A Content-Analytic Meta-Analysis of Gender Stereotyping in Screen Media

Lee Whitney Essig
Brigham Young University
ABSTRACT

A Content-Analytic Meta-Analysis of Gender Stereotyping in Screen Media

Lee Whitney Essig
School of Family Life, BYU
Master of Science

Thousands of studies have investigated the gendered portrayals in various forms of media. Researchers believe that considering gendered media content is important, as gender stereotypes have been found to influence development, often with adverse outcomes. Although a vast body of research on gender stereotypes has accumulated, little effort has been made to synthesize this literature. The purpose of this paper is to collect and analyze the results of content-analytic studies of gender portrayals across several forms of media including television, television commercials, movies, video games, music videos, and various forms of print media into a comprehensive paper on gender stereotypes in the media. Results of the analyses indicated that gender stereotypes and roles are still reinforced in the media, particularly in American and Middle-Eastern media. Additionally, while gendered roles are still reinforced, there is evidence of some decrease in gender stereotyping over time. Implications of these findings and future directions are discussed.

Keywords: gender, gender stereotypes, gender socialization, media, media portrayals
ACKNOWLEDGEMENTS

I would like to thank the administration and faculty members at Brigham Young University for providing such a wonderful environment in which I could develop talents and skills in order to conduct this project. I am especially grateful for the time, attention, and friendship that Dr. Sarah Coyne and Dr. Kevin Shafer have provided me over many years. I am also grateful for my colleagues, especially Savannah Kroff, for working with me to formulate ideas and who helped me at various stages of this project. Lastly, I would like to thank my wife, Paige, and our two boys for their love, support, and patience.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>17</td>
</tr>
<tr>
<td>Preliminary Analyses</td>
<td>17</td>
</tr>
<tr>
<td>Overall Effect</td>
<td>17</td>
</tr>
<tr>
<td>Gender Role Effects</td>
<td>17</td>
</tr>
<tr>
<td>Domestic roles</td>
<td>18</td>
</tr>
<tr>
<td>Parenting roles</td>
<td>18</td>
</tr>
<tr>
<td>Occupational roles</td>
<td>18</td>
</tr>
<tr>
<td>Moderation Effects</td>
<td>19</td>
</tr>
<tr>
<td>Region</td>
<td>19</td>
</tr>
<tr>
<td>Decade</td>
<td>20</td>
</tr>
<tr>
<td>Publication Bias</td>
<td>22</td>
</tr>
<tr>
<td>Discussion</td>
<td>23</td>
</tr>
<tr>
<td>Summary of Main Findings</td>
<td>23</td>
</tr>
<tr>
<td>Portrayals of Domestic Involvement</td>
<td>24</td>
</tr>
<tr>
<td>Portrayals of Parenting</td>
<td>24</td>
</tr>
<tr>
<td>Portrayals of Occupations</td>
<td>25</td>
</tr>
<tr>
<td>Regional Differences</td>
<td>27</td>
</tr>
<tr>
<td>Changes Over Time</td>
<td>28</td>
</tr>
<tr>
<td>North American regional trend analysis</td>
<td>30</td>
</tr>
<tr>
<td>Limitations</td>
<td>31</td>
</tr>
</tbody>
</table>
A Content-Analytic Meta-Analysis of Gender Stereotyping in Screen Media

Gender— the social and cultural constructions and expectations surrounding biological sex—permeates the lives, relationships, and cultures of every individual (Eagly, Wood, & Diekman, 2000). What does it mean to be masculine? What makes someone feminine? Our conceptualization of the masculine and feminine influence how we see both others and ourselves and can have positive (Furman, 2010) or negative (Barreto, Ryan, & Schmitt, 2009; Brescoll, Graham, & Handelsman, 2012) implications on our attitudes and behaviors. Gendered expectations permeate nearly every aspect of our lives, and may be so ingrained in our culture, traditions, family, religion, or personal development that we are almost blind to them.

While social factors including tradition, family, friends, peers, and religion all play a part in the development and reinforcement of gendered roles and expectations, recent advances in technology call into question the increasingly influential role the media may play in gender socialization of males and females. In the modern, media-saturated world, we are constantly barraged by a myriad of explicit and implicit media messages regarding gender (Arnett & Tanner, 2006; Brown, 2006; Gardner & Davis, 2013). These media messages can impact our perceptions, influence our behavior (Coyne, Linder, Rasmussen, Nelson, & Collier, 2014), and the way we think (Coyne, Linder, Rasmussen, Nelson, & Birkback, 2016; Dill & Thill, 2007) to conform to a social ideal of masculine or feminine in one’s society (Gauntlett, 2006).

It is only as we critically analyze media messages that we can understand the particular sets of gendered expectations that our cultures emphasize and that we may unknowingly consume or observe. Although there are copious amounts of research relating to stereotypical gender portrayals in the media, the research has at times proven contradictory (Anderson et al., 2013; Barker & Petley, 2002; Ferguson, Nielsen, & Markey, 2016; Grabe, Ward, & Hyde, 2008)
in part, due to muddled definitions and clarity of specific gender-stereotyped variables. For example, some research reports that domestic portrayals of women have decreased over time (Fowler & Thomas, 2015) while other studies suggest an increase (Verhellen, Dens, & de Pelsmacker, 2016). Some studies report more male sexualized portrayals (Hetsroni, 2008; Prieler & Centeno, 2013), while others suggest that sexualized portrayals of female characters outnumber those of males (Prieler, Ivanov, & Hagiwara, 2015). Similar contradictions and inconsistencies are common across many other gender-related variables.

Meta-analytic synthesis of the large body of content-analytic research will be used to compile a comprehensive analysis and discussion on gender-stereotyped media. Furthermore, with so many studies addressing different aspects of gender roles and stereotyping, we hope to investigate three specific domains that have long been subjected to gender stereotyping: domestic roles (Baxter, 2005; Neuhaus, 1999), parental roles (Patterson, Sutfin, & Fulcher, 2004), and occupational roles (Barreto, Ryan, & Schmitt, 2009; Reskin & Roos, 2009). Through this analysis, we hope to better understand gender-stereotyped roles that take place across different mediums, time periods, and regions.

**Gender-Role Stereotypes**

Social expectations of appearance, personality, attributes, and interests develop into gender-specific traditional stereotypes of masculine and feminine (Mayes and Valentine, 1979). “Be a man”, “like a girl”, and “boys will be boys” are just a few phrases that represent gender stereotyping and gender socializing, which have both been found to influence adherence to maladaptive gender norms and have detrimental effects on individual development (Martin & Ruble, 2004) and social progress (Franchina, Eisler, & Moore, 2001; Martin & Doka, 2000). Researchers posit that these maladaptive gender stereotypes prevent workplace progress
(Heilman, 2001), limit access to educational (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012; Yim & Harris, 2002) and professional opportunities for women (Rudman & Glick, 2001; Wald, 2010), and can negatively influence academic performance (Cvencek, Meltzoff, & Greenwald, 2011; Spencer, Steele, & Quinn, 1999), and mental health outcomes (Franchina, Eisler, & Moore, 2001; Gardiner & Tiggemann, 1999). Research also suggests that men’s adherence to traditional gender norms is associated with aggression (Dill & Thill, 2007; Morgan, 1987), sexist attitudes (Barreto, Ryan, & Schmitt, 2009; Jost & Kay, 2005; O’Neil, 1981), mental health issues including depression (Addis, 2008), anxiety (Eisler, Skidmore, & Ward, 1988), and emotional disassociation (Berger, Levant, McMillan, Kelleher, & Sellers, 2005).

It is important to note that this study is specifically interested in addressing maladaptive gender stereotyping, as some gender stereotypes can actually have a positive influence for individuals. For example, some research suggests that more traditionally masculine men perform better in substance abuse recovery programs (Zakrzewski & Hector, 2004), and are generally more resilient to traumatic or other difficult situations (Furman, 2010). Other studies suggest that traditionally feminine women are more prosocial in nature, and are more likely to engage in helping or service oriented behaviors (Eagly, 2009). Traditionally feminine women are also more nurturing and family oriented, which helps mothers to engage with their children, which has many positive outcomes for child development (Ispa et al., 2004). Adherence to maladaptive gender norms can also have negative implications for family functioning, including decreased father involvement (Kaufman, 2000), while androgynous couples—couples who are less likely to embrace maladaptive gender norms—report higher marital satisfaction, lower levels of conflict, and higher relational quality and division of labor (Cooper, Chassin, & Zeiss, 1985,
current citation). Unfortunately, maladaptive gender stereotypes are regularly reinforced by individuals, society, and all forms of media.

**Gender Portrayals in the Media**

Over the past few decades, media has become increasingly relevant socializing agent. Advances in technology—including television, the internet, cell phones, and video games—have extended media’s reach, saturating nearly every aspect of our lives from our infancy (Arnett & Tanner, 2006; Sherry, 2002). Research suggests that adolescents and adults spend an average of 8-12 hours per day consuming some form of media content (Foehr, Rideout, & Robert, 2005), and this number has increased dramatically in recent decades (Chou, Hunt, Beckjord, Moser, & Hesse, 2009; Wang, Tchernev, & Solloway, 2012). Additionally, decades of research demonstrate that media influences the attitudes and behaviors of children (Browne & Hamilton-Giachritsis, 2005; Villani, 2001), adolescents, (Grabe, Ward, & Hyde, 2008) and adults (Bushman & Huesmann, 2006; Gerbner, Gross, Morgan, & Signorielli, 1994) in various ways.

Bussey and Bandura’s Social Cognitive Theory of Gender Development (Bussey & Bandura, 1999) helps us to conceptualize how gendered portrayals in the media might influence the development and internalization of gender stereotypes. This theory posits that gender conceptions and roles are the product of social influences operating interdependently. While some scholars emphasize notable biological differences between males and females (Buss, 2015; Hines, Brook, & Conway, 2004), the social constructs of gender are malleable and therefore shaped, in large part, by our agentic interpretation and understanding of these constructs, based on social models (Bussey & Bandura, 1999). As mentioned previously, these social models are not limited to media. Parents, teachers, coaches, peers, religious beliefs, or regional cultural differences are also important socializing agents that can influence the gender development and
adherence to traditional gender ideologies. In the context of media socialization, boys and girls learn about gender roles by observing media models, identifying with media portrayals, and imitating behaviors of media models. Research across media types has supported this theory, demonstrating that gender stereotypes in media have been associated with heightened stereotypical behavior and attitudes (Coyne et al., 2016; Kistler & Lee, 2009; Ter Bogt, et al., 2010).

Various forms of media have been found to reinforce gender-stereotypical attitudes and behaviors (Kistler & Lee, 2009; Ter Bogt, Engels, Bogers, & Kloosterman, 2010). Studies of video games (Dill & Thill, 2007), music (Rasmussen & Densley, 2016), music videos (Turner, 2010; Wallis, 2011), movies (Neuendorf, Gore, Dallessandro, Janatova, & Snyder-Suhy, 2010), newspapers (Schwartz, 2010), television (Coltrane & Adams, 1997), TV advertisements (Eisend, 2010), and magazine advertisements (Thomas & Treiber, 2000) all suggest that gender stereotypes are pervasive in today’s media. Content analyses of these media have found settings (i.e. office/ work, home, recreational), body type and appearance, character role portrayals, and product types of both male and female actors to be stereotypical, often exaggerating already rigid social gender roles (Collins, 2011).

Exposure to these gender-stereotyped portrayals in the media are associated with greater levels of stereotypically gendered behaviors (Coyne et al., 2014; Frueh and McGhee, 1975), occupational interests and opportunities (Beuf, 1974; Opplinger, 2007), household responsibilities (Signorielli & Lears, 1992), the belief that men are superior to women (Halim, Ruble, Tamis-LeMonda, & Shrout, 2013), and greater aggressive tendencies in males (Coyne et al., 2014; Coyne et al, 2017). Media consumption can develop or reinforce attitudes regarding gender roles and expectations (Harrett-Skjellum & Allen, 1996; Opplinger, 2007), with children
being particularly susceptible to such messages (Blakemore 2003; Serbin, Powlishtam, Gulko, Martin, & Lockheed, 1993). Children are particularly susceptible to media messages in part due to the limitations of their cognitive development (Tobin, 2000), which inhibit their ability to differentiate between media content and the real world, making them more likely to accept media portrayals as reality (Calvert & Wilson, 2009; Tobin, 2000). In addition to cognitive developmental susceptibilities, children are rarely pre-armed or taught media literacy (Strasburger et al., 2013), which they may learn gradually overtime. Lastly, children are still in a process of making sense of the world, and of social roles in their societies, including gender roles. To understand these roles, children use observational learning by watching role models, including peers, adults, and media portrayals to form their understanding of gender and its associated roles (Bussey & Bandura, 1999). Identifying the gender stereotypes that are portrayed in different media is crucial to understanding the cultural values placed on gender roles as well as the possible role those stereotypes may play in the formation of gendered attitudes and behaviors.

In an attempt to address contradictory research and to explore the overall prevalence of gender stereotypes in advertising, Eisend (2010) conducted a meta-analysis on gender stereotyping in television commercials. These studies reported stereotyping related to occupational status, with women in commercials being underrepresented in the workplace. While the previously conducted meta-analysis was instrumental in increasing current understanding related to gendered media portrayals, the current study seeks to improve upon this meta-analysis in two important ways. First, the previously published meta-analysis considers only gender stereotypes in advertising, ignoring a large body of research of gender portrayals in other media.
I seek to provide the field with an analysis of several screen mediums, including television shows, movies, and television advertising.

Second, the previous meta-analysis was conducted from an advertising and marketing perspective, focusing more on credibility, products advertised, end comments, slogans, and fact vs. opinion-based arguments by gender. As a gender researcher, my study will focus on variables that inform gender-stereotyping research as opposed to marketing strategy. The body of literature on gender stereotyping has many more possible measures than those included in Eisend’s original study, including the setting (Gallagher, 2001), body type (Dill & Thill, 2007), character role (Beasley & Collins, 2002), to name a few. While there are dozens of potential variables to investigate, this analysis will focus on coding for specific gendered roles for both male and female characters, particularly domestic roles, parental roles, and occupational roles.

**Subsequent Analyses**

The current analysis will also explore regional differences across continents (i.e. North America, South America, Europe, Asia, and Africa), changes across time, and differences in media types (i.e. video games, music videos, television, etc.). This analysis will also consider the interaction of region and time to investigate how regional differences in gender stereotyping changes over time and highlight socially progressive or stagnant regions. An analysis of media, particularly across time, region, and media type, will provide both gender and media researchers with a comprehensive view of what gender stereotypes are found in the media, how much gender stereotyping is taking place, and how gender portrayals have changed over time and across regions.

**Region.** Gendered expectations and expression vary significantly across communities, societies, countries, and regions (Burleson, 2003; Fraser, 1989). For example, men in North
America are expected to stay emotionally independent and avoid expressing affection—especially physical affection towards other men, while European or Middle Eastern men are expected to be more emotionally present and physically affectionate; hugging, holding hands, and kissing are not only acceptable, but expected (Connell & Messerschmidt, 2005; Eakins & Eakins, 1978). Other gender stereotypes might be more consistent across cultures, such as the expectation of men to provide for their families. Almost universally, men have been expected to be the primary providers of food and protection in their families, regardless of their culture or socioeconomic status (Berk, 2012; Besen, 2007; Sawyer, 2004).

However, even where gender stereotypes are nearly universal, the expectations regarding adherence to those particular roles, behaviors, or attitudes associated with that gender vary in intensity or flexibility (Chia, Moore, Lam, Chuang, & Cheng, 1994; Emrich, Denmark, & Hartog, 2004). For example, the widespread emphasis on breadwinning as a man’s primary role may require men to do this on their own or may give space for spousal support. Additionally, while breadwinning is generally universal, there are very different and often contradictory expectations regarding men’s involvement with their children (Sczesny, Bosak, Neff, & Schyns, 2004). Flexibility in regional differences is at least in part due to the rigidity of the gender socialization surrounding the other sex (Digby, 2013).

Therefore, as gender equality increases in certain countries or regions, more androgynous or flexible gender norms are likely to follow (Pascall & Lewis, 2004; Risman, 2004). To moderate for these differences, my analysis considers continent-based regional differences, using region as a cultural marker to identify cultural differences in gendered expectations and presentations. I expect regional differences in gender stereotypes between more progressive and more traditional regions, and are likely to be reflected in the media produced and
aired in different regions of the world (Eisend, 2010). To find notable differences in gender portrayals across regional—and thus cultural—differences would support the notion that gender is socially constructed.

**Trend analysis.** As societies change over time, to adapt to new challenges, changing individuals or traditions, and advances in their technology or needs, the roles for individuals within those societies also change (Bandura, 1995; Marshall, 2013). Societies and individuals must adapt to meet their current needs. Historically, these adaptations or changes in societal and individual roles have happened gradually, with change happening very slowly over hundreds or thousands of years. As recently as a few hundred years ago, men were primarily responsible for hunting or farming food and protecting their families. While men still are expected to provide today, most men today do not hunt or farm, but have moved to trade or career opportunities to earn money sufficient to provide for familial needs (Geary, 1998), suggesting methods may change while the underlying gender role remains unchanged.

However, advances in technology and social movements pushing for greater gender equality and opportunity have led to quick changes in gendered expectations on men and women (Inglehart & Norris, 2003). The feminist movements, particularly beginning in the 1970’s, have led to drastic changes in just the past few decades in women’s work and home roles (Bianchi, Milkie, Sayer, & Robinson, 2000), which are reflected both in new and changing expectations and opportunities for both women and men alike (McRobbie, 2009). By considering time as a moderator, I expect to see changes in gender portrayals across time, consistent with, or closely behind, changes in gendered expectations through this transitional phrase. Significant changes in gender portrayal over time would also support the notion that gendered expression is based in socialization, and not biology.
Current Study

Given both the theoretical significance of media’s socializing influence and the ever-growing literature on influence of stereotypical gender portrayals in media in the development of gender role ideals, a broad analysis of media gender stereotyping and roles is expedient. The current study seeks to answer the questions of how gender is portrayed in various types of media and how these portrayals vary by region and across time. I hypothesize that (H1) traditional gender stereotypes are still perpetuated in television shows, television commercials, and movies. In association with this first hypothesis, I specifically hypothesize that (H1a) women will be portrayed more often in domestic, though men will be portrayed in home repairs more than women, that (H1b) women will be portrayed more often in parental roles than men, and that (H1c) men will be portrayed more in occupational roles than women, except for in assisting and entertaining occupations. My second hypothesis (H2) is that the frequency of gender stereotyping will differ among regions, with more traditional regions (Asia, Africa, Middle East, and South America) reporting more gender-stereotyped content. Lastly, I hypothesize that (H3) the frequency of gender stereotyping will decrease over time for both traditionally masculine and feminine gender roles.

Method

Literature Search Procedures

In September 2017, PsycINFO, Family & Society Studies Worldwide, and Communications and Mass Media databases were used to search for relevant articles. The following terms were used: “gender* stereotypes”, “sex role attitude”, “sex role”, “gender role”, and “gender norm” and “content analysis”. These terms were then paired with several other terms associated with different media including television (“TV” and “television”), movies
(“movie*”, “film*”, and “cinema”), and TV commercials (“media”, “advertisements”, and “commercials”). In addition to including articles from the databases as well as browsing article reference sections for additional publications, researchers contacted all authors whose published studies were included in this meta-analysis to request analyzed data or unpublished studies, though none of the unpublished studies met the inclusionary criteria, and were therefore not included in the analyses. I did not set year parameters, as I am interested in investigating how media gender portrayals have changed over time.

From the search, 728 studies were identified through the database search, with two additional studies coming from other sources. Of the articles found, 68 were assessed as eligible based on my criteria. Thirteen articles were excluded for reporting on gender stereotyping unrelated to parenting, domestic, or occupational roles. An additional 10 studies were removed for not reporting statistics necessary to compute the values required by the statistical software, leaving a total of 45 studies for the final analysis. A flowchart outlining identification and selection of studies can be found in Appendix B (see Figure 1).

**Inclusion and Exclusion Criteria**

Several inclusionary criteria were used to determine which articles were fit for this meta-analysis. First, studies had to be based on movies, television shows, and TV commercials; other forms of media such as radio, internet, magazine ads or radio ads were not included, as it would exceed the capabilities of one study. Second, because of the numerous gender dimensions that have been studied, it was necessary to select a few in particular to investigate closely. For this meta-analysis, studies had to investigate at least one of three predetermined gendered roles: domestic, parental, and or occupational roles. Third, studies had to include empirical data and statistical information in compute an effect size. Fourth, only studies written or translated into
English, Spanish, and Portuguese were added, as members of our team were bilingual and able to read and translate necessary information from these other languages. To clarify, the coded media content itself did not have to be in English, Spanish, or Portuguese, just the publication. Moderating for region while also limiting the publication languages may seem contradictory, but many studies that collected data on channels in regions throughout the world were authored by researchers who published in English, Spanish, or Portuguese. I acknowledge that because of our limit of publication languages, I will lose some studies that would have otherwise been included. Because there are dozens of gender stereotypes that could be considered across these media, I made a decision to limit this meta-analytic search to three specific gender roles that interface with family functioning and are associated with family life across the world. Doing so enables us to look specifically at stereotyping within those roles, as opposed to the myriad of stereotyping options. I decided to do this as I would be unable to give a concise and critical look at all gender stereotypes. For example, gender stereotyping in body types alone could be the subject of another analysis. This is also true for looking at other gender stereotyping in the media, including aggression differences. There are thousands of studies that address one or more of these numerous dimensions of gender stereotyping, and one meta-analysis would be insufficient to address these many domains. As a results, studies that looked at specific aspects of gender stereotyping (such as men as aggressive or females as oversexualized) were not included, which significantly decreased the number of studies included in the analyses. Lastly, only studies that had a comparative stereotyped index (reported on both men and women in their analyses) were included, as both male and female reports would be necessary to compute the difference effect scores. Several studies were excluded because they only reported on men or women, inhibiting a comparative analysis. As this study is not a comprehensive analysis of gender
stereotyping in the media, additional meta-analyses are needed to synthesize the literature on media gender portrayals.

**Reliability**

The author trained research assistants in meta-analysis techniques, media psychology, and the inclusionary and exclusionary criteria used to examine the articles to determine their relevance in the meta-analysis. Reliability was established by having the research assistants code ten-percent of the articles together. Acceptable inter-rater reliability was achieved for all outcomes ($\kappa = .75$). Finally, the research assistants individually coded each relevant article for both moderators and outcomes. Disagreements were rare and the coders were required to reach a 100% consensus on all codes.

**Coding of Studies**

**Character role.** Character role was based on the particular role in which male and female characters were portrayed. It is important to note than that the unit of analysis is character portrayals (masculinity/femininity), and not the characters/actors themselves (males and females) Character role was considered in three distinct domains: (1) domestic roles, (2) parental roles, and (3) occupational roles.

**Domestic Roles.** Domestic roles are those roles in which men and women are portrayed in the home participating in domestic tasks that are not necessarily associated with parenting. This variable was measured with four categories: (1) general domestic portrayal (being in a home setting, cooking, domestic products, etc.), (2) cleaning (doing laundry, cleaning house, cleaning products, etc.), (3) home improvement (changing lightbulbs, plumbing, electrical work, etc.). These categories are based, in part, on Verhellen’s (2016) article on domestic portrayals in the media.
Parenting Roles. These are times in which men and women are seen engaging in their roles as parents. This analysis includes four categories: (1) general parentings (identified as parent, with children, etc.), (2) warmth (parents engaging in affectionate behaviors such as hugging, cuddling, children), (3) responsibility (task oriented- driving kids, changing diapers, helping them eat, etc.), and (4) availability (playing with children, reading books, activities, etc.). These categories are based on Pleck’s (2010) domains of paternal involvement.

While Pleck’s model was originally developed to measure father involvement, the domains are universal in parenting for both men and women, and the definitions adapted to accommodate for examining parenting in media portrayals. It is worth noting that this model does not account for time (how long someone is engaging in a task) or attitudes (willingly, angrily, or whining in carrying out a task). Our interpretation of these results is therefore limited, though it still gives us an understanding of the roles and responsibilities fathers and mothers engage in.

Occupational Roles. This category covers all the variables that measured some type of occupational role. Seven categories were included, based on existing categories from existing content analyses on gender portrayals in the media (Smith, Pieper, Granados, & Choueiti, 2010): (1) General occupation (some work identification, without specifying specifics about the nature of work), (2) white-collar (jobs with a primary focus of labor on clerical, managerial, or health services), (3) blue-collar (jobs which often require a specialized skill set and are usually related to manual labor), (4) criminal (illegal or illicit jobs for which workers would not receive a paycheck), (5) military (job involving active duty for a country or leader), (6) law enforcement (jobs which regulate behavior in accordance with the statutes of the federal, state, or local
government), (7) entertainment (jobs designed to bring pleasure to an audience of viewers, readers, listeners, attendees).

**Content year.** This is the year the content was viewed, which is often different from the year of publication. As some studies reported content from several years/decades, it was necessary to split these studies into separate reports for each decade, which did legitimately increase the number of reports \((k)\), though the number of studies did not actually change.

**Region.** The region in which each of the studies took place was recorded and placed in one of eight categories: (1) United States, (2) Western Europe (i.e. U.K., Germany, Spain, France, etc.), (3) Asia, (4) Africa, (5) Latin America, (6) Australia/New Zealand, (7) Middle East, and (8) Eastern Europe (Bulgaria, Ukraine). Initially, the United States was coded North America, to include Canadian media. However, no content-analytic studies of Canadian media met the criteria for inclusion, so all studies from the North American media were based in media portrayals in the United States. As with content year, some studies reported on media from multiple regions. It was therefore necessary to split different regions into separate reports, which would increase the number of reports.

**Other publication features.** Other features that were included were the study publication year, as well as the type of publication (i.e. journal article, conference presentation, thesis, etc.).

**Computation of Effect Sizes**

Comprehensive Meta-analysis III (CMA) software was used to run the meta-analysis and to analyze the results. Rate proportion difference scores reported in each study were used to calculate each effect size. Rate proportion difference scores are a computed effect size based on the proportion of each group exhibiting, or not exhibiting a gendered characteristic or role of interest. Additionally, as the variable of interest is dichotomous (masculine or feminine), the
effect size is the difference between proportions (Lipsey & Wilson, 2000). To compute this
effect size statistic requires the values of the two proportions (men and women) being
differenced and the sample size on which these proportions are based. As only studies that
reported on both male and female portrayals, all studies reported these necessary values.

These effect sizes can be interpreted as percentages, when multiplied by 100. Standard
error values were computed using the proportion difference standard error formula provided by
calculated for each outcome within the categories and subcategories of parental, domestic, and
occupational roles (Kang, 1997). These categories and subcategories were divided intro
traditionally masculine (*m*) or feminine (*f*), based on whether that particular role has been
considered a male or female stereotyped role. For example, the domestic domain had three
subcategories: general, cleaning, and repairs. General and cleaning subcategories were
considered stereotypically feminine (*f*), as they have been traditionally carried out by women,
while the domestic repairs was considered stereotypically masculine (*m*). These effect sizes were
coded such that, for a male stereotyped role (*dm*), a positive effect size indicated a greater
proportion of male portrayals while a negative effect size indicated a greater proportion of
female portrayals. Likewise, for a female stereotyped role (*df*), a positive effect size indicated a
greater proportion of female portrayals while a negative effect size indicated a greater proportion
of male portrayals.

The analyses were conducted for gender stereotypes and, then, separately for each of the
moderators specified above. Subsequent moderation Q-tests were used to compute between-
group differences, which allowed for comparison between different regions or decades. Analyses
were only performed when there were five or more independent effect size estimates available,
and were conducted using a random effects model to assess the heterogeneity in various subsets of studies. Random effects analyses are ideal for meta-analytic studies that include articles with significant variation in sampling, measurements, locations, and times. This model allows for generalizability outside of the articles included in the current study (Borenstein, Hedges, Higgins, & Rothstein, 2010; Hunter & Schmidt, 1990).

Results

Preliminary Analyses

Preliminary analyses were conducted using the various mediums (television shows, television commercials, and movies). Though no real conceptual reason existed as to why gender portrayals may differ between medium, I decided to test for potential differences. No significant differences in gender stereotypes were found between the mediums used. The lack of difference meant that these mediums could be combined to increase the overall power for subsequent analyses.

Overall Effect

As shown in Table 1, results revealed significant effect sizes for both male and female gender role portrayals (Male: \(d_m = 0.188, p < .001, k = 45\); Female: \(d_f = .158, p < .001, k = 43\)) indicating that males, more than females, were portrayed in masculine gender roles, while females were portrayed in stereotypically feminine roles. Results also suggested significant heterogeneity for both males and females (for males, \(Q(44) = 109.15, p < .001\); for females, \(Q(42) = 126.67, p < .001\).

Gender Role Effects

The results of the meta-analysis revealed numerous significant effects in regard to the three domains of gender role stereotyping addressed in this study. Some of the following
meta-analytic results were calculated using only a few studies, I therefore suggest caution in interpretation or generalization of those results using fewer than five studies.

**Domestic roles.** There were several noteworthy findings in the analysis of the effect sizes measuring general, cleaning, and repair domestic work (see Table 2). First, a measurement of general domestic portrayals (general domestic behaviors, being portrayed in the home, etc.) revealed that women were more likely than men to be portrayed in domestic settings, advertising domestic products, or engaging in domestic responsibilities ($d_f = .169, p < .001, k = 41$). Furthermore, women were significantly more likely than men to be shown engaging in various cleaning responsibilities (laundry, dishwashing, etc.) or advertising for household cleaning products ($d_f = .097, p < .001, k = 12$). Men, however, were more likely to be portrayed engaging in domestic repairs (yard work, changing light bulbs, working with tools, etc.) than their female counterparts ($d_m = .112, p < .001, k = 3$).

**Parenting roles.** Parenting roles were separated into general parenting, availability, responsibility, and warmth categories (see Table 3). The results indicated that women were more likely than men to be seen in general parenting portrayals such as being identified as a parent, being seen with their children, etc. ($d_f = .102, p < .001, k = 16$). However, men were more likely than women to be portrayed in both availability ($d_f = -.13, p < .001, k = 2$) and responsibility ($d_f = -.099, p < .01, k = 2$) domains of parenting behavior. There were no significant differences between men and women in parental warmth ($d_f = .024, p = .242, k = 3$).

**Occupational roles.** Occupational roles were evaluated using seven categories of professional work (See Table 4). The analyses revealed that men were more likely than women to be portrayed in general employment ($d_m = .153, p < .001, k = 46$), white collar ($d_m = .195, p < .001, k = 26$), blue collar ($d_m = .068, p < .001, k = 14$), enforcement ($d_m = .256, p < .001, k = 11$),
and criminal ($d_m = .036, p<.001, k=7$) occupations. Women were more likely than men to be shown in assisting occupational roles ($d_f = .325, p<.05, k=13$). There were no significant differences between men and women in entertaining ($d_m = .112, p=.418, k=5$) professions.

**Moderation Effects**

Several of the studies in this meta-analysis included multiple time points or regions, which are used in both moderation and trend analyses. When studies reported multiple regions or time points, it was necessary to make sub-studies of these, each recording a distinct decade or region as its own report. Doing so enabled me to analyze these groups effectively and distinctly study data that reported several time points or regions. Because of this necessary alteration, the number of reports ($k$) used for each effect size may differ slightly from the actual number of studies included in this meta-analysis ($n=45$).

**Region.** Although I coded for eight different world regions, two regions (Africa and South America) were removed in the regional analysis due to the small number of studies reporting effect sizes from those regions, leaving six regions for analysis. The results for this regional moderation analyses can be found in Table 5.

The moderation analyses for male stereotyped roles revealed that the Middle East reported higher levels of gender stereotyped portrayals of men ($d_m = .394, p<.05, k=5$), while North American media reported more moderate levels of masculine gender portrayals ($d_m = .263, p<.001, k=31$). Eastern Europe ($d_m = .126, p<.05, k=5$), Western Europe ($d_m = .114 p<.001, k=8$), Asia ($d_m = .072, p<.001, k=10$), and Australia/New Zealand ($d_m = .061, p<.001, k=3$) reported lower levels of masculine gender portrayals. Q-test analyses were used to examine between-group regional differences, and revealed that the Middle East ($d_m = .394, p<.05$) and North America ($d_m = .263, p<.05$) did not differ significantly in their portrayals of masculinity.
These two regions, however, were significantly higher in their gender portrayals than all other regions, suggesting higher levels of gender-stereotyped media. North America was significantly higher than both Western ($d_m = .263, p < .05$) ($Q, (1) = 6.06, p < .05$) and Eastern European ($d_m = .263, p < .05$) ($Q, (1) = 2.52, p < .05$) regions and Asia ($d_m = .263, p < .05$) ($Q, (1) = 7.49, p < .01$). The two European regions did not differ significantly in their masculine gender portrayals ($Q, (1) = .62, p = .431$).

In female stereotyped roles, Middle Eastern media also reported high levels of gender stereotyping ($d_f = .323, p < .05, k = 5$). The results further revealed more moderate levels of feminine gender stereotyping in North American media ($d_f = .236, p < .01, k = 25$). Eastern European media was third for female stereotyped roles ($d_f = .133, p < .001, k = 4$), followed by Asian ($d_f = .128, p < .001, k = 8$), Western European ($d_f = .097, p < .001, k = 5$), and Australia/New Zealand ($d_f = .084, p < .001, k = 3$). As with male stereotyped results, Q-test analyses were used to investigate regional differences. Though the Middle Eastern media reported higher levels of gender stereotyping, it did not differ significantly from any other regions, including North America ($Q, (1) = .269, p = .604$), Western Europe ($Q, (1) = 2.16, p = .141$), or Asia ($Q, (1) = 6.06, p < .05$). North American media, did not differ significantly from any regions, including Western Europe ($Q, (1) = 3.27, p = .07$), or Asia ($Q, (1) = 1.92, p = .166$). These Q-test analyses revealed no significant differences between any regional groups for feminine stereotyping.

**Decade.** A trend analysis was used to consider how gender stereotyping might change over time. This analysis included media content from the 1950s – 2016. However, because of the limited number of studies and effect sizes published between 1950-1979, the 1950s, 1960s, and 1970s were combined. The complete results of this trend analysis can be found in Table 6.
For male stereotyped roles, the 1980s revealed higher levels of masculine stereotyped media ($d_m = .367, p<.01, k = 6$), while the 2000s ($d_m = .137, p<.001, k = 23$) and 2010s ($d_m = .125, p<.001, k = 6$) decades reported lower levels of male stereotyped roles. The pre-1980s group ($d_m = .48, p=.208, k = 4$) and the 1990s decade ($d_m = .134, p=.062, k = 20$) did not reveal any significant differences. Though it may appear a that there would be significant differences between these groups, additional $Q$-test analyses between each decade revealed that the pre-1980 and 2010s decade groupings did not differ significantly in their masculine gender portrayals ($p=.353$), suggesting that, at least for masculine gender roles, there has not been a significant change between pre-1980s media and today’s media.

For female stereotypical roles, the pre-1980s group (1950-1979) reported higher levels of feminine stereotyping ($d_f = .542, p<.05, k = 4$). Media in the 1990s showed a significantly lower level of gender stereotyping from the pre-1980s group ($d_f = .184, p<.001, k = 16$). The 2000s ($d_f = .106, p<.01, k = 24$) and 2010s ($d_f = .119, p<.01, k = 7$) decades showed substantial decreases in female stereotypes roles from the previous decades. The results from the 1980s were not statistically significant ($d_f = .148, p<.297, k = 2$), perhaps because of the lack of studies. Additional $Q$-test analyses of decades revealed significant between-group differences for female stereotyped roles, including between the pre1980s group ($d_f = .542, p<.05$) and the 2010s decade ($d_f = .119, p<.01$) ($Q, (1) = 611.43, p<.001$). These findings suggest significant decreased in female gender role stereotyping in media over the last 60 years.

In addition to trend analyses of overall masculine and feminine stereotypical roles, subsequent trend analyses were run on the general domestic, parenting, and occupational domains. These analyses helped to show how trends over time differed between these domains. The analysis of general domestic roles did not reveal a significant decrease in women’s domestic
roles from pre-1980s media \((d_f = .207, p = .182, k = 3)\) and post-2000 media \((d_f = .158, p < .001, k = 6)\) \((Q, (1) = .095, p = .758)\), though this may be due to an insufficient number of studies. The analysis of general parenting roles did reveal a significant decrease in women’s parenting portrayals across six decades \((Q, (1) = 5.65, p < .05)\). The trend analysis of general occupational roles revealed a significant decreased in men’s occupation roles from pre-1980s media \((d_f = .397, p < .001, k = 5)\) and post-2000 media \((d_f = .131, p < .001, k = 18)\) \((Q, (1) = 25.93, p < .001)\).

Lastly, additional trend analyses were conducted for both overall masculine and feminine stereotypes using only the North American region. These results revealed significant differences decreases in masculine and feminist stereotyped media from 1950-1989 (Male: \(d_m = 0.549, p < .001, k = 9\); Female: \(d_f = .745, p < .001, k = 4\)) and media from the 1999s (Male: \(d_m = 0.155, p = .171, k = 10\); Female: \(d_f = .184, p < .01, k = 9\)) (Male: \(Q, (1) = 4.17, p < .05\); Female: \(Q, (1) = 5.78, p < .05\)). The results also revealed significant differences in media from 1950-1989 (Male: \(d_m = 0.549, p < .001, k = 9\); Female: \(d_f = .745, p < .001, k = 4\)) and media produced between 2000-2017s (Male: \(d_m = .142, p < .001, k = 10\); Female: \(d_f = .105, p < .01, k = 12\)) (Male: \(Q, (1) = 6.55, p < .05\); Female: \(Q, (1) = 7.88, p < .01\)). There were no significant changes in gendered media portrayals between the 1990s (Male: \(d_m = 0.155, p = .171, k = 10\); Female: \(d_f = .184, p < .01, k = 9\)) and media post-2000 (Male: \(d_m = .142, p < .001, k = 10\); Female: \(d_f = .105, p < .01, k = 12\)) (Male: \(Q, (1) = .013, p = .91\); Female: \(Q, (1) = 1.10, p = .294\)).

**Publication Bias**

Several methods were used to assess publication bias in my dataset—an important consideration in meta-analysis. The initial method was consulting Rosenthal’s *fail-safe N*, which was 9,704. This number suggests that 9,704 studies reporting null results would be necessary to reduce the overall effect of the meta-analysis to non-significance. Secondly, the funnel plot for
the data was examined and appeared to be very symmetrical, suggesting a robust finding (Light & Pillemer, 1984). When examining the funnel plot taking into account Duval and Tweedie’s Trim and Fill adjustment (2000), no studies required imputation and, therefore, no adjusted effect size as computed.

**Discussion**

**Summary of Main Findings**

Several noteworthy results were found in my analyses. Firstly, as hypothesized, women were more likely to be portrayed in domestic roles and settings (H1a). Secondly, women were also more likely to be portrayed in parenting roles than their male counterparts (H1b), however, there appears to be some nuance in parenting, with men being more likely to be seen in availability and responsibility parenting roles. Thirdly, men were more likely to be portrayed in occupational roles (H1c), including all the subcategories of occupational roles with the exception of assisting roles, which were almost exclusively portrayed by females. Regional moderation analyses indicated that regional differences existed for masculine stereotyping, but not for feminine stereotyping. Trend analyses by decade suggested that global gender stereotyping has decreased for feminine roles, but not for masculine roles.

It is also worth noting that, while gender stereotyping is considered to be more prominent in males and that socialized gender constructions are more rigid for males than for females in the media and at home (Kane, 2006), there were no significant differences between males and females in the amount or level of stereotyped roles in the media. These main findings support my initial hypothesis (H1), that traditional gender stereotypes are still perpetuated in television shows, commercials, and movies.
Portrayals of Domestic Involvement

Consistent with my hypotheses (H1a), the results indicated that women were more likely than men to be portrayed in the home and/or engaging in domestic roles/tasks. The trend analysis of domestic roles did not reveal a significant change in women’s domestic portrayals, suggesting that women are still doing the vast majority of domestic work in media. These findings are consistent with current research on families that suggests that even with increasingly egalitarian societies, women still do the majority of housework, even when both parents are employed fulltime (Bianchi, Milkie, Sayer, & Robinson, 2000; Meier, McNaughton-Cassill, & Lynch, 2006). Though not reflected in the results, research suggests men are sharing in more domestic work than they have in the past. In the 1960s men reported doing around 10% of housework; that number has tripled in recent decades to over 30% of housework (Bianchi, Milkie, Sayer, & Robinson, 2000). Though, as noted, this shift in men’s involvement in domestic work does not seek to be reflected in the media.

Portrayals of Parenting

The analyses of parenting roles revealed that women are more likely than many to be portrayed as mothers than men are as fathers. Women are also more likely to be seen engaging in traditional parenting tasks and behaviors. This finding was consistent with my hypotheses (H1a) that women would be seen in parenting roles more frequently than men. This result was unsurprising, given long-standing tradition that places child rearing as a primary function of women. Universally, women are primarily responsible for the nurture and care of offspring (Sear & Mace, 2008). Moreover, while societal changes are broadening the opportunities for women, 29% percent of women in the United States still stay at home with their children full time (D’Vera Cohn, Livingston, & Wang, 2014). Even among dual-earning couples, women still
report greater involvement in child rearing responsibilities than their male partners do (Meier, McNaughton-Cassill, & Lynch, 2006). Research has shown that children do benefit from maternal involvement. Studies have found that a mother’s involvement is associated with their children’s sociability (Burchinal, Follmer, & Bryand, 1996), positive academic performance (Yamamoto, Holloway, & Suzuki, 2006), and emotional regulation (Feldman, Eidleman, & Rotenberg, 2004) in children.

These findings, while positive in maternal portrayals, also demonstrate that men are less likely to be seen in general parental roles than their female counterparts. However, in recent decades, shifts in society have influenced changing expectations in families (Petts, Shafer, & Essig, 2018; Yaremko & Lawson, 2007). This may be reflected in the media as the analyses indicated that men, more than women, were portrayed in specific availability (i.e. playing/doing activities with their children) and responsibility (i.e. helping with specific tasks, discussing problems, and discipline) parenting domains. This was contrary to our hypothesis, and is worth investigating further. This may suggest that when men are portrayed as fathers, they are more likely to be seen being intentional in that parenting. Whereas for women, portrayals of motherhood are less reliant on deliberate engagement with the children in specific activities, but a more comprehensive nurturing that happens outside of media-noteworthy circumstances.

**Portrayals of Occupations**

In regards to occupations, men were more likely than women to be portrayed in general, as well as most subcategories of occupational roles. These results are consistent with my hypothesis that men would be portrayed in more occupational roles than women (H1c). Of the occupational subcategories, the greatest differences were in white collar and law enforcement/military careers. White collar work encompassed several professional fields,
including law and medicine, managerial or administrative work, and office workers. Limited portrayals of women in professional fields and high-level administrative roles may have indirect implications for women’s access to these positions. Some might suggest that these portrayals might be accurate depictions of reality, as only a 6.4% of top executives in of Fortune 500 companies are women (Zarya, 2017). While Fortune 500 companies are not an accurate measure of business leadership as a whole, the majority of white collar positions are still held by men. This trend is changing and we would expect these depictions to change over time as well, as women now earn the majority of undergraduate, masters, and doctoral degrees (Okahana & Zhou, 2017), and thus have the professional certifications and qualifications to compete for high-level positions in a variety of fields.

Only in assisting occupations (nursing, secretarial work, etc.), were women higher than men. Though this is as I hypothesized (H1c), this may reinforce false notions about women’s capabilities in different occupational fields, through both influencing those who hire individuals and also by potentially limiting females’ perceptions of what career paths are viable options. A lack of representation across disciplines may push women into a small number of service or assisting opportunities, with limited earning or progression potential. According to Herrett-Skjellum & Allen (1996), these stereotypical portrayals of women can play a significant role in reinforcing children's attitudes towards genders and stereotypes, and has even been found to influence gendered behaviors in children as young as three years of age (Coyne, Linder, Rasmussen, Nelson, & Collier, 2014). These findings and implications regarding female portrayals in the media are particularly relevant given that these feminine stereotypes can have lasting impacts on girls’ attitudes and behaviors. For example, girls who are consistently exposed
to a certain type of female character (Coyne, et al., 2016), were found to engage in more gender-stereotypical behavior a year later.

While gendered behavior in boys and girls is not inherently bad, it is important to consider how gendered behaviors could be detrimental or restricting to individuals. The findings above— that women are primarily portrayed in domestic roles or settings, combined with few portrayals of professional women— may influence some girls to feel that future career or lifestyle options are limited to them (Coyne, et al., 2016). Gendered portrayals in the media could lead boys or girls to feel dissociated from certain aspects of their gender or identity if their personal preferences or interests do not align with the social portrayed expectations of their biological sex.

**Regional Differences**

In addition to the gendered outcomes coded, moderating for region produced some interesting findings. It is worth noting again that region was used as a cultural marker, to address cultural variability. However, even within the regions analyzed, there is significant intraregional cultural variability. The regions included in the analyses all have numerous cultures with varied traditions, religions, and ideologies that also influence gender socialization and roles. Ideally, an analysis of media would be able to consider these intraregional differences. However, at this point, there are not enough studies to consider such differences, meaning that caution should be exercised as to not overgeneralize these findings.

The regional moderation analysis, revealed interesting distinctions between masculine and feminine gender portrayals. While there were significant differences between regions for masculine gender portrayals, there were not significant regional differences for feminine gender portrayals. It was particularly interesting that the United States and the Middle East reported
higher levels of gender stereotyping than all other regions, suggesting important socializing influence behind gender roles and their portrayals in the media. As I posited that gender stereotypes would differ for both men and women, this finding only partially did not support my hypothesis (H2).

In considering why only men would differ between regions, it is important to acknowledge how some gender norms, while enhanced through socialization, could be tied to biological differences in men and women that may influence socialized role assignments. It is likely women’s roles as child bearers has universal implications for women’s places in society, despite other cultural or societal differences. While less traditional roles are possibilities for women, most women do have children, and take on maternal identities and responsibilities. Some of these responsibilities may naturally fall to her (i.e. breast-feeding, etc.), but are reinforced over time to where, even beyond breast-feeding age, mothers are then considered responsible for nurturing that child. The advent of baby formula, bottles, and milk pumping enable parents to feed infants, even without the required presence of the mother. However, even though these are readily available in some regions and not others, this was not reflected in the results. As more women use these alternatives to natural breastfeeding, it is possible that it could influence the co-parenting dynamic with their partners, and have implications for societal expectations of gender for both men and women.

Changes Over Time

The trend analysis also produced interesting findings worth greater consideration. In the analysis of masculine stereotypes, there were no significant differences across any decade pairings. This does not support my original hypothesis (H3) that posited that they would be significant differences masculine gender stereotypes over time. This null finding might suggest
that, despite societal shifts in gendered expectations, masculine gender role portrayals in the media have not significantly decreased over the last 6 decades, at least across all regions. However, while masculine gender roles as a whole did not change significantly overtime, a trend analysis that considered general occupational roles alone did reveal a significant decrease in men’s occupational portrayals over time. It is possible that men in the media are more likely to be seen in their roles (e.g. fathers, husbands, neighbors) that just in their occupational roles. It is also possible that women’s portrayals in occupational roles have increased. As more women are portrayed in work settings, I would anticipate some of those women are in occupational roles that would have been assigned to men in earlier decades.

For feminine gender stereotyping, analyses revealed significant decreases in the media over time. This finding supports our hypothesis (H3), and other research findings that submit that gender norms have become less severe in recent decades (López-Sáez, Morales, & Lisbona, 2008). One possible explanation for a decrease in feminine gender stereotyping is the feminist movement. The feminist social movements of the 1950s-1970s brought about some significant changes in our understanding of women’s roles in the family, in the workplace, and in society. This dynamic expansion of female roles gave greater opportunity to women, often breaching long held boundaries that limited women’s access to roles that had been protected for men. As more women embraced roles outside their normal realm, it would also influence their more traditional roles, likely decreasing their time in those traditionally roles. As the feminist movement was initially a movement for women’s rights and opportunities, it directly targeted women and the expectations and opportunities available to them. While this shift in gender role expectations did have repercussions for men and expectations regarding masculinity (McRobbie,
2009), the effects of the feminist movement on masculinity has been less clear, causing much more ambiguity, and perhaps the reinforcement of traditional masculinity.

It is also possible that the lack of change over time for masculine role stereotyping is in part due to the specificity of the roles considered in this meta-analysis. It is possible that masculinity is shifting in ways beyond specific roles. For example, some content analytic research on fathers in the media shows decreases in aggression and assertion (Essig et al., 2015), while showing an increase in sexualization and buffoonery (Kroff, Engebretson, Wheeler, & Coyne, 2017). These aspects of masculinity may not be measured by considering specific roles, but may be how those roles are performed. In the context of this study, though men are still more likely to be portrayed in occupational roles, perhaps they are less aggressive and more communicative and understanding. Additional research is needed to understand other dimensions of gender stereotyping in the media.

**North American regional trend analysis.** In addition to these considerations, a subsequent trend analyses were considered, looking at regional differences across time. However, only the North American region had sufficient data to conduct this region trend analysis. Though the decades needed to be groups to carry out this analysis (i.e. 1950-1989, 1990s, and 2000-2017), subsequent trend analysis of North American media did differ from the non-significant findings of overall trend analysis. This analysis revealed that media portrayals between 1950 and 1989 were significantly more stereotyped than in later decades. This was true for both male and female stereotyped roles.

These findings suggest as originally hypothesized (H3), that—at least in North American media—gender stereotyping has significantly decreased over time for both masculine and feminine roles. It is possible that this is also true of other regions, though, the limited number of
studies from those regions made an accurate analyses of those regions impossible at this time. It is also possible that a trend analysis that groups all regions may have mixed findings that render the overall findings insignificant, when nuances between regions are significant on their own. With time, additional studies of those regions will make future analyses possible.

**Limitations**

There are several limitations in this study, the majority stemming from the content analytic meta-analysis design. Firstly, as data collection and coding were carried out by the study authors and their research teams, there is likely some variation in outcome coding across the different gendered categories. While studies were chosen if the current authors felt that the conceptual and operational definitions were consistent with their overarching definitions, individual variation within studies could limit reliability of the outcomes. Additionally, the content-analytic nature of this study makes it more difficult to ascertain specific information about commercial demographics or target audiences. Some studies did specify certain channels or audiences, but many studies did not report this information, making it difficult to control for target audience demographics.

Further, many of the studies only reported on general parenting, domestic, or occupational roles, without specifying variation within those categories. As discussed here, certain aspects of each of the parenting, domestic, and occupational domains are gendered, and without specific information addressing differences within the domains, we cannot understand the intricacies of gendered roles, and how they may manifest in various domains.

While this study did look at regional differences on a global level as a cultural marker, it was not able to consider differences in portrayals of men and women of different racial and ethnic backgrounds. With an increasingly diverse world, the experience of ethnic and racial
groups within regions is also worth considering. In many cases, racial and ethnic minorities are subjected to increased discrimination based on unfair or unfounded stereotypes. However, only a few studies of those in this meta-analysis considered racial differences in portrayals. The effect sizes of these were insufficient to run meaningful analyses. Additional research is needed to consider the ways in which the intersectionality of race and gender might influence gender roles or media stereotypes.

The rate proportion difference statistic is also a potential limitation. Unlike betas or other effect size coefficients, this effect size is more subjective in its interpretation and significance. These scores represent a percentage of difference between males and females in a given gender role portrayals, but there is not standardized measure to assert whether a 10% differences, while statistically significant, is particularly meaningful. Some may feel that smaller rate proportion differences (e.g. lower than 20-25%) are not very telling or substantially meaningful as to be worth consideration. Others may feel that any difference in men and women in some gender roles, particularly occupational portrayals represent some form of gender inequality and are therefore worth serious consideration.

The exclusion on several relevant studies also limits this study. A number of articles were not included in the final analyses for varying reasons including missing variables, incomplete reporting of outcomes, or while several only reported stereotyping on one gender. Researchers studying gender in the media should make every effort to report relevant information on both genders as comparison across both allows for more accurate interpretation of data, comparison across groups, and contributes more meaningfully to the literature of gender in the media.
Future Directions

Aside from the future directions mentioned throughout the discussion, several other important directions should be considered. First, as far as we know, this is only the second content-analytic meta-analysis on gender portrayals in the media, with the first conducted by Eisend (2010), focusing exclusively on media advertising. Despite thousands of publications addressing gender portrayals and gender stereotyping in different media, regions, and demographics, very little effort has been made to synthesize and integrate these vast findings. Similar meta-analyses should investigate content analyses that investigate gender portrayals and stereotyping in music, music videos, video games, and in print media. These future studies would add meaningfully to the literature giving us a much more comprehensive understanding of how gender is taught in various dimensions of our media-saturated world.

In addition to meta-analytic studies, future research could investigate the ways in which advertising media differs from programmed media. Most research on commercials have focused on the marketing or advertising, the commercials effect on the viewers’ attitudes or behaviors towards a particular product (Borzekowski & Robinson, 2001; Harris, Bargh, & Brownell, 2009). However, to our knowledge, little research has investigated how people—particularly children and adolescents internalize or interpret other aspects of commercial content, including gender portrayals. Additional research into this dimension would help us understand how commercials are similar to or distinct from other forms of media we consume.

Conclusion

Gender is a social construction based on biological differences in men and women. As societies, we construct how we perceive gender and gender differences. As a culture, we shape the expectations as well as the limitations associated with being male or female. These gendered
roles and expectations are reflected in the media we create and consume, often exaggerating and dichotomizing gender differences, which may perpetuate unhealthy or limiting gendered dynamics. These gender stereotypes portrayed in the media play a significant role in the internalization of socialized gender differences, potentially leading to damaging or restrictive views towards one or both sexes, including one’s own. It is only as we become more conscientious of the gendered media messages we consume can we become more active and critical consumers of the ceaseless barrage of media messages.
References

*References marked with an asterisk indicate studies included in the meta-analysis*


doi:10.1023/A:1007046204478


doi:10.1080/02732170290062658


Risman, B. J. (2009). From doing to undoing: Gender as we know it. *Gender & Society, 23*, 81-84.


   doi:10.1080/15205436.2016.1212243

   doi:10.1007/s11199-009-9736-z


   doi:10.1207/s15327825mcs0702_5


## Appendix A

### Table 1.

Mixed Effects Analysis Results for Portrayals of Male and Female Stereotypical Gender Roles

<table>
<thead>
<tr>
<th>Roles</th>
<th>k</th>
<th>Rate Proportion Difference</th>
<th>Standard Error</th>
<th>95% CI</th>
<th>Z</th>
<th>P-value</th>
<th>Q (df)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Stereotypical (M)</td>
<td>60</td>
<td>19.56%</td>
<td>3.715</td>
<td>12.28 to 26.84</td>
<td>5.26</td>
<td>0.000</td>
<td>357.37 (59)</td>
<td>0.000</td>
</tr>
<tr>
<td>Female Stereotypical (F)</td>
<td>52</td>
<td>18.75%</td>
<td>4.42</td>
<td>10.08 to 27.41</td>
<td>4.24</td>
<td>0.000</td>
<td>126.67 (51)</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Table 2.

Mixed Effects Analysis Results for Portrayals of Male and Female in Domestic Roles

<table>
<thead>
<tr>
<th></th>
<th>k</th>
<th>Rate Proportion Difference Effect Size</th>
<th>Standard Error</th>
<th>95% CI</th>
<th>Z</th>
<th>P-value</th>
<th>Q (df)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (F)</td>
<td>41</td>
<td>16.88%</td>
<td>2.75</td>
<td>11.49 to 22.26</td>
<td>6.14</td>
<td>0.000</td>
<td>186.02 (40)</td>
<td>0.000</td>
</tr>
<tr>
<td>Cleaning (F)</td>
<td>12</td>
<td>9.69%</td>
<td>4.27</td>
<td>1.31 to 18.06</td>
<td>2.27</td>
<td>0.000</td>
<td>875.90 (11)</td>
<td>0.000</td>
</tr>
<tr>
<td>Repairs (M)</td>
<td>3</td>
<td>11.24%</td>
<td>4.78</td>
<td>1.86 to 20.61</td>
<td>2.35</td>
<td>0.019</td>
<td>891.88 (2)</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Table 3.

Mixed Effects Analysis Results for Portrayals of Male and Female in Parenting Roles

<table>
<thead>
<tr>
<th></th>
<th>k</th>
<th>Rate Proportion Difference</th>
<th>Standard Error</th>
<th>95% CI</th>
<th>Z</th>
<th>P-value</th>
<th>Q (df)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (F)</td>
<td>16</td>
<td>10.19%</td>
<td>3.71</td>
<td>2.92 to 17.47</td>
<td>2.75</td>
<td>0.006</td>
<td>519.49</td>
<td>0.000</td>
</tr>
<tr>
<td>Availability (F)</td>
<td>2</td>
<td>-12.97%</td>
<td>1.54</td>
<td>-15.99 to -9.95</td>
<td>-8.43</td>
<td>0.000</td>
<td>106.22</td>
<td>0.000</td>
</tr>
<tr>
<td>Responsibility (F)</td>
<td>2</td>
<td>-9.86%</td>
<td>4.09</td>
<td>-17.87 to -1.86</td>
<td>-2.41</td>
<td>0.016</td>
<td>472.79</td>
<td>0.000</td>
</tr>
<tr>
<td>Warmth (F)</td>
<td>3</td>
<td>2.44%</td>
<td>2.09</td>
<td>-1.65 to 6.53</td>
<td>1.17</td>
<td>0.242</td>
<td>840.14</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Table 4.

Mixed Effects Analysis Results for Portrayals of Male and Female in Occupational Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>k</th>
<th>Proportion</th>
<th>Standard Error</th>
<th>95% CI</th>
<th>Z</th>
<th>P-value</th>
<th>Q (df)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (M)</td>
<td>46</td>
<td>15.32%</td>
<td>2.39</td>
<td>10.63 to 20.01</td>
<td>6.41</td>
<td>0.000</td>
<td>208.64 (45)</td>
<td>0.000</td>
</tr>
<tr>
<td>White Collar (M)</td>
<td>26</td>
<td>19.46%</td>
<td>6.81</td>
<td>6.11 to 32.80</td>
<td>2.86</td>
<td>0.004</td>
<td>163.22 (25)</td>
<td>0.000</td>
</tr>
<tr>
<td>Blue Collar (M)</td>
<td>14</td>
<td>6.79%</td>
<td>2.63</td>
<td>1.62 to 11.95</td>
<td>2.58</td>
<td>0.001</td>
<td>775.52 (13)</td>
<td>0.000</td>
</tr>
<tr>
<td>Enforcement (M)</td>
<td>11</td>
<td>25.58%</td>
<td>10.57</td>
<td>4.87 to 46.30</td>
<td>2.42</td>
<td>0.015</td>
<td>566.44 (10)</td>
<td>0.000</td>
</tr>
<tr>
<td>Criminal (M)</td>
<td>7</td>
<td>3.55%</td>
<td>1.33</td>
<td>0.264 to 5.49</td>
<td>2.16</td>
<td>0.031</td>
<td>500.07 (6)</td>
<td>0.000</td>
</tr>
<tr>
<td>Assisting (F)</td>
<td>13</td>
<td>32.53%</td>
<td>15.16</td>
<td>2.81 to 62.25</td>
<td>2.15</td>
<td>0.032</td>
<td>775.89 (12)</td>
<td>0.000</td>
</tr>
<tr>
<td>Entertainment (F)</td>
<td>5</td>
<td>1.95%</td>
<td>2.41</td>
<td>-2.78 to 6.68</td>
<td>0.81</td>
<td>0.418</td>
<td>351.12 (4)</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Table 5.

Moderation Analysis Results by Region for Male and Female Stereotypical Portrayals

<table>
<thead>
<tr>
<th>Moderator</th>
<th>Level</th>
<th>Rate</th>
<th>Proportion Difference</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td></td>
<td></td>
<td>k</td>
<td>Q</td>
</tr>
<tr>
<td>Male Stereotypical Roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. America</td>
<td>26.27***</td>
<td>31</td>
<td>324.86</td>
<td>4.51</td>
</tr>
<tr>
<td>W. Europe</td>
<td>11.36***</td>
<td>8</td>
<td>324.86</td>
<td>6.92</td>
</tr>
<tr>
<td>E. Europe</td>
<td>12.62*</td>
<td>5</td>
<td>324.86</td>
<td>2.00</td>
</tr>
<tr>
<td>Asia</td>
<td>9.17***</td>
<td>10</td>
<td>324.86</td>
<td>4.08</td>
</tr>
<tr>
<td>Middle East</td>
<td>39.36*</td>
<td>5</td>
<td>324.86</td>
<td>2.35</td>
</tr>
<tr>
<td>Female Stereotypical Roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. America</td>
<td>23.59**</td>
<td>25</td>
<td>524.38</td>
<td>3.28</td>
</tr>
<tr>
<td>W. Europe</td>
<td>9.73***</td>
<td>5</td>
<td>524.38</td>
<td>3.64</td>
</tr>
<tr>
<td>Asia</td>
<td>12.82***</td>
<td>8</td>
<td>524.38</td>
<td>4.30</td>
</tr>
<tr>
<td>Middle East</td>
<td>32.26*</td>
<td>5</td>
<td>524.38</td>
<td>2.17</td>
</tr>
</tbody>
</table>

Note. p<.001 *** , p<.01 **, p<.05 *
Table 6.

Trend Analysis Results for Male and Female Stereotypical Portrayals

<table>
<thead>
<tr>
<th>Moderator</th>
<th>Level</th>
<th>Rate Proportion Difference</th>
<th>Effect Size</th>
<th>k</th>
<th>Q</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decade</td>
<td>Male Stereotypical Roles</td>
<td></td>
<td>718.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950s – 1970s</td>
<td>48.04</td>
<td>4</td>
<td>718.20</td>
<td>1.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td>36.69**</td>
<td>6</td>
<td>718.20</td>
<td>2.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990s</td>
<td>13.45</td>
<td>20</td>
<td>718.20</td>
<td>1.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000s</td>
<td>13.67***</td>
<td>23</td>
<td>718.20</td>
<td>5.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010s</td>
<td>12.51***</td>
<td>6</td>
<td>718.20</td>
<td>4.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Stereotypical Roles</td>
<td></td>
<td></td>
<td>360.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950s – 1970s</td>
<td>54.22*</td>
<td>4</td>
<td>360.38</td>
<td>1.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td>14.75</td>
<td>2</td>
<td>360.38</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990s</td>
<td>18.42***</td>
<td>16</td>
<td>360.38</td>
<td>3.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000s</td>
<td>10.63***</td>
<td>24</td>
<td>360.38</td>
<td>4.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010s</td>
<td>11.93**</td>
<td>7</td>
<td>360.38</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. p<.001 **, p<.01 **, p<.05*
Appendix B

Figure 1.

Flow chart describing identification and selection of studies for inclusion in the meta-analysis.

Records identified through database searching (n = 728)

Additional records identified through other sources (n = 2)

Records identified through search (n = 730)

Duplicate studies removed (n = 15)

Records screened (n = 715)

Records excluded after screening (n = 647)

Full-text articles assessed for eligibility (n = 68)

Studies with Gender Portrayal Outcomes (n = 55)

Full-text articles excluded from synthesis because content focused on gender stereotypes nor related to parenting, domestic, or occupational roles (n = 13)

Full-text articles excluded from synthesis for missing data necessary to compute statistics (n = 10)

Studies included in synthesis (meta-analysis) (n = 45)