



**DUKE
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SOCIOLOGY**

Gender Portrayals in Television
Commercials:
Differences Among Target Audience Age

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Honors Thesis 2012

Gender Portrayals in Television Commercials:

Differences Among Target Audience Age

By

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An Honors thesis submitted to the faculty of the Department of Sociology at Duke University in partial fulfillment of the requirements for graduation with a Bachelor of Arts with Distinction in Sociology.

2012

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TABLE OF CONTENTS

Abstract.....	4
Introduction	5
Methods.....	11
Results.....	15
Discussion.....	24
References.....	32
Appendix I.....	34
Appendix II.....	36

ABSTRACT

The study investigates how gender is portrayed in television commercials targeted at children and adults. Nearly 1,000 commercials from Nickelodeon (a channel aimed at young children) and E! (a channel aimed at primarily young adult females) were recorded and coded. Using TV Parental Guidelines, commercials on Nickelodeon in programs rated TV Y and TV Y7 and commercials on E! in programs rated TV PG and TV 14 were coded in the sample. The commercials selected were coded using a pre-tested coding scheme, which allowed for comparison across ages (i.e. as being on Nickelodeon or E!). E! showed heavily traditional gender roles on both conscious and subconscious levels. On Nickelodeon, traditional gender roles were less overt, but instead were conveyed to viewers in more subliminal ways (e.g. the predominance of male voiceovers). The implications of these findings are discussed.

INTRODUCTION

Influence of Television on Viewers

Technology permeates all aspects of society today, which makes its influence on daily life significant. Television is available not only in our homes, but also on the countless mobile devices that individuals now consider essential. This significantly increases the influence that television and television commercials have on viewers. Albert Bandura's Social Cognitive Theory helps explain the power television has on our perceptions as viewers (Bandura, 1986). The Social Cognitive Theory states that the attainment of information can be linked directly to an observation of interactions or external factors, such as the media (Bandura & Bussey, 1984). The messages and images seen on television are directly linked to other concepts already stored in the brain, thus television contributes to the creation of notions of social reality (Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002).

The advancement of neuroscience and technology has updated Bandura's Social Cognitive Theory. Studies have estimated that approximately 95% of all cognition occurs in the subconscious mind, and the Social Cognitive Theory heavily influences a large portion of this subconscious thinking (Coulter, Zaltman, & Coulter, 2001; Zaltman, 2003). When messages or concepts are presented to an individual, the brain activates a schema, which associates that particular message with other previous concepts. These encoded schemas may be based on incorrect judgments, but regardless of the validity the schemas are cataloged by the brain and continually drawn upon as the brain is exposed to more concepts and messages (Ambler, Ioannides, & Rose, 2000; Anderson, 1994).

Recent research has highlighted the importance of mirror neurons in relation to advertising and the internalization of gender roles. Mirror neurons fire in the human brain when other individuals are observed in action. The neurons then “mirror” the observed action and trigger feelings within the human as if they too had performed the action (Barry, 2009). This mirroring of behaviors aids individuals in the internalization of concepts, ideas, and roles. The human brain makes associations between new and old information at such a rapid pace, so rapid that it disregards the accuracy of the information and if he/she participated in the action. This makes television and television commercials extremely influential.

The firing of mirror neurons is outside of human consciousness, which increases their influence on individuals’ perceptions of gender roles. Additional research in the neuroscience field has shown that these automatic brain processes create original materials that are then used as the basis of conscious decisions. (Johnson-Hanks, J., C. Bachrach, et al., 2011; Kahneman, 2011). If the human brain is creating and storing information based on the messages seen on television and then using that information to make conscious decisions, the subsequent gender schema created subliminally perpetuate the traditionally gendered messages displayed on television (Johnson-Hanks, J., C. Bachrach, et al., 2011).

Furthermore, Americans watch an abundance of television each week, exposing them to massive amounts of new content. According to Nielsen, in the fourth quarter of 2010 the average American watched 34 hours and 39 minutes of television each week (The Nielsen Company, 2011). This is an increase of 2 minutes from 2009, which demonstrates stability in the average watching time. The American Association of Advertising Agencies

reported that 25% of an hour-long television program is advertising. Nearly 40 hours of television watching per week translates into approximately 10 hours of commercials weekly. This leads to significant exposure to commercials based on the average weekly time spent watching television by Americans. The amount of time viewers are exposed to commercials is significant not because commercials *cause* changes in the audience's mindset, but rather they hinder gender change. Commercials tend to display gender roles in an unequal manner in relation to the way these roles are played out in society.

Television's Effect on Perceived Gender Roles

Television may have an important influence on perceived gender roles. Gender portrayal in commercials is significant because, as noted above, it is a major source of information and experience. More specifically the Social Cognitive Theory supports the claim that television is an important supplier of notions of appropriate gender roles (Bandura & Bussey, 1984). A great deal of research has been conducted surrounding how gender is portrayed on television. This research shows that it is important to understand the messages that advertisers and television producers are sending to viewers because television is supplying notions of gender roles to viewers, *and* the viewers are unintentionally internalizing these gender roles.

Many researchers have examined gender portrayals in television commercials and have focused on how adult actors perform gender. There is a consensus in the current literature that there is a gender gap in television commercials that favors traditional, male-dominated gender roles. These portrayals counter changes towards gender equality (Bartsch, Burnett, Diller, and Rankin-Williams, 2000; Furnham & Paltzer, 2010; Mager & Helgeson, 2011; Smith, 1994). Women are more likely to be associated with domestic

products, such as cleaners and beauty products, than men. Women are also portrayed in domestic settings (the house, shopping) more often than men. Additionally, men are more likely to be seen outside, which sets up the paradigm of women being more prominent in private settings, while men are perceived as dominant in the public sphere. A heightened emphasis is placed on the appearance of women in commercials, with particular attention paid to weight. In the professional world, men are more likely to be seen working in professional occupations in commercials, while women are significantly more likely than men to be portrayed with no occupation at all. Furthermore, men are more physically active in commercials and assert dominance while women are usually seen in more passive roles. Males dominate voiceovers, meaning the use of voice when a character cannot be seen or is not part of the commercial. Voiceovers may also be used to narrate the action of a commercial. Lastly, more commercials are simply male-dominated, meaning there are more men than women in the commercials regardless of their roles (Bartsch, et al., 2000).

A large number of studies focus on television's depiction of gender roles in commercials, which explains a shift in the current literature towards a focus on how boys and girls are depicted in commercials. Another motivation for emphasis on gender, children, and commercials refers back to the Social Cognitive Theory. Children are particularly susceptible to the internalization of the gender roles portrayed on television, making them extremely vulnerable to the messages sent in television commercials. The absorption of stereotypes and subconscious learning is done at an early age, making research regarding children and television commercials significant. The current research on children and television commercials is primarily consistent with the findings regarding gender and adult programming (Browne, 1998; Larson, 2001; Signorielli, 1990). Similar to

the gender roles displayed by adults, more boys are in commercials than girls, as well as more male voiceovers than female voiceovers. Boys are more likely to demonstrate the uses of a product and participate in other dominant behaviors. Additionally, boys are more aggressive and physically active in commercials than girls. Girls are typically displayed as passive and not integral to the commercial (Browne, 1998; Larson, 2001; Signorielli, 1997; Signorielli, 1990).

Gender Role Depiction in Commercials in Relation to Viewer's Age

While a significant amount of research explores the depiction of gender based on the age of the characters in the commercials, a gap exists in the literature surrounding gender portrayal in relation to the age of the viewer. Stern & Mastro (2004) investigated how gender is portrayed based on the age of the actors in the commercials. This research discovered that there is significant variation within the age portrayal amongst the same gender. Beth Hentges, Robert Bartsch, and Jo Meier (2007) looked more closely at gender portrayal in relation to target audience age. This investigation found that amongst the 4 categories of age - preschool, school age, adolescent, and adult - the gender portrayal did vary with age. The school age commercials were dominated by males, which Hentges and colleagues posited was due to the nature of the products advertised. Since boys are likely to reject products advertised by girls, the use of boys for most products makes financial sense for companies (Hentges, et al., 2007). Commercials targeted at the adolescent age group advertised more products targeted specifically at one gender, which led to an increase in females in the commercials; however, the way females were portrayed was largely through beauty products, which contributed to the stereotypical view of femininity (Hentges, et al., 2007).

This study extends on the work of Hentges and colleagues, continuing to explore how gender varies as a function of target audience age. More specifically, this study focuses on commercials for channels that have strong female viewership. This takes the research a step beyond Hentges and colleagues, not only investigating how gender is portrayed in commercials based on target audience age, but when the target audience is primarily female as well. This research is innovative because it looks at the life course in relation to the target audience age. It is necessary to look at the life course because, as mentioned above, children are extremely impressionable and the subconscious learning that our brains partake in occurs at an early age; however, individuals are constantly reinforcing and updating their understandings of notions and concepts as they are exposed to more images and ideas, specifically through media and other external factors (Stangor & Ruble, 1987).

Furthermore, gender is constantly evolving as society's notions of gender expand. This study provides a glimpse of how the media is portraying gender in the 21st century. Lastly, this research is important because it explores the issue of whether young female viewers are being exposed to similar gender notions that young adult women are viewing. If these gender portrayals are similar a worrisome situation is created because children are viewing these stereotypes and then processing them as reality, which ultimately impedes gender change. This further contributes to the literature on the adultification of children, giving children issues, concepts, and duties to handle before they have reached the necessary maturity level (Burton, 2007).

METHODS

This study is a quantitative content analysis and seeks to describe how gender is portrayed in television commercials when the target audience age varies. Commercials were recorded on Nickelodeon and E! during prime time hours to capture the variation of gender portrayal based on the target audience age.

Unit of Analysis

Human subjects were not used in this study, but rather television commercials were the unit of analysis. The overall commercial was the unit of analysis rather than each individual within the commercial. This allowed for interactions amongst all of the characters in the commercial to be observed. The coding scheme used to evaluate the commercials, which is discussed in detail in the *Instruments* portion of the *Methods* section, was constructed to gain an understanding of the commercial as a whole, also to investigate the activity of the primary and secondary characters in each commercial.

The commercials were recorded on Nickelodeon during programs rated either TV Y or TV Y7 and on E! during programs rated TV PG or TV 14. Both Nickelodeon and E! are cable channels, which provides consistency for the type of television channel within the sample. E! was chosen as one category of the stratifying variable because its target demographic is predominantly young adult females. I chose Nickelodeon due to its popularity with a much younger demographic. For 16 consecutive years, Nickelodeon has been ranked the top basic cable network (Seidman, 2011). In order to ensure that the commercials included in the sample targeted the appropriate age demographics any shows that were rated TV G were eliminated because those shows are considered suitable for viewers of all ages. Commercials that aired multiple times during programming were

included multiple times. If commercials aired multiple times it was important to include them multiple times in the data to accurately represent the gender portrayals that viewers see.

The time frame for the collection of commercials was based on the definition of primetime for the target demographic. Primetime hours were recorded because it is peak viewership, meaning the commercials impact the highest number of viewers. Primetime for viewers of E! is considered 8 pm to 11 pm, 7 days a week; therefore, programming on E! was recorded for one week during primetime hours from January 9, 2012 to January 15, 2012, which yielded 21 hours of television. On Nickelodeon, recordings occurred from 9 am to 12:30 pm for 5 consecutive Saturdays from January 14, 2012 to February 11, 2012, which yielded 17.5 hours of recordings. Nickelodeon was only recorded on the weekends because children are equally likely to watch television on Saturday mornings and weekday afternoons (Ganahl, Prinsen, & Netzlev, 2003; Smith, 1994).

Instruments

This study examined the relationship between 2 variables: the target audience age of television shows and the gender portrayals in television commercials. The target audience age was based on the TV Parental Guidelines. By collecting commercials that aired during television shows rated for a specific age group, the data reflect the gender portrayals targeted at that particular audience. The target audience age of television shows was classified as TV Y and TV Y7 for children and TV PG and TV 14 for adults/young adults. The second variable, gender portrayal in television commercials, was measured through a coding scheme (The coding scheme can be found in its entirety in Appendix I). Gender portrayal was measured through the following coding categories: primary setting of

commercial, primary behaviors, degree of physical activity, occupational role, alluring behavior, and speaking roles. These categories created an objective understanding of how gender is displayed. The setting of the commercial was coded for whether males or females were seen in the home or the office, which are locations that have been historically associated with a specific gender. The primary behavior of individuals has been heavily reliant on gender, as well as the degree of physical activity. Primary behaviors are categorized as work (paid working position), domestic (unpaid domestic work in the home), recreation, or other. Alluring behaviors, which are defined as flirting, winking, batting eyelashes, or other sexual teasing, are typically associated with females. Conversely, occupational roles are linked to males stereotypically. The occupational roles are divided into 3 groups: professional (holds white collar position, such as doctor or lawyer), nonprofessional (holds blue collar position, such as construction worker or fast food worker) and nonworker (has no clear occupation). An examination of these variables based on the target audience age resulted in an understanding of the level of gender traditionalism in the commercials.

I also coded each commercial subjectively to assess the overall level of “traditionality” in each commercial. Each commercial was given an overall rating ranging from 1, which represented extreme non-traditional gender roles, to 10, signifying extreme traditional gender roles. Often times behaviors in commercials should be objectively coded one way; however, this subjective variable adds depth and may capture a different story. The subjective measure allows a comparison between subjective and objective assessments of gender within these commercials.

To ensure that the coding scheme was reliable and valid, intersubjectivity was implemented in this study. The coder watched commercials with her peers in her Sociology 190B Honors Thesis course to guarantee that the judgments being made subjectively were consistent with the opinions of others. This established that the coder's judgments were in high agreement with others. This activity also helped ascertain the effectiveness of the coding scheme.

Analysis

Once the television commercials were coded a comparison of the data for the children's commercials versus the adults' commercials was conducted. These results were interpreted to assess whether gender was portrayed similarly or differently to children viewers and adult viewers. I also generated tables and figures to assess the association between the two suggested age demographics of television viewers. Chi-square statistics were calculated to estimate the likelihood (measured by p , the probability that a particular chi-square value would be obtained by chance) that observed differences by target audience age could be produced by sampling variation.

RESULTS

Overall 972 commercials were recorded and coded, 412 on Nickelodeon and 560 on E!. These commercials contained 448 female dominant characters and 638 male dominant characters, and 190 commercials did not have a clear dominant character or dominant characters with identifiable gender (e.g. animals or cartoons). The following results analyze only the first dominant character. The data for first and secondary dominant characters led to similar conclusions, but nearly 60% of commercials did not have second dominant characters. Analysis of the second dominant character can be found in *Appendix II: Analysis of the Second Dominant Character*.

Differences in Gender

Results were consistent with a great deal of past research, with the majority of actions being traditionally gendered. Table 1 details the variation in gender portrayals among the gender of the first dominant characters. It is structured so that the percentages in each column separated by dependent variable total 100%. Comparing percentages in the same row (across columns) highlights the key comparisons. 75% of all voiceovers were male, which is in agreement with prior analysis of television commercials. The first panel of Table 1 demonstrates that half of all female dominant characters appeared in commercials with female voiceovers, whereas 89% of male dominant characters were seen in commercials featuring a male voiceover. Due to the overwhelming presence of male voiceovers, 43% of female dominant characters appeared in commercials with male voiceovers ($X^2 = 84.14, p < 0.01$).

Table 1: Differences in Gender Portrayals Among First Dominant Characters

	<i>Female (%)</i>	<i>Male (%)</i>
Gender of Voiceover*	(N=93)	(N=259)
<i>Female</i>	54.8	9.7
<i>Male</i>	43.0	89.2
<i>Male & Female</i>	2.2	1.2
	(100)	(100)
Primary Setting*	(N=93)	(N=259)
<i>Place of Employment</i>	3.2	10.4
<i>Other Inside Location</i>	16.1	21.6
<i>Outdoor</i>	34.4	40.5
<i>Home</i>	46.2	27.4
	(100)	(100)
Primary Behavior*	(N=257)	(N=438)
<i>Work</i>	16.7	20.1
<i>Recreation</i>	42.8	65.5
<i>Domestic</i>	25.7	2.3
<i>Other</i>	14.8	12.1
	(100)	(100)
Occupational Role*	(N=257)	(N=438)
<i>Nonworker</i>	79.4	78.8
<i>Nonprofessional</i>	2.3	7.8
<i>Professional</i>	18.3	13.5
	(100)	(100)
Alluring Behavior *	(N=257)	(N=438)
<i>No</i>	29.6	94.8
<i>Yes</i>	70.4	5.2
	(100)	(100)
Traditional vs. Non-Traditional Gender Roles*	(N=257)	(N=438)
1 (<i>non-traditional</i>)	5.8	1.8
2 (<i>2-4</i>)	2.3	7.5
3 (<i>indifferent</i>)	2.3	14.4
4 (<i>6-9</i>)	29.2	37.9
5 (<i>traditional</i>)	60.3	38.4
	(100)	(100)

NOTE: The following variables were not included in the table: Type of Product, Degree of Physical Activity, and Speaking.

* signifies $p < 0.01$, meaning that relationship between this variable and the gender of the first dominant character is statistically significant.

In relation to the primary setting shown in the second panel of Table 1, 11% of males were at work versus 3% of females, 46% of females were observed at home versus 27% of men. This difference is also statistically significant, was expected, and indicates stereotypical gender roles were present ($X^2 = 13.33, p < 0.01$). Similarly, there was a significant difference between genders in primary behaviors, which is displayed in the third panel of Table 1. Twenty six percent of females exhibited domesticity as their primary behavior in comparison to 2% of males. Males were significantly more likely than females to exhibit recreational behavior, with two thirds of males being recreational in contrast to 43% of females. ($X^2 = 97.5889, p < 0.01$).

While 79% of both male and female dominant characters were classified as nonworkers, males were slightly more likely to be nonprofessional workers in comparison to females. A higher percentage of females had a professional occupational role, which is seen in panel 4 of Table 1. Eighteen percent of females were professionals, in comparison to 13% of males ($X^2 = 10.76, p < 0.01$). These differences were not expected and challenge traditional gender roles. Shown in the fifth panel of Table 1, 70.4% of female dominant characters exhibited alluring behavior in comparison to 5.3% of male dominant characters. This large difference is statistically significant ($X^2 = 331.79, 1d.f., p < 0.01$).

The subjective variable (shown in panel 6 of Table 1) supported the fact that a significant portion of the behavior in commercials aligned with society's definition of traditional gender roles ($X^2 = 59.71, p < 0.01$). Female dominant characters were 22% more likely than male dominant characters to exhibit the most traditional gender roles; however, 80% of all behavior of both male and female dominant characters was found on the traditional side of the scale (6-10).

Differences in Age via Television Channel

As discussed above, differences in the age of the target audience were measured through television channels, specifically Nickelodeon and E!. Significant differences were observed between gender depicted on Nickelodeon and E!. Table 2 depicts the variation of gender portrayals amongst all variables in relation to television channel, and thus the target audience age. The most interesting finding (shown in panel 5), shows that on E!, 42% of commercials included alluring behavior, while only 10% of commercials on Nickelodeon depicted characters performing alluring behavior.

Table 2: Differences in Gender Portrayals Among Television Channel

	<i>Nickelodeon (%)</i>	<i>E! (%)</i>
Gender of Voiceover*	(N=390)	(N=520)
<i>Female</i>	18.7	38.1
<i>Male</i>	77.7	58.9
<i>Male & Female</i>	3.6	3.1
	(100)	(100)
Primary Setting*	(N=181)	(N=171)
<i>Place of Employment</i>	4.9	12.3
<i>Other Inside Location</i>	24.3	15.8
<i>Outdoor</i>	46.4	30.9
<i>Home</i>	24.3	40.9
	(100)	(100)
Primary Behavior*	(N=280)	(N=415)
<i>Work</i>	12.1	23.4
<i>Recreation</i>	83.6	39.3
<i>Domestic</i>	3.9	15.7
<i>Other</i>	0.4	21.7
	(100)	(100)
Occupational Role*	(N=280)	(N=415)
<i>Nonworker</i>	87.1	73.5
<i>Nonprofessional</i>	3.6	7.2
<i>Professional</i>	9.3	19.3
	(100)	(100)
Alluring Behavior *	(N=280)	(N=415)
<i>No</i>	90.0	57.6
<i>Yes</i>	10.0	42.4
	(100)	(100)
Traditional vs. Non-Traditional Gender Roles*	(N=350)	(N=528)
<i>1 (non-traditional)</i>	1.7	3.6
<i>2 (2-4)</i>	7.4	3.4
<i>3 (indifferent)</i>	11.7	14.0
<i>4 (6-9)</i>	40.3	29.9
<i>5 (traditional)</i>	38.9	49.1
	(100)	(100)

NOTE: The following variables were not included in the table: Type of Product, Degree of Physical Activity, and Speaking.

* signifies $p < 0.01$, meaning that relationship between this variable and the gender of the first dominant character is statistically significant.

Male voiceovers were extremely prevalent on both Nickelodeon and E!, which is displayed in panel 1 of Table 2. Voiceovers display gender in more subliminal ways in commercials. Over half of all voiceovers on both channels were male, but Nickelodeon had an astonishing 78% of male voiceovers. Voiceovers on E! were somewhat more balanced with 38% of voiceovers being female. The primary setting of commercials on E! placed characters in traditionally gendered settings. Panel 2 of Table 2 demonstrates that a higher portion of commercials on E! were set in dominant characters' place of employment or in the home. Contrastingly, 46% of commercials on Nickelodeon were placed outdoors ($X^2 = 21.55, p < 0.01$). This is likely connected to the fact that 84% of the primary behaviors on Nickelodeon were recreational (shown in panel 3 of Table 2). Additionally, there was minimal difference between the subjective measures of traditional versus non-traditional gender roles between Nickelodeon and E! (shown in panel 6 of Table 2). Nearly 79% of commercials on both Nickelodeon and E! were categorized on the traditional side of the scale (6-10), which is significant ($X^2 = 21.76, p < 0.01$).

Differences in Gender based on Age

Three way tabulations were created to understand the behavior of the dominant characters on each specific television channel. One of the most striking results, the sheer gender imbalance of dominant characters among Nickelodeon and E!, can be seen in the column totals of the three way tabulations in Table 3. On both Nickelodeon and E! male dominant characters overwhelming outnumbered females. Amongst dominant characters on Nickelodeon, 27 were female compared to 175 males. This results in a ratio of 6 males to 1 female on Nickelodeon. Similarly, on E! 69 female dominant characters were present compared to 120 males; therefore, on E! there were 2 males for every 1 female.

Table 3: Differences in Primary Behavior Among First Dominant Characters Based on Television Channel

Primary Behavior	Nickelodeon ^a				E! ^b			
	Female		Male		Female		Male	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Work	0	0.0	26	14.9	10	14.5	26	21.7
Recreation	18	66.7	148	84.6	31	44.9	54	45.0
Domestic	9	33.3	0	0.0	26	37.7	7	5.8
Other	0	0.0	1	0.6	2	2.9	33	27.5
Total	27	100.0	175	100.0	69	100.0	120	100.0

^aX² (3, *N* = 202) = 63.41, *p* < 0.01

^bX² (3, *N* = 189) = 40.95, *p* < 0.01

Table 3 details the gendered primary behaviors of dominant characters on both Nickelodeon and E!. These data show that no females on Nickelodeon exhibited a primary behavior of work, while 15% of males were seen working. Conversely, no males on Nickelodeon and less than 6% of males on E! exhibited domestic behavior, whereas one third of females on Nickelodeon and 38% of females on E! displayed domestic behavior. Males were more likely than females to be recreational on Nickelodeon, with 85% of males exhibiting this behavior in comparison to 67% of females. Males and females were both equally likely to display recreational behavior, while males were slightly more likely to be working than females. In conclusion, Table 3 documents that while recreation was the most performed primary behavior, males were more likely to be working while females were more likely to show domesticity (this finding holds for both Nickelodeon and E!).

Table 4: Differences in Occupational Role Among First Dominant Characters Based on Television Channel

Occupational Role	Nickelodeon ^a				E! ^b			
	Female		Male		Female		Male	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Nonworker	27	100.0	149	85.1	57	82.6	92	76.7
Nonprofessional	0	0.0	3	1.7	2	2.9	13	10.8
Professional	0	0.0	23	13.1	10	14.5	15	12.5
Total	27	100.0	175	100.0	69	100.0	120	100.0

^aX² (2, *N* = 202) = 4.60, *p* < 0.20

^bX² (2, *N* = 189) = 3.80, *p* < 0.20

Table 4 describes the gendered occupational roles of dominant characters on both Nickelodeon and E!. While the differences to be described are consistent with expectations they are not significant at the *p* < .05 level, thus they should be viewed as weaker evidence. One hundred percent of female dominant characters on Nickelodeon were nonworkers. Although 85% of male dominant characters on Nickelodeon were also nonworkers, 15% of males were working in some capacity. Thirteen percent of males on Nickelodeon had professional occupational roles, while 2% of males had non-professional occupational roles. The gendered occupational roles of dominant characters on E! revealed that both males and females were highly likely to be nonworkers, with this occupational role including over 75% of all male and female dominant characters on E!. While 23% of males on E! held a working role in comparison to 17% of females, those female dominant characters were slightly more likely than males to have professional occupational roles.

While the data are not shown here, alluring behavior was nonexistent among males on Nickelodeon; however, 41% of females on Nickelodeon exhibited alluring behavior. On E!, 65% of female dominant characters displayed alluring behavior, in comparison to only

12% of males behaving in an alluring manner. These differences are significant and created stark variation between the two television channels and subsequently the age of the target audience ($X^2 = 75.40, p < 0.01$). In relation to the subjective variable of traditional versus non-traditional gender roles, no commercials on Nickelodeon were coded as a 1 or 2, which signify extremely non-traditional behavior.

As previously mentioned, 78% of all voiceovers on Nickelodeon were male, which is an overwhelmingly high majority (Data on voiceovers not listed). It was extremely unlikely that a male dominant character would appear in a commercial with a female voiceover; this result occurred in 3% of all commercials on Nickelodeon. In comparison, it was significantly more likely that a female dominant character would appear in a commercial with a male voiceover on Nickelodeon, occurring in nearly 20% of commercials. Contrastingly, on E! over half of all female dominant characters appear in commercials with male voiceovers. Male dominant characters were still most likely to appear in commercials featuring male voiceovers (77%), but nearly 20% of commercials with male dominant characters on E! included a female voiceover.

DISCUSSION

Gender Stereotypes Still Prevail

This study investigated gender portrayals across target audiences that varied by age. First, and regardless of age, the data reaffirmed the majority of previous research's findings that television commercials still use traditional gender roles to depict males and females. Despite a more egalitarian view of gender roles within society, there are still traditional gender messages being sent by the media, which is demonstrated by this analysis. Females were significantly more likely to display characteristics of alluring behavior in comparison to males. This is linked to the media's sexualizing of women of all ages. In relation to the primary setting of the commercial, males were more likely than females to be seen at work, whereas females were more likely than males to be displayed in a home setting. Similarly, more females were seen exhibiting domestic behaviors, while males were more likely to be recreational than females. These measures of gender matched the subjective measure of traditional versus non-traditional gender roles, which demonstrated that 80% of both male and female behavior was found on the traditional side of the spectrum. Lastly, males overshadowed females from a sheer numerical standpoint with commercials displaying 638 male dominant characters versus 448 female dominant characters. These measures are overt and are likely to be easily observed by viewers, meaning that one message viewers receive consciously is that men are dominant over females.

On the contrary, voiceovers are measures of gender portrayal that are not likely to be actively observed by viewers and therefore affect the viewers subconsciously. Male voiceovers were dominant within the sample of commercials, which supports previous

research's findings. Although female dominant characters appeared in commercials with female voiceovers in nearly half of commercials, an overwhelming 43% of female dominant characters appeared in commercials with male voiceovers. The overwhelming, yet subtle presence of the male voice instills notions of male dominance amongst viewers.

Despite the fact that this study proved there are many other overt variables that convey gender to viewers, the voiceover's subconscious ability makes its impact even more powerful. The brain processes information in a variety of ways, one of which is automatic or unconscious. This process creates schema within the brain that then inform other decisions and processes that the brain performs consciously. Since voiceovers are likely to subconsciously affect viewers, and males heavily dominated voiceovers, the viewers use the concept of male domination through voiceovers to then inform their other conscious decisions (Johnson-Hanks, J., C. Bachrach, et al., 2011).

One factor within this study did not depict gender in a traditional manner: occupational role. First, these tabulations did not carry extremely high statistical significance, which decreases the weight of their analytical meaning. The majority of both males and females were nonworkers, but amongst those who had occupational roles females were slightly more likely than males to be in professional occupational roles. Despite having a lower significance, males were more likely than females to hold nonprofessional positions. This variation may be indicative of the progress that is being made as more females enter the work place. Perhaps the fact that more women were in professional roles rather than nonprofessional roles when compared to men could be a result of an increase in women at institutions of higher education (U.S. Department of Education, National Center for Education Statistics. 2011). With more women acquiring

college degrees, this creates a new target demographic for advertisers and marketers. As women advance into the work place, the professional woman demographic expands, which supports the finding of more female professionals in television commercials.

Hidden Gender on Nickelodeon, to Younger Audiences

Although gender stereotypes were pervasive, understanding how these gender roles were portrayed on Nickelodeon and E! was critical to answering a key question: does target audience age influence gender portrayal in commercials? Overall, the behavior on E! was gendered in a very traditional manner. A high proportion of the alluring behavior was found on E!, while a minimal amount of this flirtatious behavior surfaced on Nickelodeon. Furthermore, E! displayed more dominant characters at their place of employment or at home, which are locations associated with very gendered activities. In contrast, Nickelodeon mainly depicted its dominant characters outdoors. This supports the findings that a greater quantity of Nickelodeon commercials showed characters performing recreational behaviors, whereas working and domestic behaviors were prominent on E!. Lastly, E! depicted characters in the role of nonprofessionals and professionals more so than Nickelodeon, where the majority of characters were nonworkers. All of these results are very evident to viewers, showing very traditional gender roles on E!, while Nickelodeon seemed to attempt to skirt the issue. Rather than showing dominant characters in potentially gendered roles of working and domesticity, an overwhelming amount of the behavior on Nickelodeon was simply recreational, taking place outside.

The lack of gendered roles in relation to primary behaviors may have positive implications, as this decreases the association between females and domesticity and males and the professional workplace in the minds of the young Nickelodeon viewers. Then again,

it is also possible that this could result in negative implications for Nickelodeon viewers.

The high percentage of recreational behavior may seem more gender neutral on the surface in relation to domesticity and working; however, through future research a deeper analysis of this data may show that the recreational behavior was gendered on a more subtle level through variables such as color and type of toy.

While the objective and explicit categorizations of gender were more covert on Nickelodeon, the subtly and proportion of male voiceovers painted a much more traditional picture of gender roles on Nickelodeon. Despite the gender of voiceovers being heavily male on both Nickelodeon and E!, there was a significantly higher percentage of male voiceovers on Nickelodeon, with 78% of Nickelodeon voiceovers being male. This sends a message to young viewers of a strong undertone of male dominance and traditional gender roles on both Nickelodeon and E!.

These covert signals of male dominance were in line with the subjective measure of traditional versus non-traditional gender roles. With over 70% of all commercials on both channels categorized on the traditional side of the spectrum (6-10), a strong majority of commercials send yet another level of messages about gender. While Nickelodeon was not explicitly presenting what is considered to be traditional gender stereotypes, they were also not actively showing non-traditional gender stereotypes. Instead, there was a dominance of male superiority and traditional gender roles in the voiceovers and subjective measure on Nickelodeon. This means that Nickelodeon's target audience of children is being sent messages of male domination in implicit ways; these viewers will store these opinions as fact and use them for future decisions. Because these viewers are of such a young age, the subconscious side effects of these commercials are extremely

dangerous and perpetuate gender inequality despite society's attempts to move towards more egalitarian conceptions of gender. Contrastingly, the target audience of teenagers and adults on E! is being sent a consistent message of traditional gender roles through a variety of conscious and subconscious methods.

Lastly, as mentioned in the *Methods*, E! has a high female viewership, which allows the research to understand how femininity is portrayed in commercials to a majority female audience (Cabletelevision Advertising Bureau, 2010). Based on the above results, these female viewers are being sent overt and covert messages of traditional gender roles. Despite advertisers being aware of a largely female audience on E!, it seems that there was a very minimal attempt to remove gender portrayals that displayed females in a negative or less than ideal light.

Nickelodeon's Covert Messages Uncovered

Nickelodeon sends minimal amounts of explicit messages regarding gender; however, when clear messages are sent to the predominantly children audience traditional gender roles shine through loud and clear. The ratio of male dominant characters to female dominant characters on Nickelodeon was 6.48. This exposes the young viewers to a tremendous number of males and asserts male dominance very clearly. Furthermore, no males exhibited alluring behavior in any Nickelodeon commercials; this was left to 41% of female dominant characters. Similarly, no male dominant characters exhibited domestic behaviors, and no females were seen working on Nickelodeon. Consistent with this observation, 100% of female dominant characters on Nickelodeon were classified as nonworkers. Males were also very likely to be nonworkers, but had a significantly higher likelihood of being a professional on Nickelodeon in comparison to females. This suggests

that although Nickelodeon exhibited a minimal proportion of overt traditional gender roles, when gender portrayals are explicit Nickelodeon follows traditional gender stereotypes.

E! has consistently presented traditional gender images overtly and covertly, and when gender is investigated by television channel and subsequently target audience age, this remains true. Over half of the women on E! demonstrated alluring behavior, while only 11% of males exhibited this same behavior. There was a significantly higher amount of females participating in domestic behaviors on E! as well. Occupational roles show some variation against the gender norms, with nearly equal levels of males and females working. Furthermore, while males and females were highly likely to be nonworkers, there was a slightly higher rate of female professionals than male professionals on E!. Stern and Mastro (2004) found similar results, noting that young female adults had a higher likelihood than any other age of females to not only be working, but at a professional level.

In relation to voiceovers, on both Nickelodeon and E! it was extremely likely that male dominant characters would appear in commercials with male voiceovers. There was a much lower percentage of female dominant characters who appeared in commercials with female voiceovers, meaning that a significant portion of female dominant characters were in commercials with male voiceovers. This furthers the importance of the subconscious presence of predominantly male dominated voiceovers.

Reading between the Commercials: What's the Real Message?

It is clear that gender stereotypes are alive and well within television commercials. E! is very forward and presents traditional gender portrayals in a variety of ways. Their primarily young adult viewers see traditional gender roles through this study's objective variables, voiceovers, and the subjective measure of traditional versus non-traditional

gender roles. The picture is not as coherent on Nickelodeon, but the different messages, which are displayed both visibly and more covertly to a largely children audience, are hierarchical.

The objective measures of commercials on Nickelodeon tell the story of minimal exposure to explicit traditional gender roles, instead opting to portray dominant characters as recreational nonworkers who do not exhibit alluring behavior. The subjective measure of traditional versus non-traditional gender roles directly contrasts this classifying 79% of all behavior on Nickelodeon on the traditional side of the scale. It is clear that these two measures tell different stories, mainly because they measure different forms or levels of gender. The objective variables target very specific actions, such as occupational role or alluring behaviors. On the other hand, the subjective measure observes the entire commercial as a whole, ultimately examining a different level of gender in comparison to the objective measure. For instance, on Nickelodeon a commercial with young girls playing with dolls would not necessarily be coded for stereotypically feminine traits such as alluring behavior, domestic primary behavior, or being in the home, but on the subjective scale that is viewed as very traditional. For this reason the subjective measure helps understand the message of gender portrayal on another, more subliminal level.

Additionally, voiceover is another measure of gender portrayal that truly is on a subconscious level. Over three fourths of voiceovers on Nickelodeon were male, which is subconsciously noted and then used by the brain to inform other more conscious forms of decision-making. In combination with the subjective measure of traditional versus non-traditional gender roles, it can be concluded that Nickelodeon subliminally sends very traditional gender portrayal messages to its young viewership, but on the surface stays

away from explicitly traditional gender representations. Whether the messages sent by Nickelodeon are overt or covert, their effects on their young viewership are undeniable. The influence of these gendered messages sent by Nickelodeon have long-term effects that are working against many efforts in the United States to promote gender equality. Since the information in these commercials is stored and used to inform many future decisions, the impact that these male dominated gender portrayals hold is far-reaching.

While this study did explore a variety of levels of gender perceptions, a content analysis of this nature cannot be all encompassing. Limitations of this content analysis include only recording on cable television at primetime hours. Including broadcast television and widening the hours of recording to less popular times may provide a more well rounded picture of the current gender roles on television. A comparison of broadcast television and cable television would be an interesting avenue for future research; this research could help understand if commercials on cable television are better suited for audiences of a wider age range.

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APPENDIX I

The following is the coding scheme that was used for each commercial. The scheme aimed to understand what general behaviors each character was doing, rather than focus on physical appearance or the subtleties of behavior. These coding instructions are a edited version of the coding categories used by Stern & Mastro in their 2004 article "Gender Portrayals Across the Life Span: A Content Analytic Look at Broadcast Commercials."

Coding Instructions:

Numbers 1 through 5 will be coded based on the overall commercial:

1. Count the number of total males and total females in the commercial.
2. If there is a voiceover (the voice of an unseen narrator speaking) in the commercial, note the gender of the voiceover.
3. Note the type of product being advertised (The specific name of the product will be recorded for each commercial as well). Categories are as follows:
 - a. Home products (household items, food, body care, etc).
 - b. Away products (cars, travel, restaurants, etc).
 - c. Both home and away products (products used both at home and away; clothing, electronics, sporting goods, alcohol, et).
4. On a scale from 1 to 10 where 1 is 100% non-traditional gender roles and 10 is 100% traditional gender roles, does the commercial depict traditional gender roles?
5. Note the primary setting that the commercial is taking place in. Categories are as follows:
 - a. Place of employment.
 - b. Home.
 - c. Outdoor.
 - d. Restaurant.
 - e. Other inside location.

*Numbers 6 through 11 will be coded based on individual dominant/primary characters. The coder will first determine which characters are dominant/primary and then code the following**:*

6. Note the primary setting that the individual dominant character is in. Categories are as follows:
 - a. Place of employment.
 - b. Home.
 - c. Outdoor.
 - d. Restaurant.
 - e. Other inside location.
7. What is the primary behavior for the individual dominant character?
 - a. Work (paid working position)
 - b. Domestic (unpaid domestic work in the home)
 - c. Recreation
 - d. Other
8. What is the individual dominant character's degree of physical activity?

- a. 5 point scale, 1 being active and 5 being passive
 - i. 1 = active, extremely energetic
 - ii. 5 = passive, lying down
- 9. What is the individual dominant character's occupational role?
 - a. Professional (holds white collar position, such as doctor or lawyer)
 - b. Nonprofessional (holds blue collar position, such as construction worker or fast food worker)
 - c. Nonworker (has no clear occupation)
- 10. Does the individual dominant character exhibit alluring behavior?
 - a. Alluring behavior is considered flirting, winking, batting eyelashes, or sexual teasing.
- 11. Does the individual dominant character speak?

***Dominant characters will be determined using intersubjectivity. The coder will establish that her judgments are in high agreement with another person(s).*

APPENDIX II: Analysis of the Second Dominant Character

The second dominant character was not included in the primary analysis because the data for both characters led to the same conclusions, and nearly 60% of commercials did not have a second dominant character. The analysis of the second dominant character is included now for supplemental purposes.

The results in relation to the second dominant character were in line with a great deal of previous research surrounding gender and television commercials. Table 1, which is structured so that the percentages in each column separated by dependent variable total 100%, details the variation in gender portrayals among the gender of the second dominant characters. By comparing percentages in the same row (across columns) key comparisons are made. A significant relationship ($X^2 = 70.99, p < 0.01$) emerged between gender and alluring behavior; over half of all female dominant characters exhibited alluring behavior in comparison to 8% of male dominant characters (shown in panel 5 of Table 1).

As shown in panel 1 of Table 1, over 75% of voiceovers were male, which is in agreement with prior analysis of television commercials. Approximately 31% of female dominant characters appeared in commercials with female voiceovers, whereas 85% of male dominant characters were seen in commercials featuring a male voiceover. Due to the overwhelming presence of male voiceovers, 67% of female dominant characters appeared in commercials with male voiceovers ($X^2 = 84.14, p < 0.01$).

Table 1: Differences in Gender Portrayals Among Second Dominant Characters

	<i>Female (%)</i>	<i>Male (%)</i>
Gender of Voiceover*	<i>(N=163)</i>	<i>(N=189)</i>
<i>Female</i>	30.7	13.8
<i>Male</i>	67.5	85.2
<i>Male & Female</i>	1.8	1.1
	(100)	(100)
Primary Setting*	<i>(N=163)</i>	<i>(N=189)</i>
<i>Place of Employment</i>	0.6	6.4
<i>Other Inside Location</i>	27.6	24.3
<i>Outdoor</i>	36.8	39.7
<i>Home</i>	34.4	29.6
	(100)	(100)
Primary Behavior*	<i>(N=191)</i>	<i>(N=200)</i>
<i>Work</i>	6.3	28.0
<i>Recreation</i>	64.9	61.0
<i>Domestic</i>	19.4	1.5
<i>Other</i>	9.4	9.5
	(100)	(100)
Occupational Role*	<i>(N=191)</i>	<i>(N=200)</i>
<i>Nonworker</i>	90.6	71.5
<i>Nonprofessional</i>	2.1	7.5
<i>Professional</i>	7.3	21.0
	(100)	(100)
Alluring Behavior *	<i>(N=191)</i>	<i>(N=200)</i>
<i>No</i>	54.5	92.0
<i>Yes</i>	45.6	8.0
	(100)	(100)
Traditional vs. Non-Traditional Gender Roles*	<i>(N=191)</i>	<i>(N=200)</i>
1 (<i>non-traditional</i>)	2.1	1.0
2 (<i>2-4</i>)	7.3	10.5
3 (<i>indifferent</i>)	6.3	10.0
4 (<i>6-9</i>)	37.7	25.0
5 (<i>traditional</i>)	46.6	53.5
	(100)	(100)

* signifies $p < 0.01$, meaning that relationship between this variable and the gender of the first dominant character is statistically significant.

In relation to primary setting shown in panel 2 of Table 1, 10% of males were at work versus 2% of females, whereas 38% of females were observed at home versus 30% of men, which is also depicted in Table 1. This difference is significant, was expected, and supports stereotypical gender roles ($X^2 = 12.88, p < 0.01$). Similarly, there was a significant difference between genders in primary behaviors (shown in panel 3 of Table 1). Nineteen percent of females exhibited domesticity as their primary behavior in comparison to 2% of males. Males were significantly more likely than females to be working, with 28% of males shown in the workplace in contrast to 6% of females ($X^2 = 97.5889, p < 0.01$).

While the majority of both male and female dominant characters were classified as nonworkers, over 90% of females were nonworkers in comparison to 72% of males (shown in panel 4 of Table 1). Furthermore, males were slightly more likely to be nonprofessional workers in comparison to females; Eight percent of males were nonprofessionals, while only 2% of females were nonprofessional. Similarly, a higher percentage of males than females had a professional occupational role. Twenty-one percent of males were professionals, in comparison to 7% of females ($X^2 = 23.84, p < 0.01$).

The subjective variable supported the findings that the objective variables had detected (see panel 6 of Table 1). Traditional gender roles were very present, overtly and covertly, in the commercials. ($X^2 = 34.64, p < 0.01$). Over 79% of all behavior of both male and female dominant characters was found on the traditional side of the scale.

Differences in Gender based on Age

Three way tabulations were created to understand the behavior of the dominant characters on each specific television channel. Table 2 details the gendered primary behaviors of dominant characters on both Nickelodeon and E!. The data in Table 2 displays

the fact that only 5% of females on Nickelodeon exhibited a primary behavior of work, while 22% of males were seen working. Conversely, no males on Nickelodeon exhibited domestic behavior, whereas 8% of females on Nickelodeon displayed domestic behavior. The gendered primary behaviors of dominant characters on E! show that males were significantly more likely to be working than females, while a significantly higher proportion of females exhibited domestic behavior in comparison to men on E!. Together this demonstrates that while recreation was the most performed primary behavior, males were more likely to be working while females were more likely to show domesticity on both Nickelodeon and E!.

Table 2: Differences in Primary Behavior Among Second Dominant Characters Based on Television Channel

Primary Behavior	Nickelodeon ^a				E! ^b			
	Female		Male		Female		Male	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Work	4	4.8	26	22.0	8	7.5	30	36.6
Recreation	72	85.7	92	78.0	52	48.6	30	36.6
Domestic	7	8.3	0	0.0	30	28.0	3	3.7
Other	1	1.2	0	0.0	17	15.9	19	23.2
Total	84	100.0	118	100.0	107	100.0	82	100.0

Percentages are listed in parentheses.

^a $\chi^2(3, N = 202) = 21.46, p < 0.01$

^b $\chi^2(3, N = 189) = 38.20, p < 0.01$

Table 3 describes the gendered occupational roles of dominant characters on both Nickelodeon and E!. Ninety-three of female dominant characters on Nickelodeon were nonworkers. Although 78% of male dominant characters on Nickelodeon were also nonworkers, 22% of males were working in some capacity. Eighteen percent of males on

Nickelodeon had professional occupational roles, while 4% of males had non-professional occupational roles.

Table 3: Differences in Occupational Role Among Second Dominant Characters Based on Television Channel

Occupational Role	Nickelodeon ^a				E! ^b			
	Female		Male		Female		Male	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Nonworker	78	92.9	92	78.0	95	88.8	51	62.2
Nonprofessional	3	3.6	5	4.2	1	0.9	10	12.2
Professional	3	3.6	21	17.8	11	10.3	21	25.6
Total	84	100.0	118	100.0	107	100.0	120	100.0

Percentages are listed in parentheses.

^a $X^2(2, N = 202) = 9.71, p < 0.01$

^b $X^2(3, N = 189) = 21.31, p < 0.01$

Although the data is not shown here, alluring behavior was nonexistent on Nickelodeon, as no males displayed this behavior. Furthermore, 29% of females on Nickelodeon exhibited alluring behavior. On E!, 59% of all female dominant characters displayed alluring behavior, in comparison to only 20% of males who behaved in an alluring manner. These differences are significant and created stark variation between the two television channels and subsequently the age of the target audience viewers (Nickelodeon: $X^2 = 38.26, p < 0.01$; E!: $X^2 = 29.57, p < 0.01$).

As previously mentioned, 78% of all voiceovers on Nickelodeon were male, which is an overwhelmingly high majority (Data on voiceovers is not shown). It was extremely unlikely that a male dominant character would appear in a commercial with a female voiceover; this result occurred in less than 1% of all commercials on Nickelodeon. In comparison, it was significantly more likely that a female dominant character would appear

in a commercial with a male voiceover on Nickelodeon, which occurs in nearly 63% of commercials. Similarly, on E! 70% of all female dominant characters appeared in commercials with male voiceovers. Male dominant characters were still most likely to appear in commercials featuring male voiceovers (63%), but 34% of commercials with male dominant characters on E! included a female voiceover.

The gendered occupational roles of dominant characters on E demonstrate that males and females were both highly likely to be nonworkers; however, 89% of females were nonworkers in comparison to 62% of males. Thirty-eight percent of males on E! held a working role in comparison to 11% of females. Of that 38% of males, 26% were professionals compared to 10% of females (Data not shown). This supported traditional gender roles, showing more women not working in comparison to men.