Excellent	1.0000	Excellent	1.0000	Excellent
Physical Negative	.5000	Fair	—	—	.5000	Fair

Note: — indicates that the code was not used by the primary and reliability coders.

Table 5 - continued

Variable	Parent		Child		Total	
Laugh-Inappropriate	.0000	Poor	—	—	.0000	Poor
Cry	.5000	Fair	1.0000	Excellent	.7500	Excellent
Other Categories						
Descriptive/Reflective Questions	.8256	Excellent	.8889	Excellent	.9243	Excellent
Information Questions	.8341	Excellent	1.0000	Excellent	.9615	Excellent
Direct Commands	.8837	Excellent	1.0000	Excellent	.9187	Excellent
Indirect Commands	.7590	Excellent	.8864	Excellent	.8448	Excellent
Yell-Activity	.5000	Fair	.7500	Excellent	.6250	Good
No Opportunity to Answer	.7500	Excellent	.7969	Excellent	.7549	Excellent
Play Talk	.9377	Excellent	1.0000	Excellent	.9669	Excellent
Compliance	.5000	Fair	.6889	Good	.5763	Fair
Noncompliance	1.000	Excellent	.8284	Excellent	.8872	Excellent
No Opportunity for Compliance	.8769	Excellent	.7523	Excellent	.8638	Excellent

Note: — indicates that the code was not used by the primary and reliability coders.

Table 6

Mean of Cartoon DPICS Composite Categories and Codes

	Parent		Child		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Composite Categories					
Prosocial Behavior	26.71	7.07	19.32	7.17	4.03*
Inappropriate Behavior	4.00	3.86	4.21	3.53	.32
Individual Codes					
Acknowledgement	3.82	2.89	4.11	2.72	
Information Description	18.39	6.81	2.21	6.05	
Behavioral Description	0.00	0.00	0.00	0.00	
Reflective Statements	.14	.36	1.54	3.51	
Descriptive/Reflective Question	2.57	1.67	2.64	1.73	
Information Question	2.29	2.34	1.61	1.59	
Unlabeled Praise	1.32	2.34	1.11	1.22	
Labeled Praise	.21	.42	1.61	1.59	
Indirect Command	2.79	2.38	1.93	1.41	
Direct Command	3.21	2.10	1.25	1.08	
Criticism	1.07	1.27	.57	.74	
Smart Talk	1.07	2.12	1.36	1.68	
Play Talk	2.07	3.77	.71	1.74	
Laugh	.18	.39	.07	.26	

Note. * means $p = .00$.

Table 6 - continued

Mean of Cartoon DPICS Composite Categories and Codes

	Parent		Child		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Whine	.11	.31	1.18	1.36	
Yell	1.43	1.87	.96	1.91	
Laugh-Inappropriate	.07	.38	0.00	0.00	
Yell-Activity	.29	.81	.25	.65	
Yell-Positive	.07	.38	.04	.19	
Physical Positive	1.93	2.37	.04	.19	
Destructive	.18	.39	.11	.31	
Cheer	.18	.48	.18	.48	
Physical Negative	.14	.36	.25	.52	
Cry	.07	.26	.07	.38	
Compliance	.25	.59	.57	.74	
Noncompliance	.21	.50	4.75	2.93	
No Opportunity for Compliance	.39	.57	.93	1.02	
Answer	.82	1.16	1.07	1.33	
No Answer	.75	1.27	.89	1.17	
No Opportunity for Answer	.36	.62	.39	.69	

Table 7

Sum of Parent, Child, and Total Codes by Primary Coders

Individual Codes	Parent	Child	Total	# Dyads
Acknowledgement	107	115	222	28
Information Description	515	342	857	28
Behavioral Description	0	0	0	0
Reflective Statements	4	1	5	5
Descriptive/Reflective Question	72	74	146	28
Information Question	64	45	109	28
Unlabeled Praise	37	31	68	21
Labeled Praise	5	2	7	7
Indirect Command	78	54	132	28
Direct Command	90	35	125	27
Criticism	30	16	46	22
Smart Talk	30	38	68	19
Play Talk	58	43	101	15
Laugh	21	25	46	18
Laugh-Inappropriate	2	0	2	1
Whine	3	33	36	17

Note. Sum = Total frequency of the behavior by parent cartoon characters, child cartoon characters, and the total of both observed by the primary coder across the 28 cartoons. # = The number of dyads in which the primary coder observed the behavior.

Table 7 - continued

Sum of Parent, Child, and Total Codes by Primary Coders

Individual Codes	Parent	Child	Total	# Dyads
Yell	40	27	67	20
Yell-Activity	8	7	15	7
Yell-Positive	2	1	3	2
Physical Positive	54	20	74	21
Destructive	5	3	8	6
Cheer	5	5	10	4
Physical Negative	4	3	7	6
Cry	2	2	4	2
Compliance	7	17	24	10
Noncompliance	6	7	13	11
No Opportunity for Compliance	74	133	207	28
Answer	23	30	53	25
No Answer	10	11	21	17
No Opportunity for Answer	11	26	37	22

Note. Sum = Total frequency of the behavior by parent cartoon characters, child cartoon characters, and the total of both observed by the primary coder across the 28 cartoons. # = The number of dyads in which the primary coder observed the behavior.

Table 8

Cartoon DPICS Prosocial Behavior Composite Categories Across Cartoons: Ranked by Total Prosocial Behavior

Cartoon	Parent	Child	Total
<i>Clifford</i>	37	28	65
<i>South Park</i>	40	24	64
<i>The Neverending Story</i>	31	31	62
<i>George Shrinks</i>	35	26	61
<i>Liberty's Kids</i>	40	21	61
<i>Rocket Power</i>	29	30	59
<i>Stanley</i>	35	23	58
<i>Static Shock</i>	24	18	52
<i>Wild Thornberrys</i>	31	21	52
<i>Danny Phantom</i>	39	8	47
<i>Kenny the Shark</i>	25	21	46
<i>Kim Possible</i>	21	25	46
<i>Family Guy</i>	30	14	44
<i>Proud Family</i>	12	32	44
<i>Stuart Little</i>	24	18	43
<i>Tutenstein</i>	24	19	43
<i>Little Bill</i>	24	17	41
<i>Hey Arnold</i>	26	14	40

Table 8 - continued

Cartoon DPICS Prosocial Behavior Composite categories Across Cartoons: Ranked by Total Prosocial Behavior

Cartoon	Parent	Child	Total
<i>Braceface</i>	27	12	39
<i>Caillou</i>	22	17	39
<i>Pelswick</i>	25	14	39
<i>Rugrats</i>	22	17	39
<i>The Simpsons</i>	24	15	39
<i>Fairly Oddparents</i>	22	14	36
<i>Grim Adventures of Billy and Mandy</i>	21	13	34
<i>King of the Hill</i>	20	14	34
<i>Jimmy Neutron: Boy Genius</i>	24	8	32
<i>Weekenders</i>	16	15	31

Table 9

Cartoon DPICS Inappropriate Behavior Composite Categories Across Cartoons: Ranked by Total Inappropriate Behavior

Cartoon	Parent	Child	Total
<i>Static Shock</i>	13	6	19
<i>Hey Arnold</i>	14	5	19
<i>Rugrats</i>	5	13	18
<i>Kim Possible</i>	5	12	17
<i>The Simpsons</i>	11	4	15
<i>South Park</i>	3	10	13
<i>Braceface</i>	1	10	11
<i>Family Guy</i>	8	3	11
<i>Grim Adventures of Billy and Mandy</i>	8	2	10
<i>Jimmy Neutron: Boy Genius</i>	6	4	10
<i>Fairly Oddparents</i>	3	6	9
<i>Danny Phantom</i>	7	0	7
<i>King of the Hill</i>	3	4	7
<i>Proud Family</i>	3	4	7
<i>Weekenders</i>	2	5	7

Table 9 - continued

Cartoon DPICS Inappropriate Behavior Composite Categories Across Cartoons: Ranked by Total Inappropriate Behavior

Cartoon	Parent	Child	Total
<i>Tutenstein</i>	2	5	7
<i>Pelswick</i>	3	3	6
<i>Rocket Power</i>	2	4	6
<i>Stuart Little</i>	2	4	6
<i>Caillou</i>	0	5	5
<i>George Shrinks</i>	5	0	5
<i>Stanley</i>	3	2	5
<i>Wild Thornberrys</i>	0	5	5
<i>Kenny the Shark</i>	0	2	2
<i>Little Bill</i>	1	1	2
<i>The Neverending Story</i>	2	0	2
<i>Clifford</i>	0	1	1
<i>Liberty's Kids</i>	0	0	0

Table 10

Cartoon DPICS Prosocial and Inappropriate Behavior Composite Categories Across Cartoons: Ranked by Ratio of Prosocial to Inappropriate Behavior

Cartoon	Prosocial	Inappropriate	Ratio
<i>Liberty's Kids</i>	61	0	∞
<i>Clifford</i>	65	1	65:1
<i>The Neverending Story</i>	62	2	31:1
<i>Kenny the Shark</i>	46	2	23:1
<i>Little Bill</i>	41	2	21:1
<i>George Shrinks</i>	61	5	12:1
<i>Rocket Power</i>	59	6	10:1
<i>Stanley</i>	58	5	12:1
<i>Wild Thornberries</i>	52	5	10:1
<i>Caillou</i>	39	5	8:1
<i>Pelswick</i>	39	6	7:1
<i>Stuart Little</i>	42	6	7:1
<i>Danny Phantom</i>	39	7	6:1
<i>Proud Family</i>	44	7	6:1
<i>Tutenstein</i>	43	7	6:1
<i>King of the Hill</i>	34	7	5:1
<i>South Park</i>	64	13	5:1
<i>Braceface</i>	39	11	4:1

Table 10 - continued

Total Frequency of Prosocial Behavior and Inappropriate Behavior by Cartoon: Ranked by Ratio of Prosocial Behavior to Inappropriate Behavior

Cartoon	Prosocial	Inappropriate	Ratio
<i>Fairly Oddparents</i>	36	9	4:1
<i>Family Guy</i>	44	11	4:1
<i>The Simpsons</i>	39	15	4:1
<i>Weekenders</i>	31	7	4:1
<i>Grim Adventures of Billy and Mandy</i>	34	10	3:1
<i>Kim Possible</i>	46	17	3:1
<i>Jimmy Neutron: Boy Genius</i>	32	10	3:1
<i>Static Shock</i>	52	19	3:1
<i>Hey Arnold</i>	40	19	2:1
<i>Rugrats</i>	39	18	2:1

Table 11

Means of Prosocial and Inappropriate Behavior by Network: Ranked by Ratio of Prosocial Behavior to Inappropriate Behavior

	Prosocial <i>M</i>	Inappropriate <i>M</i>	Ratio <i>M</i>	# of Cartoons
WB	61.00	0.00	∞	1
CBS	41.00	1.00	21:1	1
HBO Family	52.00	4.00	13:1	2
PBS	55.00	3.67	11:1	3
NBC	43.50	4.50	9:1	2
Discovery Kids	43.50	4.50	9:1	2
ABC	44.00	7.00	6:1	1
FX	34.00	7.00	5:1	1
Toon Disney	37.50	7.00	5:1	2
Comedy Central	64.00	13.00	5:1	1
TBS	44.00	11.00	4:1	1
Nick Toon	43.25	10.43	4:1	7
Disney	46.75	10.00	4:1	4
Nickelodeon	42.45	9.50	4:1	8
Nick Jr.	42.45	9.50	4:1	8
Cartoon Network	40.00	12.67	3:1	3
FOX	36.50	11.00	3:1	2

Table 12

Ranking of Top 30 Programs: Broadcast and Cable

Rank	Age Group	Cartoon	Television Rating	Network	# of Viewers (in millions)
1	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	3.24
3	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	2.92
5	Kids 2-11	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	2.81
9	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	2.51
10	Kids 2-11	<i>Danny Phantom</i>	TV-Y	Nickelodeon	2.41
11	Kids 2-11	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	2.28
12	Kids 2-11	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	2.26
15	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	2.05
17	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.84
18	Kids 2-11	<i>Hey Arnold</i>	TV-Y7	Nickelodeon	1.79
20	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.74
22	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.73
24	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.71
27	Kids 2-11	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.62
29	Kids 2-11	<i>Rugrats</i>	TV-Y	Nickelodeon	1.61

Note. Cartoons that are listed more than once represent different episodes of that cartoon televised during the week. — indicates that no television rating code for *South Park* was displayed on the cartoon or listed in the television guide at the time of taping. Rankings are based on Nielsen Media Research data (as cited in Vasquez, 2004).

Table 12 - continued

Ranking of Top 30 Programs: Broadcast and Cable

Rank	Age Group	Cartoon	Television Rating	Network	# of Viewers (in millions)
1	Kids 9-14	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.37
2	Kids 9-14	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	1.35
4	Kids 9-14	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	1.24
7	Kids 9-14	<i>Danny Phantom</i>	TV-Y	Nickelodeon	1.16
10	Kids 9-14	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	1.02
12	Kids 9-14	<i>Jimmy Neutron</i>	TV-Y	Nickelodeon	0.97
24	Kids 9-14	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	0.80
27	Kids 9-14	<i>Static Shock</i>	TV-Y7	Cartoon Network	0.79
28	Kids 9-14	<i>Fairly Oddparents</i>	TV-Y7	Nickelodeon	0.79
29	Teen 12-17	<i>South Park</i>	—	Comedy Central	0.65

Note. Cartoons that are listed more than once represent different episodes of that cartoon televised during that week. — indicates that no television rating code for *South Park* was displayed on the cartoon or listed in the television guide at the time of taping. Rankings are based on Nielsen Media Research data (as cited in Vasquez, 2004).