

An honors thesis for the Department of Child Study and Human Development

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Abstract

The intent of this study was to analyze the content of a sample of current animated television shows for children between the ages of six and twelve. Specifically, the main research questions involved examining the frequency and portrayals of male and female characters. Television is a major part of children's lives all over the world, so it is important to have an understanding of what images and messages they are being exposed to. Existing research on children's television has shown that male characters severely outnumber female characters.

This content analysis examined a total of thirty episodes of ten different cartoons. A team of undergraduate and graduate students coded all speaking characters for demographic information, physical portrayals, and a variety of personality traits. Results of this particular study found that males outnumbered female characters about two to one. Females were rated as skinnier and more beautiful, and were more likely to be kind and less likely to be cruel than males. With a discussion of these findings, the research team hopes to add to the literature discussed and provide useful information for caregivers and educators about children's media content. The results of this study indicate that there has been improvement in the content of children's animation but that there is still very much a need for more diverse, multidimensional characters. Further media effects research is also an important and necessary addition to this study and existing research to better understand how children are affected by the images presented to them on television. *Keywords*: children's television, animated television, content analysis, sex roles, gender stereotypes, Children's Television Project, cartoons

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"Are You a Good Witch, or a Bad Witch?": Female Stereotypes in Animated Television

Introduction

Media is a pervasive part of a child's life today more than ever. A cell phone is no longer used just to make calls, and a child does not have to sit with the entire family around a television set at a specifically scheduled time to watch his or her favorite programs. Television and advertisements can be accessed on computers, tablets, and smartphones in the home or even underground on the subway. The amount of time people between the ages of 8 and 18 spend watching regularly scheduled television programming has decreased, but with this spread of television to multiple platforms, the average amount of time consuming television per day has increased by 38 minutes (Rideout, Foehr, & Roberts, 2010). Parents and caregivers have long been concerned about exposing children to television media, however, and this changing media landscape only raises the stakes.

Today, with an even greater wealth of video games, movies, and television shows accessible online and otherwise, people of all socioeconomic statuses have even more access to and concern about the quality of content children will be taking in.

Exposure to television media is almost inevitable, and despite all of the other options for screen entertainment, it remains the primary media source for young children (Comstock & Scharrer, 2012). According to the most recent report from The American Academy of Pediatrics (n.d.), children spend an average of seven hours a day on entertainment media on any variety of electronic devices. Between 2012 and 2013, ownership of tablet computers increased from 20-51%, and the use of tablets by children and teenagers aged five to fifteen increased 7% vs 23% (Moffat, 2014).

The effects of this exposure on children appear to be both positive and negative, however. Research has shown that watching large amounts of television can be correlated with low self-esteem (Martins & Harrison, 2012), internalization of racial and gender stereotypes (Martins & Harrison, 2011), violent behavior (Holland, 2003), and changes in body image (Harrison & Hefner, 2006). On the other hand, studies have shown that there can be benefits to children watching programming that provides modeling of prosocial behavior (Sprafkin et al., 1975). Studies have found that exposure to certain television can lead to an increase in academic achievement (Donlevy, 2002) and a rise in self-esteem for minority viewers when their heritage is represented (Ryan, 2010). This type of effects research is important for caregivers and for television producers. As the expression goes, boys will be boys but girls will be both. Meaning, male viewers will typically only watch programs with predominantly male casts, whereas female viewers will watch and identify with female and male casts of characters (Harrison & Aubrey, 2009).

Given the arguably semi-constant exposure children have to media every day, it stands to reason that we should study the content of the media itself. Many content analyses have been conducted examining the actual images and messages presented to children in animated television programming. Most commonly, portrayals of gender, race and ethnicity, and age groups have been studied (Baker & Raney, 2004; Baker & Raney, 2007; Hentges & Case, 2013; Thompson & Zerbinos, 1997; Punyanunt-Carter, 2008). A precursor to the present study, Dobrow and Gidney (1998) conducted a content analysis of children's animated television and found that character demographics remained fairly whitewashed with little diversity that accurately reflected the diversity of cultures in the United States--the primary audience for their sample.

The present study is a thorough content analysis examining personality and physical characteristics of characters in animated television programs aired from 2013-2015. The sample studied consists of ten animated television shows commonly viewed by children between the ages of six and twelve years-old. This research was conducted as part of the Children's Television Project at Tufts University under the principal investigators Dr. Julie Dobrow, Dr. Calvin Gidney, and Dr. Jennifer Burton. The content analysis is only the first stage of the larger project, which aims to evaluate the way characters are drawn, the way they act and speak, and how these portrayals come about. The investigators plan to continue with researching how producers, voice actors, and vocal casting directors make decisions about the characters they bring to life in animated programming for children. One of the major goals of this particular part of the project is to gain a better understanding of how gender is portrayed in current animated television shows watched by children, and if there has been any change in these gender representations over the past fifteen years.

The research questions and hypotheses that will be addressed in this thesis are as follows:

- How is gender represented in the sample of children's animated television?
 - How many characters are male? How many characters are female?
 - H1. This content analysis will find similar results to previous research on demographics in children's animated television. There will be significantly more male characters than female characters.
 - Is character gender related to stereotypically male or female personality traits?

- H2. Female characters will be more likely to be coded as kind, peaceful, serious, and dependent while males will be more likely to be coded as cruel, violent, comic, and independent.
- H3. Female characters will be no more likely to be coded as smart or stupid than male characters.
- Is character gender related to stereotypically male or female physical ideals?
 - H4. Female characters will be more likely to be coded as skinny and beautiful while male characters will be more likely to be coded as fat and ugly.

Through various forms of data analysis, this study aims to provide updated information about how gender is currently portrayed in children's animated television, and thus, what messages children are being sent about gender. With this research, television producers and writers may be encouraged to improve the images that they put on screens for children to watch and learn from so that they are more diverse and accurate in their representations of gender.

Review of the Literature

Impact of Media

As previously stated, media consumption is inevitable in children's lives, and it is important to examine exactly how much they are taking in and what the effects of media exposure could be. Children spend an average of seven hours a day on entertainment media on any variety of electronic devices and the use of tablets is increasing every year (American Academy of Pediatrics (n.d.); Moffat, 2014). This shift to viewing on multiple platforms in practically endless locations has raised a lot of questions about the changing media landscape children will encounter. Because viewing habits on iPods, smartphones, tablets, DVR, television, and online streaming are changing so quickly, there is not much research on the effects of viewing on these varying platforms. What is clear is that television is still the media that young children are exposed to most (Pallotta, 2014), but as they age, children are more likely to turn their attention to other forms of screen media (Comstock & Scharrer, 2012). Regardless, children of all ages continue to watch television, and in particular, they continue to watch cartoons. Television is here to stay, so it is important to examine what the possible effects are of watching television on children.

Social Learning Theory. Albert Bandura, a behaviorist theorist, is perhaps most famous for the development of Social Learning Theory (1977), which states that through observation of their environment, children acquire and maintain behaviors. The behaviors that are reinforced will continue to be exhibited and behaviors that do not result in reward would be devalued, and thus decrease in frequency. It stands to reason that children would gather information about gender and sex through observing the other children and adults in their environment. Evidence to support this theory can be found in the famous Bobo doll

experiment conducted by Bandura, Ross, and Ross (1961), in which some children were shown a video of an adult hitting a weighted blow-up doll and others were not. When the children were then put in a room with the actual doll, those that had viewed the video with the aggressive adults were likely to imitate the behavior. Though this study is not perfect in its experimental design, it has been replicated with multiple manipulations (Hayes, Rincover, & Volosin, 1980), and experiments continue to support Bandura's theory.

These and other studies demonstrate that children model those in their immediate environment. But what about imitating the behaviors of those they observe on television, animated or otherwise? Anderson and Cavallaro (2002) conducted a survey asking children about who their role models were, both people they know and famous people or imaginary characters. They found that even with variation in what qualities they valued, second to parents, children most frequently named entertainers as their heroes or role models, and that these media characters were valued for their skills. What this study, and others can show us, is that children wish to model their behavior after the characters that they view in media.

Cultivation Theory. To be more specific to how children learn from television, we must turn to Gerbner's Cultivation Theory (1976), which states that people who watch television slowly take in its viewpoints and become susceptible to indoctrination of television portrayals. Meaning, people (including children) who are heavy television viewers are more likely to align with the beliefs and attitudes of the television they watch and hold these demonstrations as truth. Gerbner (1976) found empirically that television cultivated a mainstream view of the world for those who consumed it the most. So, when we're looking at a television world in which gender, race, ethnicity, and age are not

reflective of reality, the concern would be that children viewing the most television (who also tend to be Black, Latino or low-income) are going to be developing ideas commensurate with this unrepresentative television world.

Cultivation Theory is not as prominent as it once was because it omits certain factors that influence the development of a person's beliefs and attitudes, like the viewers' environments or genre of the shows being watched (Morgan & Shanahan, 2010). Also, while Gerbner and colleagues were not concerned with how cultivation actually occurs, researchers have moved on to studying the cognitive processes with mixed results supporting cultivation theory. Shrum (1995) contends, for example, that television does not change one's beliefs, but rather, strengthens already existing ones. Even with its criticisms, it is still important to consider Cultivation Theory when studying media effects of children's animated television.

Regardless of the accuracy of Cultivation Theory itself, from numerous studies we know that children learn from consuming media. Sesame Workshop, or the Children's Television Workshop, is perhaps best known for its research on the educational possibilities of television for children. Fisch, Brown and Cohen (2001) conducted a study on children's comprehension of short video segments with participants between the ages of three and five. Two claymation videos were shown, a more concrete episode demonstrating cooperation, and a more abstract episode demonstrating the importance of honesty. Participants were divided into two groups: one that watched the episodes with English dialogue, and one that watched with "chicken talk." While the language of the episodes did not show any effect on the children's abilities to comprehend the stories, level of understanding increased with age and was significantly stronger for the more concrete

episode about cooperation. Fisch et al. demonstrate that it is possible for children to learn and comprehend television even at a very young age, and that varying content affects that level of understanding.

Negative Influences

Much of the research conducted on what children learn from television has focused on the negative impact it could have on children's behaviors and beliefs. It is important to keep in mind that the research on these influences is disproportionate, so there are simply more studies about possible negative impacts than positive ones.

Development of Stereotypes. Many researchers have explored the possibility that television consumption could lead the internalization of the stereotypes presented to them, in particular with regards to stereotypes of race or gender (Baker & Raney, 2004; Baker & Raney, 2007; Thompson & Zerbinos, 1997). Punyanunt-Carter (2008) surveyed undergraduate students about how realistic they believed portrayals of African-Americans' occupational roles, negative personality traits, low-achieving status, and positive stereotypes in television were. Results indicated that viewers perceived the occupational roles and negative personality traits that African-Americans portray on television as real or true to life, and that viewers may feel that television depicts their jobs that are realistically and believably, though perhaps this second finding is due to the increase in varying occupations for African-Americans on television. Low-achieving status and positive stereotypes on television were not perceived as accurate. What this study, and others, show is that for better or for worse, the racial stereotypes presented to viewers on television can impact the way they view people in real life. Development of gender stereotypes will be discussed in depth further in a later section.

Low Self-Esteem. Research has also shown a correlation between high amounts of television watching and low self-esteem. One study found that for children around the age of fourth grade, watching a high amount of television (4 or more hours a day) was associated with low self-esteem and that watching a moderate amount (one to two hours a day) was associated with a healthy level of self-esteem (Tin, Ho, Mak, Wan, & Lam, 2012). This finding is particularly interesting because the students who watched a very low amount of television (less than one hour a day) also had lower self-esteem. These findings indicate that children with lower self-esteem may be drawn to spending more time watching or that watching too much television can negatively impact one's self-esteem. There is also perhaps a danger in losing out on social interactions if one does not watch enough.

A longitudinal study by Martins and Harrison (2011) surveyed elementary school children to examine if changes in television use over a year would have any association with self-esteem for Black and White boys and girls in the United States. Results showed that exposure to television predicted lower self-esteem for all participants except White boys. These results could be explained by the overrepresentation of white males in children's television, or by the quality of the representations (i.e. content may draw on racial and gender stereotypes that more heavily reinforce positive characteristics of white male characters). Graves (1999) suggests that children who do not see themselves reflected in television shows have lower self-esteem than those who do.

Media Violence and Violent Behavior. Perhaps the most talked about in the news with the rise in popularity of video games and violent media, much research has been

conducted on the possible negative effects of exposure to violent media or the possible relationship between exposure to large amounts of media and aggressive behavior. Fitzpatrick, Barnett, and Pagani (2012) conducted a longitudinal study in which parents reported whether their children had watched what they considered violent media at 41 and then again at 53 months. Exposure to violent media was significantly associated with antisocial symptoms, emotional distress, inattention, lower academic achievement in second grade as reported by teachers. Children exposed to violent media also self-reported less academic-self concept and intrinsic motivation. This research suggests a link between violent media and negative effects on general mental health in children.

Mößle, Kliem, and Rehbein (2014) studied possible connections between watching violent media and development of empathy and aggressive behavior. They conducted a longitudinal study in which students from approximately 10 years-old until 12 years-old completed measures of media usage, aggressive behavior and empathy. Like the findings of many other studies, higher violent media consumption was significantly associated with lower empathy scores and a higher rate of aggressive behavior, and lower empathy scores were significantly associated with a higher rate of aggressive behavior all without gender differences. This correlation could imply that children who are more prone to aggression are drawn to consuming violent media, or that consumption of violent contributes to their aggressive actions. Like all correlational studies, this does not address the issue of causation or take extraneous variables into account (like socioeconomic status, family stresses, problems at school, etc.).

Many have proposed remedies to the potentially negative media effects of violent media consumption. Cardwell (2013), for example, recognizes that suppressing the

production and consumption of violent media would be a futile action to attempt, and that the video game, film, and television rating systems are not very successful at contributing to how parents and caregivers monitor what their children consume, though this system is also an attempt to curb children's consumption of violent media. Instead, Cardwell and many others suggest that the solution is to educate the masses more effectively about the possible consequences of violent media consumption so that children's exposure to violent media is drastically limited.

Relationships between the development of stereotypes, self-esteem, aggressive behavior and television consumption is important to keep in mind when studying the content of children's cartoons. Though outside the scope of the present study, the gender representations found in our sample could have serious implications about negative media effects on viewers. Both male and female viewers may develop false opinions about themselves and others based on the images presented to them in the animated television they watch. Thoroughly studying content of television could shed more light on the root of these negative effects.

Positive Influences

As previously stated, more research tends to be conducted on the possible negative effects of media, but research has shown that media can be associated with positive aspects of children's lives.

Math, Science, and Literacy. Television networks and game companies have undertaken the task of turning television and digital media into teaching tools for concrete concepts like math, science, and literacy. Sesame Street, for example, may be the most studied and lauded of examples of a television program with the goal of improving

academic achievement beginning with viewers at a very young age (Fisch & Truglio, 2001). Media is even being integrated into classrooms to facilitate learning. Barak and Dori (2011), for example, evaluated the integration of web-based animations into a science curriculum in fifteen elementary school classrooms of fourth and fifth graders, and found that the animations enhanced scientific curiosity, and promoted various thinking skills.

Thirteen/WNET developed an animated television series called *Cyberchase* for children ages eight to eleven with the goals of teaching math to viewers and encouraging them to approach math with confidence and a positive attitude (Donlevy, 2002). Donlevy evaluated the series with 450 students and 20 teachers, and results suggested that the program appealed to viewers, increased their enthusiasm for mathematics, boosted their self-confidence, and broadened awareness of math applications.

WGBH developed a very successful show for PBS Kids called *Between the Lions* designed to teach young child viewers to read (Anonymous, 2002). The Early Childhood Institute of Mississippi State University conducted a study over the 2001-2002 school year in which students on the Choctaw Indian reservation watched two half-hour episodes a week while making use of related resources. The students who participated in the study outperformed their control group peers on a variety of literacy measures, showing once again that media can have concrete educational effects.

Social and Emotional Learning. Some of the most studied positive effects of media for children are social and emotional learning. This may be a result of social and emotional learning being long-time popular lessons taught in children's television over more concrete concepts like STEM lessons (though there may be a shift toward more funding for STEM programming). Sprafkin (1975) conducted a study using the show, *Lassie*, and found that

children who watched an episode of the show that demonstrated a boy helping a dog were more likely to demonstrate helping behavior later than those who had watched an episode that did not.

In particular, superheroes, or simply heroes and role models have been studied with the goal of teaching children a variety of lessons about prosocial behavior. One study even found that putting capes on children, showing them videos of Superman, and discussing Superman's qualities led to displays of delay of gratification (Silverman, 2011). Rubin and Livesay (2006) also found superheroes a useful part of play therapy for children. Children used stories relating to the superheroes of their choosing to create scenarios similar to situations in their lives. Other positive (and negative) social messages children can learn from media will be discussed in later sections of this literature review.

Though less frequently studied, the possible positive effects of television-watching are also important to keep in mind in relation to the present study. This content analysis could find positive images that should continue to be presented to children and further studied in media effects research. Given all of the findings on negative effects, identifying images that could have positive influences is key to improving the images children are exposed to.

Gender in Media

It is no secret that mass media has been accused of "under-representation and symbolic annihilation of socially disenfranchised groups," as Shiffman and Klein (2009) put it. Much of what we see on television are stereotypes of race, gender, age, the list goes on. In their study, Shiffman and Klein (2009) examined animated television from the 1930's up through the mid 1990's and found that females and ethnic minorities have been continually

underrepresented, and even that there was a steady decline in the inclusion of ethnic minorities. This study is a good introduction to what many other studies have found, and what will be the focus of the following sections.

Depictions of Gender Roles. It is important to examine what content analyses in the past have found regarding gender in television in order to inform the hypotheses of this study. Shiffman and Klein's (2009) study mentioned previously found that female characters only made up 16.4% of characters even though they make up about 50% of the population, and female characters were found to be more attractive, and six times more likely than male characters to be above-average looks. Ahmed and Wahab (2014) also found that female characters were more likely to be sexual and attractive by coding for indicators like revealing clothing, body type, and body language.

Leaper, Breed, Hoffman, and Perlman (2002) took a different approach and assessed content based on genres they called traditional adventure, nontraditional adventure, educational/family, and comedy. Using a time-sampling method, they found that there were significantly more male characters in traditional adventure and comedy programs, and that female characters were more likely to exhibit behaviors like showing fear, acting romantic, being polite, and acting supportive. Some of these might be considered more positive female stereotypes, but demonstrate a limited number of possible personality traits for female characters. Also, in the traditional adventure programs, male characters were more likely than females to use physical aggression. Luther and Legg (2010) focused on expressions of aggression in children's cartoons on Nickelodeon, Cartoon Network, and Toon Disney, and found that male characters were more likely to display acts of physical aggression while female characters were more likely to display acts of social aggression.

These findings are unsurprising given existing research that young girls are more likely to exhibit relational aggression (Butovskaya, Timentschik, & Burkova, 2007).

One study examined the portrayals of characters' usage of science and technology in television cartoons (Brownlow & Durham, 1997). Results showed that male characters were more likely than female characters to make use of science or technology, and that when female characters did, it was more likely to be in a prosocial manner, rather than a destructive one. The researchers used a series of measures about cognitive, physical, emotional, and social activities, and found that the competence of female characters was typically associated with prosocial behavior. These results again indicate that female characters in animated television are valued for being "good."

What Children Learn About Gender from Television. Although content analyses are vital contributions to media research, studies on media effects are important for understanding what viewers actually take away from the media presented to them. A lot of the existing literature focuses on what children learn specifically about gender from watching television. O'Bryant and Corder-Bolz (1978) were especially interested in children's understanding gender stereotyped occupations. They showed children cartoons with commercials of in women in "traditional" roles or in "traditionally male" roles, and children were pre- and post-tested on their knowledge of occupations, how much they stereotyped occupations, and which types of occupations they preferred. They found that the boys in the study preferred male stereotyped jobs while the girls in the study preferred female-stereotyped jobs. However, more girls who viewed women in traditionally male jobs preferred these jobs on the posttest than they had on the pretest. This particular result is good evidence that television can affect a child's opinion about gender.

Davidson, Yasuna, and Tower (1979) found that even children as young as five and six years-old exhibited changes in sex-role stereotyping after watching cartoons that exhibited reverse, neutral, and high amounts of gender stereotyping (though there was no difference between children's responses who watched shows that were neutral and highly stereotyped). They measured these effects by telling stories about male or female characters, and then showing pictures of males or females and asking the children to point to which person the story was about.

McGhee and Frueh (1980) wanted to see how heavy television viewing versus light television viewing might affect perceptions of gender stereotypes. Children from first through seventh grades participated, and as expected, heavy viewers had more stereotypic perceptions than low viewers. Perhaps more interestingly, for heavy viewers, male stereotypic perceptions increased as a function of age, but this was not the case for female characters. There are many rationales for why this may be (including cultivation), but regardless of why, these results indicate that different gender stereotypic portrayals result in different perceptions in child viewers.

In another study, children from ages of four to nine were interviewed about their cartoon-watching habits, how they perceived the characters, and what occupations they wanted for the future (Thompson & Zerbinos, 1997). Children in the study perceived boys as three times as likely to do something silly and four times as likely to behave violently, and generally across all measures, male respondents saw more differences between male and female characters. A large majority of boys selected male-stereotypical jobs for their futures, and over half of girls selected female-stereotypical jobs. While it is hard to make a

cause-and-effect claim, the correlations between cartoon-watching and these gender perceptions are compelling.

Harrison and Aubrey (2009) conducted a thorough content analysis of children's cartoons, and then assessed children's gender-role values and interpersonal attraction to same- and opposite-gender characters. Results showed that boys were unlikely to be attracted to female characters no matter what kind of television content they preferred, while girls who preferred male stereotypical content were less likely to be attracted to female characters. This study, along with many others, supports the claim boys will only watch content with a predominantly male cast while girls are more willing to watch shows with any variety of cast. The rationales for this finding vary, but one might suggest that with a lack of female representation, girls simply must find other aspects on which to evaluate a television show.

It is difficult to accurately gauge what children see and understand, but with a variety of different study designs, we can try to piece together what is consistent across all studies. While the present study analyzes the images adults coded with regard to gender, next steps in the CTV Project will observe how children understand the images presented to them.

Race and Gender. Made clear by the Schooler et al. (2004) study, it is difficult to make sweeping claims about media effects with regard to gender without examining how race factors in. Martins' and Harrison's (2012) findings mentioned in a previous section are a good example of the importance of this interaction. White boys' self-esteems increased with media exposure while the self-esteems of Black boys and White and Black girls decreased. Ryan (2010) uses "Dora the Explorer" as an example of a show that draws

attention to the title character's race and gender in the hopes of raising the self-esteem of Latina girls. This area of research needs to be explored further, especially because of the points Graves (1999) brings up. She argues that there is little interaction among races in children's television even when there is a diverse cast, and that it is important to show people of different races getting along on television. Graves also hypothesized in this article that African-American children who watch television and do not see characters that look and sound like them will have lower self-esteem.

Self-Esteem and Body Image. Aside from violent behavior, the other perhaps most-talked about media effect is body image. High amounts of media intake is associated with body dissatisfaction (Harrison, 2001), but this may only be true for certain viewers. Particular focus has been paid to adolescent and preadolescent girls. Harrison and Hefner (2006) had participants self-report television and magazine exposure and perception of their own bodies and body ideals over the course of a year. Regardless of age, race, perceived body shape and initial ideals, greater television and magazine exposure predicted a thinner future body ideal, and greater television exposure predicted disordered eating. Another study focused on thin ideal focused television with participants between the ages of nine and twelve watching movie clips that were either explicitly thin ideal or indirectly thin ideal (Anschutz, Spruijt-Metz, Van Strien, & Engels, 2011). Only older preadolescent girls showed greater body dissatisfaction after watching thin ideal focused television than after the neutral clip. These, and other studies, show a clear correlation between negative body image and media exposure.

One study aimed to examine a relationship between race and body dissatisfaction in female television-watchers (Schooler, Ward, Merriwether & Caruthers, 2004). Participants

reported how much they viewed mainstream and Black-oriented television shows monthly, with different results for Black women and White women. Watching mainstream television predicted poorer body image for White women, while watching Black-oriented television had no effect. Watching Black-oriented television predicted healthier body image for Black women, while watching mainstream television had no effect. These results indicate that the content of media has a huge impact on the resulting effects on its viewers.

The intersection of race and gender and development body image and gender identity are complex issues. It is important to understand what images children are seeing on television that may contribute to these aspects of their lives. Child viewers are at formative ages when they are developing their own identities and opinions about others, and these thoughts and attitudes may be heavily influenced by the television they are exposed to.

Method

Sample

A sample of ten animated television shows was selected for this stage of the project by cross-referencing several lists of "top ten" children's animated television shows for 2013 and 2014. These lists were accessed on the Internet without any cost. In order to be included in the study, a show had to be featured on at least two of the aforementioned lists and target children ages six to twelve. Although some of the programs appeared on multiple lists, we cannot say definitively whether they are actually the most-watched animated television programs by children.

The shows are from a variety of networks and genres. A complete list of shows included in the sample can be found in Appendix A, but some examples are *Arthur*, *Bob's Burgers*, *The Legend of Korra*, and *Digimon*. *Arthur* is from PBS and has educational goals, *Bob's Burgers* is a comedy on FOX targets a slightly older audience, *The Legend of Korra* is an adventure story from Nickelodeon, and *Digimon* is a Japanese series that airs on Cartoon Network in the United States.

The coding manual was based on the original coding scheme used by the principal investigators, Drs. Dobrow and Gidney, in their 1998 study. It was updated and modified to fit the goals of the current Children's Television Project, and was then converted to a Google Form for easy access and usage by coders. On the Character Coding Sheet there were ten personality traits and four physical traits coded on a scale of 0 to 5, where 0 was used when coders were unsure. Only two of the physical traits and six of those personality traits were analyzed for this thesis. Those physical traits are "Beautiful/Ugly" and "Fat/Skinny" and those personality traits are "Kind/Cruel," "Peaceful/Violent,"

"Smart/Stupid," "Competent/Incompetent," "Independent/Dependent," and "Comic/Serious." See Appendix B for the complete coding sheet.

For each television show, three episodes were randomly chosen from the most recently aired episodes that were available for access on DVD or online streaming. The sample amounted to 30 episodes of the selected ten programs. Each episode was either two 11-minute shorts or one full-length 22 minute story.

Procedure

30 undergraduate and graduate students at Tufts University were trained on how to use the coding forms accessible through Google Documents. This coding scheme (called the CTV 2013 Character Coding Form) included questions about physical appearance and personality traits on a 0-5 Likert scale, forced choice answers about age, race, socioeconomic class, and role in the show, and a free-response comment box at the end in which coders could choose to further explain any coding choices that they made. In this thesis, two "rounds" of coding will be examined. In each round of coding, students were randomly assigned to code one episode of one of the television programs, two students per episode. The students completed their coding independently and continually met in pairs throughout the semester to discuss improving and standardizing coding decisions. During the "data cleaning" process for the first round of data collection, pairs met again to address any discrepancies in forced choice answers by rewatching the episode together. For the second round of data cleaning, four undergraduate students and one graduate student met in pairs to watch the episodes and resolve any remaining discrepancies. Averages were calculated to clean the data collected on the 0-5 scales of physical appearance and personality traits.

Results

A total of 554 speaking characters were coded from the sample of 10 children's animated television programs. All characters were coded for physical and personality traits, as well as gender, age, dramatic role in the episodes, and race. The coding scheme provided options for coders to put "indeterminate/uncertain" as well as "other," and a notes box at the end of the form where they could explain their thoughts and reasoning behind their decisions.

Frequencies

To address the question of whether the diversity of characters in children's animated television has changed over the past 15 years, simple frequencies were calculated. The sample was comprised of 554 total characters. To be coded, a character had to be a speaking-character. 67% of characters were male (n = 369), while 32% were female (n = 179), and 1% was uncertain/indeterminate (n = 6). As Figure 1 shows, male characters outnumbered female characters about two to one.

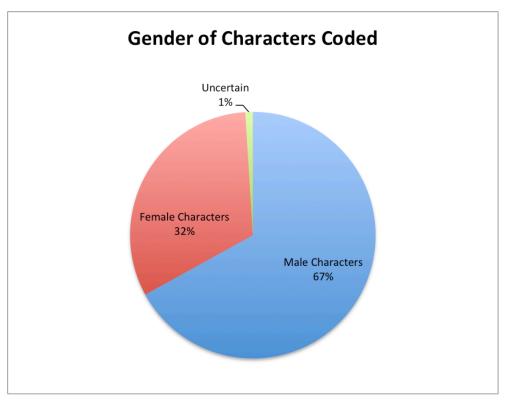


Figure 1. This chart displays the proportion of male and female characters in the entire sample. 1% of characters were of "uncertain" gender. It is clear that male characters outnumbered female characters by about two to one.

In terms of age, 34% of characters were middle-aged (n = 190), 22% were teenagers (n = 123), 17% were children (n = 94), 12% were young adult (n = 63), 6% were elderly (n = 35), 1% were babies/infants (n = 3), and 8% were rated uncertain (n = 46).

For dramatic role, we found that 40% of characters coded were walk-on characters (n = 223), 29% were minor characters (n = 161), 14% were heroic sidekicks (n = 77), 10% were major heroes (n = 56), 6% were major villains (n = 31), and 1% were villainous sidekicks (n = 6).

In terms of racial breakdown, 45% of characters were White (n = 246), 7% were Asian (n = 39), 2% were Black (n = 12), and 1% were Latino (n = 3). 13% were rated as Other (n = 72) like inuit, for example, and 32% were rated uncertain/indeterminate (n = 181) -- like Spongebob Squarepants.

Chi-Square Analyses

Gender Frequencies

All physical and personality traits were rated on the 0 to 5 Likert scale. Characters rated between 1 and 2.5 were grouped together, and characters rated between 3.5 and 5 were grouped together. 0's were eliminated because they meant "uncertain." These new groupings allowed us to change a scale variable into a dichotomous variable with the first group being "Kind" and the second being "Cruel," for example.

Physical Appearance

To address the question of whether character gender is related to stereotypically male or female physical ideals, we conducted χ^2 analyses comparing the number of male and female characters with varying appearance scales.

We conducted a χ^2 comparing gender and body type, which was rated on a Skinny/Fat scale. $\chi^2(1, N=383;)=22.4, p<.000$. Male characters were more likely to be rated as fatter and female characters were more likely to be rated as skinnier.

Another χ^2 compared gender and beauty, which was rated on a Beautiful/Ugly scale. $\chi^2(1, N=372)=44.3$, p<.000. Male characters were more likely to be rated as uglier and female characters were more likely to be rated as more beautiful. As Figure 2 shows, there is a drastic difference between the number of female and male characters, and male characters' ratings come out to around an average because of the spread across possible physical traits.

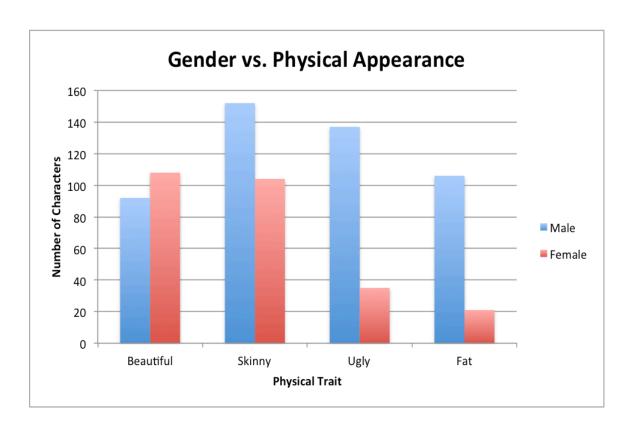


Figure 2. This graph displays how many male and female characters were rated as beautiful, skinny, ugly, and fat. Female characters are statistically more likely to be beautiful and skinny. Male characters appear to be more spread among these physical traits, showing that there is more variety in male characters' appearances while female characters tend to have a limited number of possible appearances.

Both of these data analyses supported my hypothesis that the physical traits of the animated characters would be stereotypical.

Personality Traits

To address the question of whether character gender is related to stereotypically male or female personality traits, we conducted a series of χ^2 analyses comparing the number of male and female characters with varying personality scales.

We conducted a χ^2 comparing gender and violence, which was rated on a Peaceful/Violent scale. χ^2 (1, N=306) = 14.6, p<.000. Female characters largely

influenced this relationship. Female characters were significantly more likely to be peaceful and less likely to be violent.

A χ^2 compared gender and kindness, which was rated on a Kind/Cruel scale. χ^2 (1, N=346) = 7.9, p=.005. Standardized residuals showed that this relationship was largely because female characters were less likely to be cruel.

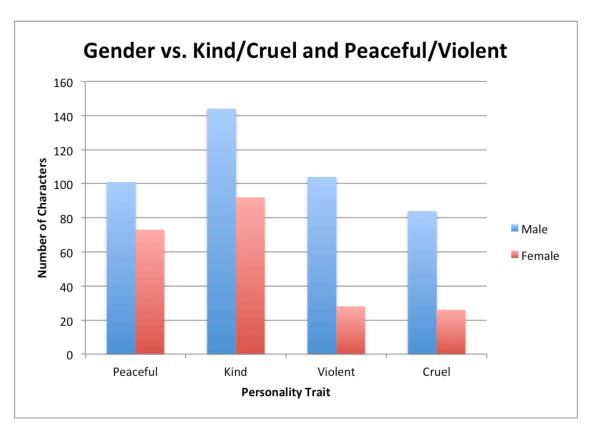


Figure 3. This graph displays some of the personality traits that characters were coded for. Female characters were far more likely to be rated as peaceful and kind over violent and cruel and male characters were more evenly distributed among these traits. Again, male characters appear to have a variety of personalities while female characters are more limited in their possible roles.

A χ^2 comparison of gender and competency, which was rated on a Competent/Incompetent scale, shows that female characters were less likely to be incompetent, χ^2 (1, N = 299) = 7.4, p = .006.

Another $\chi 2$ compared gender and humor on a Serious/Comic scale. $\chi 2$ (1, N = 427) = 5.2, p = .023). Standardized residuals only showed that there is a relationship between gender and this scale.

Two personality traits did not show significant differences between male and female characters. When comparing gender and intelligence, which was rated on a Smart/Stupid scale, $\chi 2$ (1, N=324) = 3.7, p=.055, there was no significant difference in Smart/Stupid for male and females characters, though p-value is very close to significant. Gender and independence, which was rated on an Independent/Dependent scale, also showed no significant difference: $\chi 2$ (1, N=321) = 2.4, p=.136. The discussion will address the possible rationales behind these results.

Discussion

This research is one of the first works done on the Children's Television Project, so the statistical analyses are preliminary, but still provide a sense of what more in-depth studies may find. Basic frequencies were calculated, and as previous literature has noted, male characters significantly outnumbered female characters. In 2009, Shiffman and Klein found that female characters made up only 16.4% of their sample of animated television. In our sample, male characters were about 67% of the sample while female characters were 32%. Our findings show a shift toward more accurate representation, but there is clearly still a major disparity and a need for improvement. With further analysis, it would be interesting to look at the gender frequencies by each program, genre, or network. I would predict that networks like PBS that produce programs in the educational genre would have a more even gender distribution than children's cable networks like Cartoon Network.

I chose to focus my statistical analyses specifically on the frequencies and cross-tabulations concerning gender representations. Results of this study indicated that differences emerged between the portrayals of male characters and female characters in terms of both physical and personality traits. Specifically, female characters were more likely to be rated as skinny, beautiful, kind, and peaceful, and less likely to be rated as incompetent. There was also a significant relationship between gender and the Serious/Comic scale. There was no significant difference between male and female characters with regard to independence or intelligence. These results support most of the hypotheses stated earlier.

Consistent with my hypothesis and what recent content analyses have found (Baker & Raney, 2004; Baker & Raney, 2007; Gerding & Signorielli, 2013), female characters were more likely to be rated by coders as skinnier and more attractive than male characters. In fact, data analysis showed that female characters were far less associated with being fat than male characters were with being skinny. Meaning, it is more common to see a skinny male character than a fat female character. Female characters were also significantly likely to be more beautiful while male characters were more likely to be uglier. These results supported the hypothesis that the physical traits of the animated characters would be stereotypical, and align with previous literature about physical representations of gender in cartoons (Shiffman & Klein, 2009).

These findings are also not surprising when considered in the context of a larger media landscape. In the worlds of news media, film and television acting, and advertising in any form, women's appearances are far more critiqued than men's. Beauty standards are stricter for women, which we see most commonly criticized with regards magazine advertisements that make heavy use of Photoshop and other photo-editing techniques. One might see a "distinguished" older anchor on the nightly news with greying hair, and his co-anchor will be a young beautiful woman in her 20's. Older actresses in Hollywood frequently complain about how difficult it is to find parts for middle-aged women while middle-aged men are still playing love interests. When a female celebrity gains weight it is all over the tabloids; the list goes on. That is not to say that there are not problems with male beauty standards in media, but the findings of this study support the argument that the larger societal problems with gender stereotypes manifest in animated children's television especially with regard to female characters. This trend is particularly concerning

because the same messages are being sent to children at the ages when they are developing their identities, understandings of others, and personal beliefs. While these results do not allow for media effects claims, it is troubling that there would be such unbalanced physical representations when there is such concern about media exposure and development of self body image (Anschutz et al., 2011; Harrison, 2001; Harrison and Hefner, 2006).

The results concerning personality traits were also generally consistent with previous research (Leaper et al., 2002; Hentges & Case, 2013; Signorielli, 2012) and supported parts of my second hypothesis. Female characters were significantly more likely to be peaceful and less likely to be violent. Similarly, female characters were less likely to be cruel. The standardized residuals of these two variables were different, even though they are related measures. Female characters were far less associated with violence than male characters were associated, so, it would be very unlikely to see a violent female character, but not as uncommon to see a peaceful male character. Like the results for the Skinny/Fat scale, it appears that there are more varieties of male characters, whereas female characters are more limited in their qualities.

These particular personality trait findings were expected because of pervasive stereotypes in society that men are stronger, and more physically aggressive, and that women are more peaceful, caring, and when they have to be, only relationally aggressive (meaning they are more likely to use their words than their fists). These portrayals of more violent or cruel male characters than violent or cruel female characters may contribute to the worries many have about media influencing aggressive behavior in children, especially in young boys.

Media effects research is outside of the scope of the present study, but these findings are still concerning because of the possible long-term effects of these stereotypical images on both male and female viewers. Even if the more stereotyped images are of female characters, that could have serious consequences concerning girls' self-esteem and the way boys perceive and interact with girls. Limited portrayals of female characters could seriously impact girls' identity development, for example. Young female viewers exposed to these images may be at a point in their lives when they are developing self-concepts, and seeing only a few options on television for how females "should" behave may discourage them from developing identities outside of this norm. Some of these findings can also be viewed as encouraging, however. Female and male viewers seeing positive (kind, peaceful) portrayals of female characters could influence identity development and opinions about others positively. Female viewers may be more likely to avoid cruel behavior, and male viewers may view their female peers more as more positive contributors to their community.

Two personality traits were not statistically significant across gender: intelligence and independence, which partially supported my hypotheses. I predicted that there would be no significant difference across gender for intelligence, but that there would be for independence. I hypothesized that female characters would be more likely to be rated as dependent because I predicted that there would be fewer female characters in total, and that when they were present, they'd be in supporting and perhaps subservient roles. Male characters were no more likely to be smart or independent than female characters. It is possible that with a larger sample, however, there could be a statistical relationship between gender and intelligence, because the *p*-value was very close to .05.

The fact that there was no significance for intelligence is interesting because there was a significant difference with regard to competence. Though competence is a different measure, it seems related and thus reasonable to predict that these two traits would be correlated. It is possible that coders were using vastly different cues to measure competence--like clumsiness or goofiness--that they did not feel was directly related to intelligence. While at one time dependence and stupidity (or at least lack of education) may have been associated with women, societally we have made some strides in suppressing more concrete female stereotypes. Today, female stereotypes are subversive but less blatant. One would likely be called a sexist for saying that women are stupid, but it still fairly acceptable to express beliefs that women are more naturally kind and peaceful people, especially because those may be viewed as "positive stereotypes." This relatively recent societal shift may explain why these measures were not significant in our sample. It also may be that we did not find any significance simply because there are not that many female characters in the sample compared to the number of male characters, making it difficult to statistically claim a trend on some measures.

As stated previously, there was a statistical relationship between competence and gender such that female characters were less likely to be incompetent. This could be explained by the fact that given how few female characters there are, producers simply would not want to appear sexist by making their only female characters incompetent. Also, there was a statistical relationship between gender and the Serious/Comic scale. Taken together, these two findings may indicate an interesting trend. In cartoons, incompetence is frequently used for humor. Patrick Star in *Spongebob Squarepants*, for example, is a funny character who is laughed at for his clumsiness and the stupid things he says. Networks like

Nickelodeon frequently incorporate slapstick and incompetent adults for humor. Based on these results, it is possible that female characters are less likely to be rated as incompetent because they are not the funny characters in cartoons. Male characters may be the funny ones, and thus be the incompetent and clumsy fools, while the female characters generally remain serious, plot-oriented characters. This would be consistent with previous research that found that children perceived male characters to be three times more likely to do something silly (Thompson & Zerbinos, 1997). There is a societal stereotype that men are funny and women are not (Stanley, 2008), and continuing this portrayal in cartoons could continue the trend of the difficulty women have in comedy writing, stand-up, or even comedic acting.

There are several rationales to explain the significant differences found in physical and personality traits overall. From the simple analyses conducted, it is evident that there is a much wider variety of male characters in terms of physical appearance and personality traits. Averages of the coders' choices come out to around the middle of the scale for male characters because of the spread of coders' ratings. Female characters, on the other hand, have fewer options. They are very likely going to be skinny, beautiful, kind, and peaceful. It is possible, first and foremost, that there is less variety in female characters' physical appearances and personality traits simply because there are fewer of them. By virtue of having fewer numbers of female characters, the averages of their traits are less likely to level out in the middle of the scale like with the large number of male characters. It is also possible, however, that producers and writers rely on tropes and flat female characters. Perhaps there are fewer options for diverse female roles and physical appearances in

cartoons because they are generally less developed characters by the creators of these shows.

While we have not conducted data analyses on many of the frequencies described here because we are continuing to collect and analyze the data from the Children's Television Project, there are still noteworthy trends emerging. In particular, the racial breakdown of characters in the sample is overwhelmingly White, and unrepresentative of other ethnicities in the United States. Previous literature notes this trend (Graves, 1999; Martins & Harrison, 2011), and the data collected so far appears to demonstrate that this underrepresentation of multiple ethnicities is continuing in television today. Further statistical analysis is necessary, as well as further media effects research about the selfesteem and achievement of minority children who watch television, for example. Underrepresentation of racial and ethnic minorities may not only have implications about selfesteem for viewers belonging to these minorities, however. It may also have implications about the opinions of viewers of other backgrounds. White viewers, for example, may develop attitudes about these racial minorities based on the images presented to them on television. It is important to look further into the racial representations in this sample of animated television because it may tell us something about how viewers develop concepts about "others."

Qualitatively speaking, it seems that there are even trends within the sample of non-White characters. For example, many of the characters coded as Asian could be found in *Digimon* or *The Legend of Korra*, and most of those that were not were minor or walk-on characters in other shows. This observation interestingly skews the data because the overall percentages do not demonstrate where the disparities are. It would be important to

look at each individual show, genre, or network to see where the ethnic diversity in the sample is coming from. If in fact a large majority of the Asian characters come from these two programs, it is even more clear that other shows are lacking Asian representation.

Even in *The Legend of Korra*, some of the characters coded as Asian have stereotypically White or ethnically ambiguous features, but other aspects of the show indicated an Asian ethnicity. The title heroine, Korra, for example, has a name that sounds non-Western and clothing that is reminiscent of Inuit or nomadic East-Asian tribes, but she has light brown skin and blue eyes. *The Legend of Korra* is made in the United States and airs on Nickelodeon, though the animation style is like that of anime from Japan, which frequently Westernizes characters' facial features. Korra is also an interesting example of a female lead character because has a very muscular build, but also breasts and hips. She is thin and beautiful, which is not surprising given the results of this study. Her personality is volatile, and she could be considered serious, competent, violent and kind. Her violence is for the sake of the greater good, however, which cannot be included into a statistical analysis of ratings. Korra is arguably a complex character, and it is because of the creation of characters like her that further qualitative analysis on animated television is necessary.

Limitations

This study is not without its limitations with regard to both sample size and coders. The sample was chosen from cross-referencing two "top ten" lists, and the final sample includes two shows that are not necessarily intended for children, but are cartoons that children watch. They were included because they fit the criteria for inclusion in the study, and do address an interesting new development in which children can click to watch cartoons on iPads or computers thinking that the content is intended for them, when really it is intended for an older audience. The sample size is also rather small at this stage in the Children's Television Project, especially with only three episodes of each program. With only 66 minutes of each show, it is hard to definitively make any observations about trends, and it is possible that we could be missing major aspects of or characters in the shows that simply do not appear in the episodes chosen. Also, some of the findings may simply result from the specific three episodes chosen.

Perhaps more important are the issues that arose involving coders and the coding sheet in the project. Like with all studies of this design, there is always concern about interrater reliability and consistency in decisions made while coding. The coding manuals were based on the original ones used by Gidney and Dobrow (1998), but it is still possible that the operational definitions did not lead coders to accurate or consistent coding. One particular example from this study arose multiple times with regard to the Serious/Comic measure. The research team had to discuss what coding a character as serious or comic meant, for example with regards to Dr. Doofenshmirtz in *Phineas and Ferb*. Are the characters' motivations serious or funny, or is the character supposed to be serious or funny for the viewer? In Doofenshmirtz's case, he is a villain with serious motivation to

create chaos, but he is supposed to make the viewer laugh, so is he to be coded as serious or comic? The Likert Scale system leaves little room for studying the nuanced aspects of characters like Doofenshmirtz. Small issues like this one are probably negligible, but still noteworthy.

Also, many of the coders had seen the shows prior to their coding assignment, and expressed difficulty coding characters based simply on the episode being watched. It was difficult to separate what one knew from past experiences with the show from only what they were seeing on the screen, and it is possible that the coding reflects this. For example, in one episode of *Bob's Burgers*, Louise may not have been acting particularly cruel, but in many episodes she does, so her rating on the Kind/Cruel scale may have reflected knowledge of other episodes. To combat all of these coding issues, the research team met weekly to discuss and clarify coding procedures, and data was cleaned after all episodes in the sample had been coded. It is also possible that what the coders interpreted is not what a child viewer would see and understand. The coders used their worldly knowledge, and a child may form different opinions of the characters than the adult coders.

Lastly, this data set limited our possible statistical analyses (especially with many "Uncertains" coded), and qualitative analysis itself is not without its weaknesses. With a larger sample containing more programs from each network and more episodes of each program, we could conduct additional statistical tests and be more sure that the analyses conducted were strong.

Future Research

Based on the results of this study, it is clear that research needs to continue regarding media representations of gender, race, age, the list goes on. Be it video games, advertisements, live-action television for kids, or dramas targeting adults, the results of the Children's Television Project so far indicate that there are still statistical trends in how stereotypes are incorporated into the media we consume every day.

If research were to continue with this particular content analysis, updated coding sheets that have additional measures could add to the wealth of literature already present on animated television. An added measure looking at sexual orientation, for example, could yield interesting results, especially given how gender expression is already being studied with the current coding manual.

There are many benefits to conducting a comprehensive content analysis of children's television, but it is by no means the be-all and end-all of this research. As previously mentioned, phase two of the Children's Television Project will consist of interviews with important players in the creation of children's television. These interviews will explore how script writers, television directors, voice actors, and vocal casting directors make decisions about the way characters are drawn and voiced. Phase three will involve studying what opinions children are actually forming when they watch these cartoons, which may be the most important direction for this research to go. Content analyses are important contributors to media research, but they cannot tell us about media effects. Based on this study alone, future research could look into what male and female viewers learn and internalize from these shows, and perhaps compare reactions across gender. Though difficult to design, media effects research could continue to attempt to

explore any causal relationships between viewing these images and changes in self-esteem, aggression, perceptions of racial minorities, or academic achievement.

Although perhaps not directly related to the results of this study, it is important to consider the role that changing platforms will have on how children watch and learn from media, and very little has been studied on the subject. Children no longer watch television at scheduled hours of the day, and can choose to watch several episodes in a row if they or their caregivers so choose. They frequently multitask, watching television without paying full attention. Future research should look into what impact platforms like internet streaming and iPad viewing have on how television is being made and what or how children may be internalizing from this alternative style of television-viewing.

Conclusion

Overall, this study has added valuable, updated information to the existing literature on gender portrayals in television. This content analysis found that there has been some improvement in the diversity of children's animated television when compared to Dobrow and Gidney's 1998 study, but male characters continue to drastically outnumber female characters. Hopefully, with these findings, television writers and producers will be urged to push for more equal representation in animated television. Also, caregivers and educators can be made aware of these inequities, and start discussions about media literacy with children. If children are more aware of the images and messages being presented to them, perhaps the negative effects can be reduced. Convincing children to stop watching television or reduce their media intake would be a fruitless endeavor. Media intake is inevitable and semi-constant, but media literacy campaigns and classes could provide them with the necessary tools to consume media critically. In particular, this study calls for education for young girls about self-esteem and body image. Further research is necessary, but these findings are a start.

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Appendix A

Sample Information

Adventure Time*** - Cartoon Network

Loyalty to the King

Blood Under the Skin

It Came from the Nightosphere

The Eyes

Storytelling

Slow Love

American Dad* – Fox

Hot Water

Hurricane!

A Ward Show

Arthur** - PBS

Swept Away

Germophobia

Arthur Sells Out/

Mind Your Manners

D.W. on Ice

Spoiled Rotten

Bob's Burgers* – Fox

Bob Day Afternoon

Synchronized Swimming

Burger Boss

Digimon*** – Nickelodeon

Enter Flamedramon

The Digiteam Complete

A New Digitude

Dragons: Riders of Berk*** – Cartoon Network

Thawfest

When Lightening Strikes

What Flies Beneath

Legend of Korra*** - Nickelodeon

Welcome to Republic City

A Leaf in the Wind

The Revelation

My Little Pony: Friendship is Magic*** - The Hub

Friendship is Magic Part 1

Friendship is Magic Part 2

The Ticketmaster

Phineas and Ferb*** – Disney

Jerk De Soliel

Toy to the World

A Hard Day's Knight

I Brobot

It's a Mud, Mud, Mud World

The Ballad of Bad Beard

SpongeBob SquarePants*** – Nickelodeon

Accidents will Happen

The Other Patty

Drive Thru

Hot Shot

Friendly Game

Sentimental Sponge

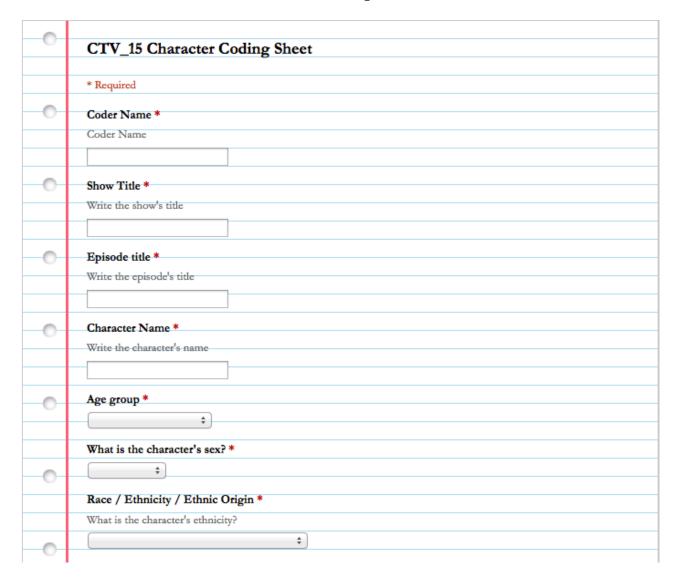
Broadcast Network*

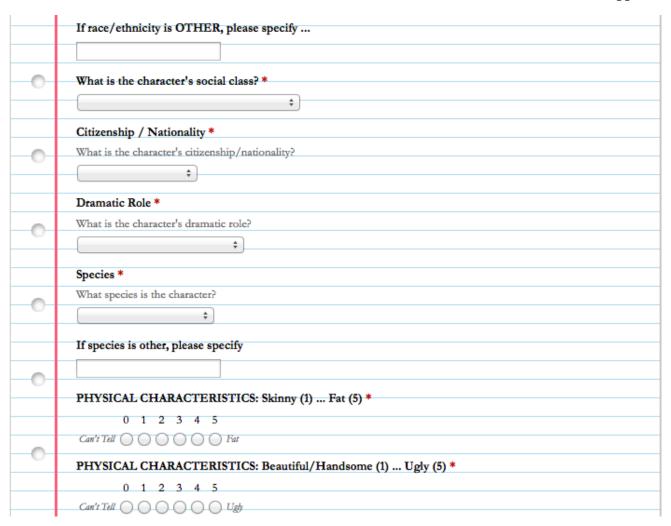
Public Broadcasting**

Children's Cable***

Appendix B

Character Coding Sheet





-0	
	PHYSICAL CHARACTERISTICS: Skin tone: Light Skin (1) Dark Skin (5) *
	0 1 2 3 4 5
	Can't Tell O O Dark Skin
	PHYSICAL CHARACTERISTICS: Dress: Well-dressed (1) Sloppily Dressed (5) *
	0 1 2 3 4 5
	Can't tell OOOOSloppily dressed
0	PERSONALITY TRAITS: Serious (1) Comic (5) *
	0 1 2 3 4 5
	Can't Tell O O O Comic
	PERSONALITY: Strong (1) Weak (5) *
-0	0 1 2 3 4 5
	Can's Tell O O O Weak
	PERSONALITY: Good (1) Bad (5) *
_	0 1 2 3 4 5
	Can't Tell. O O O Bad
	PERSONALITY: Peaceful (1) Violent (5) *
_0	0 1 2 3 4 5
	Can't tell O O O Violent
	PERSONALITY: Kind (1) Cruel (5) *
	0 1 2 3 4 5
-0	Can's tell.
	PERSONALITY: Smart (1) Stupid (5) *
	0 1 2 3 4 5
-0	Can't tell O O O Stupid

