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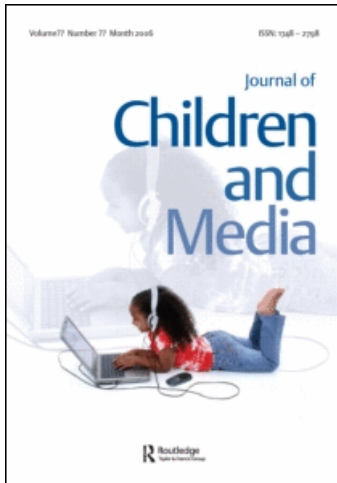
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DUTCH CHILDREN'S JUDGMENTS OF GENDER STEREOTYPICAL PICTURES IN ADVERTISEMENTS

Johannes W.J. Beentjes and Loes Janssen

Judged by the high level of gender stereotyping in advertising directed at children, advertising professionals apparently assume that this type of portrayal is appealing for them. This paper investigates the extent to which this assumption is correct. The study focused on ninety-six children in the age of 8 to 12 years in The Netherlands and on portrayals of characters in advertising pictures. Children judged a series of gender stereotypical and nonstereotypical photographs, in which adults or children advertised specific products. Children individually indicated which picture of a pair they considered as (a) most similar to reality, (b) most realistic as an advertisement, and (c) most likeable. Overall, children liked the stereotypical pictures better, and evaluated them as more similar to reality, and more like real advertisements. One type of pictures contradicted this general conclusion: the pictures that depicted girls in a tough pose (nonstereotypical) were liked better and were seen as more realistic advertisements than pictures where girls adopted a sweet pose (stereotypical).

KEYWORDS advertising; children; gender; stereotyping

Introduction

Critics of gender stereotyping in the media are concerned that media users may internalize these stereotypes (e.g. Saito, 2007; Schwartz & Markham, 1985). Gender stereotypes are generic assumptions about psychological or behavioral characteristics, and roles that are differentially appropriate for men or women (Browne, 1998). An advantage of stereotypes is that they enable us to process information quickly and without much thought. Nevertheless, stereotypes simplify reality and may not do justice to the persons involved (Signorielli, 2001). Because children spend much time using the media and do not yet have the experience to critically evaluate media messages, they would be particularly susceptible to the stereotypes that are being portrayed. Gender stereotypes may influence how children perceive themselves and others. In addition, gender role expectations may affect social interactions, choice of profession, and their achievement motivation (Macklin & Kolbe, 1984). Judged by the high level of gender stereotyping in advertising directed at children, advertising professionals apparently assume that this type of portrayal is appealing for children. This paper investigates the extent to which this assumption is correct.

Gender Stereotyping in Advertising

Because commercials and advertisements lack the time or the space to elaborate on characters and need to present their messages fast and clearly, advertisers tend to use

recognizable images that they expect to be instantly understandable for their target groups. Presumably that is why advertisers rely on stereotypes, including gender stereotypes. Consequently, advertising does not reflect the diversity of men and women in society. When justifying this simplification, advertisers may say that advertising is meant to sell and not to reflect the realities of life.

Various content analyses of gender portrayal in advertising on television and in magazines produced rather consistent results over time. Through the years, men have been generally overrepresented in television commercials (Allan & Coltrane, 1996; Ganahl, Prinsen, & Netzley, 2003), although women were overrepresented in advertising for domestic products groups (Bartsch, Burnett, Diller, & Rankin-Williams, 2000; Ferrante, Haynes, & Kingsley, 1988; Furnham & Skae, 1997); nine out of ten times commercials used male voiceovers, which may be interpreted as a sign of male authority (Bartsch et al., 2000; Bretl & Cantor, 1988; Furnham & Skae, 1997); men were presented as more dominant and active, whereas women were more passive and dependent (Courtney & Whipple, 1974; Furnham & Skae, 1997; Ganahl et al., 2003); women were more frequently shown inside the home, and in traditional caretaking roles such as wife or mother, whereas men were more often portrayed in professional roles and outside the home (Bretl & Cantor, 1988; Ferrante et al., 1988; Valls-Fernandez & Martinez-Vicente, 2007).

In line with the results for television commercials, advertisements in magazines portrayed women in household roles, not making important decisions, and in need of male protection (Courtney & Lockeretz, 1971; Doering & Poeschl, 2006; Lindner, 2004). One cross-national study of advertisements in magazines in The Netherlands, Sweden, and the US showed only small differences between these countries in the portrayal of men and women (Wiles, Wiles, & Tjernlund, 1995), suggesting that gender-role portrayals are universal.

Some content analyses addressed advertising that was specifically aimed at children. Like general advertising, child-directed advertising showed both adults and children with gender stereotypical characteristics and in gender stereotypical roles. The majority of dominant characters in television commercials turned out to be male (Furnham, Abramsky, & Gunter, 1997; Hentges, Bartsch, & Meier, 2007; Macklin & Kolbe, 1984); commercials that targeted boys showed more active characters than commercials directed at girls (Macklin & Kolbe, 1984; Sternglanz & Serbin, 1974). Girls were more passive, more restricted in their movements, and more often depicted at home, whereas boys were active, adventurous, and outside (Browne, 1998; Smith, 1994). Buijzen and Valkenburg (2002) studied the use of appeals in commercials directed at children, and found that some of the appeals were based on gender stereotypes. The most typical appeals in commercials directed at boys were "action and adventure" and "sports and games," whereas commercials directed at girls emphasized caretaking, physical attractiveness, friendship, and love.

The research findings above show that gender stereotyping is quite common in advertising, including child-directed advertising. Although some studies that compared data over time suggest that women are increasingly being portrayed in work-related situations and in more diverse professions (Allan & Coltrane, 1996), gender stereotyping is still a widespread phenomenon in advertising.

Research Question

The present study was designed to find out how children judge the gender stereotypical portrayals of adults and children in advertising. The study focused on

children aged 8–12 years and on portrayals of characters in advertising pictures. Children judged a series of gender stereotypical and nonstereotypical photographs, in which adults or children advertised specific products. On a gender stereotypical photograph, characters of either sex were associated with a role or with a characteristic that is regarded as typically male or female. In contrast, a nonstereotypical picture showed characters with a characteristic or role that is regarded as untypical for their gender. The judgment of the photographs in the present study involved three aspects. The first aspect was the extent to which children judged the photographs as true to reality. This judgment shows whether children see the stereotypical or nonstereotypical portrayals as reality based. The second aspect was the extent to which children regarded the photographs as realistic examples of advertisement photographs. The third aspect of children's judgment was how much they liked the photographs. In sum, the judgments answer the question whether advertising professionals correctly assume that gender stereotypical portrayals in advertising are appealing for children. In order to assess children's judgments, photographs were presented pair wise, and children always chose between two pictures, one with a gender stereotypical portrayal and the other with a nonstereotypical portrayal. We asked children to choose between two pictures because the obvious alternative task of rating individual photographs in terms of the three aspects that we were interested in (being true to reality, similarity to real advertisements, and preference) is difficult for children. We felt that the task of choosing between two photographs would yield more valid results.

Hypotheses

The first hypothesis is based on the division of household tasks between men and women in The Netherlands, where the study was carried out. Despite emancipatory changes, women still do most of the housekeeping, whereas men do most of the handyman chores in and around the house (CBS, 2003). Because of this traditional division of roles in Dutch families, we expect children to point at gender stereotypical roles in households as more reality based in comparison to nonstereotypical roles.

H1: Children choose the photographs with gender stereotypical household roles as more true to reality than pictures with nonstereotypical roles.

The second hypothesis is about children's judgments of whether the photographs are realistic examples of advertising pictures. The hypothesis proposes that children will judge the gender stereotypical portrayals as more resemblant of advertisement pictures, because they will base their judgments on their experience that most advertisements they see in daily life contain gender stereotypes.

H2: Children choose the gender stereotypical photographs as more realistic examples of advertisement pictures than nonstereotypical pictures.

The third hypothesis is based on the so-called *mere exposure effect* predicting that the more we are exposed to objects or people the more we come to like them (Zajonc, 1968). Because gender stereotypes are common in advertising, we expect that children will like this type of portrayal more than nonstereotypical portrayals.

H3: Children like gender stereotypical photographs more than nonstereotypical pictures.

The fourth hypothesis is derived from the so-called *outgroup homogeneity effect*, predicting that people's estimates of the variation in their own group, the ingroup, are generally higher than their estimates of the variation in groups they do not belong to, the outgroup (Brewer & Brown, 1998). In other words, people regard the outgroup as more homogeneous than the ingroup. People tend to overestimate the similarities between the members of an outgroup, whereas they tend to emphasize the differences between individuals in an ingroup, partly because they know more about their own group (Vonk & Olde Monnikhof, 1998). The effect predicts that women will see fewer differences in characteristics between men than between women, whereas men will have the opposite perspective (Linville, Fischer, & Salovey, 1989). Indeed, women appear to come up with more subgroups or types of women, whereas men distinguish more types of men, despite frequent encounters with members of the opposite sex (Vonk & Olde Monnikhof, 1998).

Assuming that the outgroup homogeneity effect applies not only to adults but also to children in the age range of 8–12 years, we expect children to see their own gender ingroup as more heterogeneous than the outgroup of the opposite gender. Therefore it seems likely that children will favor stereotypical portrayals of the opposite sex, whereas they will not have a preference for stereotypical or nonstereotypical portrayals of their own sex.

H4a: Boys like gender stereotypical portrayals of girls more than nonstereotypical portrayals of girls, whereas they equally like gender stereotypical and nonstereotypical portrayals of boys.

H4b: For girls, the hypothesis is analogous. They prefer gender stereotypical portrayals of boys, whereas they will equally like gender stereotypical and nonstereotypical portrayals of girls.

Method

Participants

The study was carried out with ninety-six children aged 8–12 years from four grades (3 to 6) of a regular primary school in The Netherlands. The school has a heterogeneous population regarding socioeconomic status and ethnicity of the children's families. In each grade twelve boys and twelve girls were randomly selected.

Materials

For the purpose of this study, twenty-eight photographs (fourteen pairs) were made, picturing six different persons: two boys aged 9 and 12 years; two girls aged 11 and 12 years; an adult man aged 30 and an adult woman of 29 years. Within each pair, the photographs differed in gender stereotypical characteristic or role, whereas the pictures were designed to be identical in other respects; both photographs showed portrayals of the same children or adults, in the same background, and the advertised products were identical. In this way we tried to make sure that differences in children's choices for either photograph could be ascribed to the stereotype and not to other characteristics. Gender stereotyping was operationalized by means of the concepts

“tough” and “sweet,” because they seem applicable to many of the characters in advertising directed at children. We categorized the pictures as stereotypical when a girl posed as being sweet, and as nonstereotypical when a girl posed as being tough. In contrast, pictures with boys were categorized as stereotypical when a boy posed as being tough, and as nonstereotypical when a boy posed as being sweet. In order to check whether we had succeeded in making sweet and tough pictures, we asked children from grade 2 ($n=7$) and grade 3 ($n=6$) to indicate whether a picture was either sweet or tough. For the present study we selected the pictures that were unanimously categorized as either sweet or tough, in sum fourteen pairs of pictures.

Nine of the fourteen pairs showed either a boy or a girl with a product. Each pair consisted of a gender stereotypical and a nonstereotypical picture of the same child. Five of the paired pictures showed girls who were advertising either an umbrella, marmalade, chips, a puzzle book, or drinking straws with animal cartoons. The other four pairs showed boys who were advertising either a football, chips, or candy bars.

The remaining five pairs portrayed men and women in gender stereotypical or nonstereotypical roles. Three pairs of pictures showed either a man or a woman in a housekeeping role: ironing (advertising ironing spray), cleaning windows (advertising window cleaner), or cooking (advertising tortilla wraps) (see for example Figure 1). Two pairs of pictures showed either a man or a woman in a handyman role: changing the oil of a car engine (advertising motor oil), or drilling a hole in a wall (advertising a cordless drill) (see for example Figure 2). On each picture either the man or the woman was watching while the other character was performing the role. We categorized the pictures with a woman in a housekeeping role and the pictures with a man in a handyman role as stereotypical. In contrast, the pictures that showed the opposite were categorized as nonstereotypical.



FIGURE 1

Example of picture pair with a man (nonstereotypical) and a woman (stereotypical) in a housekeeping role.



FIGURE 2

Example of picture pair with a woman (nonstereotypical) and a man (stereotypical) in a handyman role.

Judgments

In order to assess which picture of a pair was preferred, we asked each child to point at the picture they most liked. A choice for the stereotypical picture was scored as +1, whereas the opposite choice was scored as -1; when a child did not express a preference the answer was scored as 0. Subsequently, three sum scores were calculated: one preference score for the five pairs that showed a girl; one preference score for the four pairs that showed a boy; a preference score for the three pairs with adults in housekeeping roles; and finally a score for the two pairs with adults in handyman roles. A positive sum score indicated a higher preference for the stereotypical pictures, and a negative sum score indicated that the respondent preferred the nonstereotypical pictures.

In order to assess whether children judged the stereotypical roles as true to reality, the five picture pairs with adults were introduced with the question whether the situations on the pictures sometimes happened in real life (yes/no), followed by the question which of both situations would happen more often in real life. The answers to the latter question were scored in the same way as the answers to the preference questions and converted into two sum scores; a sum score for the three picture pairs with housekeeping roles and a sum score for the two pairs with handyman roles.

In order to measure the judgment about similarity with real advertisements, we asked children to indicate for all fourteen pairs which photograph looked more like a real advertising picture. The answers were again scored like the preference scores and summed in four sum scores; for pictures with girls, for pictures with boys, for adults in housekeeping roles, and the fourth for adults in handyman roles.

Procedure

The study took place in 2005 at the participants' primary school. Each child was individually interviewed by two female students. The child sat next to one of the students who placed the picture pairs in front of the child and asked the questions as described

above. The second student was seated at some distance to observe and write down the child's responses. The picture pairs were presented in a fixed order. Within each pair, however, the left–right position of the gender stereotypical and nonstereotypical picture within each pair was systematically varied to control for a possible left or right bias. First, the child answered the preference question about all pairs. Subsequently, all pairs were presented a second time. For the pictures with boys and girls, the child answered only the question which picture was more like a real advertisement. For the pictures with adults in housekeeping and handyman roles, the child first answered the two connected real-life questions, and finally the question which picture was more like a real advertisement.

Results

In all analyses, children's judgments were expressed in terms of sum scores for each of the four picture types: (1) pictures with girls posing as either sweet or tough; (2) pictures with boys posing as either tough or sweet; (3) pictures with either a woman or a man in a housekeeping role; and (4) pictures with either a man or a woman in handyman role. A positive score on the three dependent variables (reality of the situation portrayed in the pictures with adult roles; similarity to a real advertisement; and the preference for either picture) indicates a higher score for the gender stereotypical pictures, whereas a negative score indicates that the nonstereotypical pictures scored higher. We used a one-sample *t*-test to check whether the mean sum scores deviated from 0, the midpoint of the scale. If significant deviations from the scale's midpoint were found, we concluded that children favored either the gender stereotypical or the nonstereotypical pictures.

Table 1 shows the mean sum scores for each picture type on the three dependent variables. The first column of Table 1 represents whether children find the gender stereotypical pictures of the adults in either housekeeping or handyman roles to be more true to life than the nonstereotypical pictures. The one-sample *t*-test showed that the children judged the stereotypical pictures in both picture types to be more true to life than the nonstereotypical pictures. This finding corresponds with the first hypothesis. In other words, children judged the pictures of women in housekeeping roles as more true to

TABLE 1

Mean judgment of similarity to daily life, similarity to a real advertisement, and preference of stereotypical (above zero) or nonstereotypical pictures (below zero) per picture type.

Picture type	Similarity to daily life	Similarity to a real advertisement	Preference
Woman or man in housekeeping role (max.: 3, min.: -3)	2.48*	0.76*	0.26 (<i>ns</i>)
Man or woman in handyman role (max.: 2, min.: -2)	1.96*	1.06*	0.59*
Tough or sweet boy (max.: 4, min.: -4)	—	1.67*	1.32*
Sweet or tough girl (max.: 5, min.: -5)	—	-0.58*	-0.89*

Note: *Deviation from 0 is significant ($p < .05$) according to one-sample *t*-test.

life than the pictures with men in the same roles; and they regarded the pictures with men in handyman roles as more similar to daily life than the pictures with female handymen.

The second column of Table 1 shows the mean sum scores of children's judgments about the similarity of the pictures to real advertisements. According to the one-sample *t*-test, children appeared to regard the stereotypical pictures more similar to real advertisements than the nonstereotypical pictures for three of the four picture types: children chose the pictures with women in housekeeping roles, men in handyman roles, and tough boys as more similar to real advertisements than the corresponding pictures with men in housekeeping roles, women in handyman roles, and sweet boys. These three findings support the second hypothesis, stating that children will choose gender stereotypical photographs as more similar to real advertisement pictures. However, with regard to the depictions of girls posing as either sweet or tough, children turned out to choose the nonstereotypical pictures as more similar to a real advertisement. This finding is opposite to the second hypothesis and surprising because advertising predominantly portrays girls as being sweet instead of tough.

The third column of Table 1 shows the mean sum scores of children's preference for either picture. According to the one-sample *t*-test, children favored the pictures with male handymen to pictures with females in handyman roles; and they preferred pictures of tough boys to pictures of sweet boys. These findings concur with the third hypothesis. The remaining findings however do not support the hypothesis that children would prefer stereotypical pictures. Among the pictures with a woman or a man in housekeeping roles we found no preference for either stereotypical or nonstereotypical pictures. Finally, the judgment about the fourth picture type was counterstereotypical: children preferred pictures of girls with a tough pose to those depicting girls as being sweet.

In order to determine whether children's gender or grade, the two variables we used to compose the sample, predicted the various sum scores, we carried out separate ANOVAs on the three dependent variables for each picture type with gender and grade (3, 4 vs. 5, 6) as factors. We did not find interaction effects or main effects of grade in any of the analyses. Neither did we find interaction effects of gender. This finding is in contrast with Hypothesis 4 predicting that children will favor stereotypical portrayals of the opposite sex, whereas they will not have a preference for either stereotypical or nonstereotypical portrayals of their own sex. In one instance (pictures with boys, similarity to real advertisement) we found a main effect of gender, $F(1, 92) = 3.98, p < .05$. Table 2 shows that, although both genders judged the pictures of tough boys to be more like real advertisements (all means are positive), girls did so more often than boys (girls' mean scores are higher than those of boys). Despite this qualification, the general conclusion is

TABLE 2

Mean judgment of similarity to real advertisement of pictures with tough (above zero) or sweet boy (below zero) by gender and grade.

Gender	Grade 3/4	Grade 5/6	Sum
<i>M</i>	1.21	1.42	2.63
<i>F</i>	1.92	2.13	4.05
Sum	3.13	3.55	

neither children's grade nor children's gender affected their judgments of stereotypical and nonstereotypical pictures.

Discussion

The main conclusion of the present study is that children's judgments of advertisement pictures are not quite stereotypical. Although children's choices between pictures support most of our stereotype-based hypotheses, our findings suggest that advertisers are well-advised to reconsider their tendency to portray girls as being sweet. For in contrast with the idea that gender stereotypes determine children's evaluations of advertisement pictures, we find that children prefer tough girls to sweet girls.

The first hypothesis, that children regard advertisement pictures with a stereotypical division of roles as more true to life, is supported by pictures with either a man or a woman in a handyman role or a housekeeping role. This conclusion applies to both grade groups and to both genders. The finding is in line with the fact that children are frequently confronted with stereotypical divisions of roles, both within and outside the media.

The second hypothesis, that children see gender stereotypical pictures as more similar to real advertisements, is supported for three picture types: pictures with either a man or a woman in housekeeping roles, adults of either gender in handyman roles, and pictures of a boy posing as either tough or sweet. When confronted with a girl in either a sweet or a tough pose, however, children of both genders and in both age groups chose the tough picture as the more realistic advertisement. The latter finding is opposite to the idea that children choose what they often see as more realistic.

The third hypothesis, that children prefer the gender stereotypical pictures to nonstereotypical pictures, is supported for only two of the four picture types: pictures with either a man or a woman in handyman roles, and pictures with a boy posing as either tough or sweet. Among the pictures with adults in housekeeping roles, we find no clear preference for either the stereotypical or the nonstereotypical portrayal. Within the fourth picture type, however, the one with girls posing as either sweet or tough, children of both genders and in both age groups prefer the tough pictures. The findings for the two latter picture types contradict the idea that people prefer portrayals that they come across more often, an idea that is derived from the so-called mere exposure-effect. An explanation for the lack of preference regarding the pictures that portray men and women in housekeeping roles may be that children are not interested in advertisements that are associated with housekeeping activities. The preference for tough girls may be found in the reservation that Zajonc (1968) made with regard to the mere exposure effect, namely that people should not yet have formed a strong opinion about the topic concerned. Possibly, children find the characteristic "toughness" so attractive that they are not affected by the frequent exposure to stereotypical portrayals of sweet girls. That "tough" is "in" corresponds to the ample availability of tough female role models in the popular culture outside of advertising, for instance Pippi Longstockings, Tank Girl, and Xena (Innes, 1998). In any case, our findings suggest that children prefer nonstereotypical tough portrayals of girls in advertisements to the stereotypical sweet portrayals.

The fourth hypothesis, that was derived from the outgroup homogeneity effect, is not supported. According to this effect, boys as well as girls would prefer the gender stereotypical depictions of the other gender, whereas they would equally appreciate

stereotypical and nonstereotypical portrayals of their own gender. We did not find such a pattern in children's preferences. It must be noted that the outgroup homogeneity effect was tested in research with adult participants (Vonk & Olde Monnikhof, 1998). Perhaps it develops with age. Another explanation may be that the effect does not apply to characteristics that are highly popular in the group that the participants belong to.

In sum, we find that gender stereotypes determine children's judgments in all respects (similarity to daily life, similarity to real advertisement, and preference) for two of the four picture types, namely the pictures with adults in a handyman (male) role, and pictures with tough or sweet boys. For one other picture type, the one with adults in a housekeeping (female) role, gender stereotypes affect children's judgment in two respects (similarity to daily life, and similarity to real advertisement) but not their preference. That's the first small blow for the assumption that children prefer stereotypical advertisements. A bigger blow is the finding that children irrespective of grade group and gender prefer pictures of tough girls to pictures of sweet girls. In addition, they judge pictures with tough girls to be more similar to real advertisements. This judgment may indicate that children have a better memory for tough than for sweet portrayals of girls.

A limitation of the present study lies in the manipulation of gender stereotypes. In this study we used pictures of girls or boys in either a sweet or a tough pose, and pictures of adults in housekeeping and handyman roles. Gender stereotyping in advertisements is of course expressed in other characteristics and roles as well. Besides, gender stereotypes may be emphasized in formal characteristics such as color and voiceovers. A recommendation for future research is the development of more and different pictures in order to investigate whether the conclusions of this study may be generalized to other types of pictures.

Notwithstanding this limitation, this study contradicts the assumption that children rely exclusively on gender stereotypes when they judge advertisements. Although this assumption may be true for some picture types we find one interesting exception, namely pictures with girls on the dimension sweet-tough. Whereas sweet girls are abundant in advertising, children prefer to see tough girls. Besides, children point at the pictures with tough girls as more similar to real advertisements, suggesting that tough depictions gain a more prominent place in memory. These judgments do not differ according to gender or age group. In the light of these findings it seems wise if advertisers start producing more advertisements and commercials featuring tough girls, thereby contributing to a more balanced and diverse portrayal of gender in advertising.

REFERENCES

- Allan, K., & Coltrane, S. (1996). Gender displaying television commercials: A comparative study of television commercials in the 1950's and 1980's. *Sex Roles, 35*(3/4), 185–203.
- Bartsch, R. A., Burnett, T., Diller, T. R., & Rankin-Williams, E. (2000). Gender representation in television commercials: Updating an update. *Sex Roles, 43*, 735–743.
- Bretl, D. J., & Cantor, J. (1988). The portrayal of men and women in US television commercials: A recent content analysis and trends over 15 years. *Sex Roles, 18*, 595–609.
- Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. J. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 357–411). New York: McGraw-Hill.
- Browne, B. A. (1998). Gender stereotypes in advertising on children's television in the 1990s: A cross-national analysis. *Journal of Advertising, 27*(1), 83–97.

- Buijzen, M., & Valkenburg, P. M. (2002). Appeals in television advertising: A content analysis of commercials aimed at children and teenagers. *Communications*, 27, 349–364.
- CBS. (2003). Retrieved April 13, 2005, from <http://www.cbs.nl/nl/>
- Courtney, A. E., & Lockeretz, S. W. (1971). A woman's place: An analysis of the roles portrayed by women in magazine advertisements. *Journal of Marketing Research*, 8, 92–59.
- Courtney, A. E., & Whipple, T. W. (1974). Women in TV commercials. *Journal of Communication*, 24, 110–118.
- Doering, N., & Poeschl, S. (2006). Images of men and women in mobile phone advertisements: A content analysis of advertisements for mobile communication systems in selected popular magazines. *Sex Roles*, 55, 173–185.
- Ferrante, C., Haynes, A., & Kingsley, S. (1988). Image of women in television advertising. *Journal of Broadcasting and Electronic Media*, 32, 231–237.
- Furnham, A., Abramsky, S., & Gunter, B. (1997). A cross-cultural content analysis of children's television advertisements. *Sex Roles*, 37, 91–99.
- Furnham, A., & Skae, E. (1997). Changes in the stereotypical portrayal of men and women in British television advertisements. *The European Psychologist*, 2(1), 44–51.
- Ganahl, D. J., Prinsen, T. J., & Netzley, S. B. (2003). A content analysis of prime time commercials: A contextual framework of gender representation. *Sex Roles*, 49, 545–550.
- Hentges, B. A., Bartsch, R. A., & Meier, J. A. (2007). Gender representation in commercials as a function of target audience age. *Communication Research Reports*, 24(1), 55–62.
- Innes, S. A. (1998). *Tough girls: Women warriors and wonder women in popular culture*. Philadelphia: University of Pennsylvania.
- Lindner, K. (2004). Images of women in general interest and fashion magazine advertisements from 1955 to 2002. *Sex Roles*, 51, 409–421.
- Linville, P. S., Fischer, G. W., & Salovey, P. (1989). Perceived distributions of the characteristics of in-group and out-group members: Empirical evidence and a computer simulation. *Journal of Personality and Social Psychology*, 57, 165–188.
- Macklin, M. C., & Kolbe, R. H. (1984). Sex role stereotyping in children's advertising: Current and past trends. *Journal of Advertising*, 13(2), 34–42.
- Saito, S. (2007). Television and the cultivation of gender-role attitudes in Japan: Does television contribute to the maintenance of the status quo? *Journal of Communication*, 57, 511–531.
- Schwartz, L. A., & Markham, W. T. (1985). Sex stereotyping in children's toy advertisements. *Sex Roles*, 12, 157–170.
- Signorielli, N. (2001). Television's gender role images and contribution to stereotyping. In D. G. Singer & J. L. Singer (Eds.), *Handbook of children and the media* (pp. 341–358). Thousand Oaks, CA: Sage.
- Smith, L. J. (1994). A content analysis of gender differences in children's advertising. *Journal of Broadcasting and Electronic Media*, 38, 323–337.
- Sternglanz, S. H., & Serbin, L. A. (1974). Sex role stereotyping in children's television programs. *Developmental Psychology*, 10, 710–715.
- Valls-Fernandez, F., & Martinez-Vicente, J. M. (2007). Gender stereotypes in Spanish television commercials. *Sex Roles*, 56, 691–699.
- Vonk, R., & Olde Monnikhof, M. (1998). Gender subgroups: Intergroup bias within the sexes. *European Journal of Social Psychology*, 28, 37–47.
- Wiles, J. A., Wiles, C. R., & Tjernlund, A. (1995). A comparison of gender role portrayals in magazine advertising: The Netherlands, Sweden and the USA. *European Journal of Marketing*, 29(11), 35–49.

Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, 1–27.

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