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THE PORTRAYAL OF MEN AND WOMEN IN AMERICAN TELEVISION COMMERCIALS: A REPLICATION AND EXTENSION presented by

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# THE PORTRAYAL OF MEN AND WOMEN IN AMERICAN TELEVISION COMMERCIALS: A REPLICATION <br> AND EXTENSION 

By

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## ABSTRACT

THE PORTRAYAL OF MEN AND WOMEN IN AMERICAN TELEVISION COMMERCIALS: A REPLICATION

AND EXTENSION

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This study is a replication and extension of an earlier work conducted by McArthur and Resko (1975) concerning the portrayal of men and women in American television commercials. The characteristics of adult male and female models in randomly selected television commercials were systematically coded and content analyzed by the authors, and several significant sex differences were discovered.

Focusing on the advertising viewed in millions of American homes, I also found that women are portrayed quite differently from their male counterparts. In my analysis of a sample of Fall 1978 network television ads, males and females manifested different behaviors which were followed by different consequences. This research suggests the possible influence of television commercials on sex stereotyped behaviors, which tend to portray women in an unfavorable light and reinforce sexual differences.

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## INTRODUCTION

## Statement of the Problem

The work reported here is a replication and extension of an earlier study conducted by McArthur and Resko (1975). These authors sought to determine the extent to which stereotyped portrayals of the sexes could be found in the medium of television commercials. In their investigation the main area of concern was the characteristics of the male and female models in these commercials which were "sold" along with the product.

McArthur and Resko randomly selected television commercials which were viewed for the purpose of systematically identifying particular characteristics depicted in them. Their analysis of the portrayal of males and females in adult television commercials revealed a number of significant sex differences which are consistent with current sex-role stereotypes. They found that men and women presented to the viewing audience differed in regard to their frequency, credibility, roles, location, arguments given, rewards reaped, and product type. The only category which was not statistically significant in their analysis was rewards offered by authority central figures. They also reported differences in the presentation of
males and females by time of day.
Given the growing concern in our society over the undesirable consequences of stereotyped sex roles, it would seem important to study this area further by replicating and extending the available research. My research suggests that one field which needs to be investigated is the strong impact that the mass communications media has upon sex-role stereotyping. Perhaps the most generalized reflection of extant sex-role stereotyping can be found in this field, including sex role definitions. These media include newspapers, magazines, movies, and popular music, but the main focus here is on television commercials. It seems that blatant sex-role stereotyping is overwhelmingly the case in television commercials, which are very influential as a communications medium.

The mass media has long been recognized as a transmitter of cultural stereotypes (Allport, 1958; Liebert, 1973; Duberman, 1975). In a classic study, Child, Potter, and Levine (1946) analyzed stories in thirty third grade textbooks used to teach reading. They found marked differences in the way male and female characters were portrayed. Male characters were significantly more likely than females to be portrayed solving problems, physically exerting themselves, and engaging in constructive or productive behavior. Of course, in 1946 literature was the predominant media form. Today that place is held by television.

Research has been somewhat sparse, however, in the area of television commercials and the way in which they serve as a transmitter of sex-role stereotypes, although studies by Maccoby and her associates (1957, 1958) have reported that film viewers identify with, spend more time looking at, and remember more about same-sexed characters. But there is research evidence bearing on the question of television and sex-role stereotyping (Hennessee and Nicholson, 1972). Analysis of the portrayal of males and females in the ten most popular children's comercial television programs (Sternglanz and Serbin, 1974) and in adult television commercials (Courtney and Whipple, 1974; Dominick and Rauch, l972) have revealed a number of significant sex differences which are consistent with current sex-role stereotypes. These authors contend that media content would be less sexist if women characters were shown to have the same occupational distribution as male characters, were shown advertising the same types of products as men, and were used for the voice-overs in advertisements to the same extent as men.

There is some research which supports their contentions. An early study of television programs (Head, 1954) revealed that men held more than two-thirds of the major roles, women only one-third. More recently, DeFleur's work (1970) indicates that the situation may have deteriorated. He found that women comprise less than $20 \%$ of the roles having definite occupational activity. Similarly,

Coleman (1971) found that television commercials carry direct and subtle messages about who does what kind of work. For instance, coffee commercials often show the wife fussing around at breakfast, serving a husband who is obviously getting ready for work while she remains at home with a stack of dirty dishes.

In regard to product types, Courtney and Whipple (1974) found that women were seven times more likely to appear in ads for personal hygiene products (deoderants, toothpaste, and soap) than not appear. Analysis revealed that $75 \%$ of all ads using females were for products found in the kitchen or bathroom.

The behavior of the characters also supports sexrole stereotyping. Lands and Brennan (1974) analyzed the "type of voice" used by the narrator in television ads and found that virtually all of the males were either "factual" or "aggressive-sales pitchy." Females were overwhelmingly characterized as either "seductive" or "soft spoken." Relatedly, Parker and Lemm (1974) found that $24 \%$ of the female characters were "silent," a category that held no males.

Our society does define stereotypically a host of traits as belonging almost exclusively to one or the other sex roles, as evidenced by research conducted in the mass media. In short, society creates a radical dichotomy of human types, despite both the many differences between individuals of the same gender and the many similarities
between people of opposite genders. Nonetheless, while the present findings indicate a high degree of sex stereotyping for televised models, it would seem desirable to have further documentation of such portrayal of the sexes, and one purpose of the present investigation is to provide such evidence. My study of the portrayal of men and women in American television commercials not only reveals sex differences which replicate some of McArthur's and Resko's research on sex-role stereotyping, but also includes an examination of commercials on Saturday and during evening news programming. In addition, an analysis is made of the voice-over which accompanies many commercials and which seems to confer the stamp of approval on the advertised product.

Television commercials were drawn from broadcasts of the three major networks in the Fall of 1978. CBS was sampled on a Tuesday (October 10), ABC on a Wednesday (October 11), and NBC on a Saturday (October 14). This was different from the original study in two respects: the order in which the networks were sampled and the days chosen for viewing. The latter was important for my study, since $I$ wanted to see if there were any significant differences in the portrayal of men and women in television ads on the weekend.

Each network was viewed for a total of seven hours (McArthur and Resko viewed each station for six hours). The time periods were as follows: 9:00 A.M.- 11:00 A.M. (morning); 1:00 P.M. - 3:00 P.M. (afternoon); and 6:00 P.M. 9:00 P.M. (evening). These time periods also differed from those reported in the original study (10:00 A.M. 12:00 Noon; 1:30 P.M. - 3:30 P.M., and 8:00 P.M. - 10:00 P.M.). I had chosen these for the sake of simplicity; they all began on the hour. Furthermore, I added an additional viewing hour, as previously noted, since I wanted to analyze those commercials shown during news programming.

McArthur and Resko coded every other commercial. However, they neglected to say what constituted a commercial. Some ads were simply not commercials, such as announcements of future program viewing or political ads, the latter which were very prevalent during this election year. Therefore, I made a further clarification and coded every other commercial in which some type of product (rather than self or network program) was displayed or discussed. Ads such as those just mentioned were not treated as commercial announcements and simply ignored. For instance, if the first ad which appeared during a commercial break was political in nature, it was ignored and the following ad was coded (if, indeed, a product was advertised in the latter). If not, the next commercial was then coded, and so on. A total of 242 commercials were viewed during these hours, of which 154 could be coded. Eighty-eight commercials were omitted because no adult central figures appeared in them or because they were identical duplications of previously coded commercials. Note that I sampled types of commercials and not duplications. Frequency, therefore, was defined as the number of different ads appearing on television, with a subsequent analysis of the categories coded for each new ad; repetitions were not coded.

Coding
The coding procedures in my study were similar to those reported in the McArthur and Resko analysis, with some minor variations. An analysis of each coding category was most important, rather than an intracategory study. Notes were taken during the commercial, at which time the central figures and other aspects of the commercial to be coded were recorded. The audio tape was stopped after each coded commercial, and the information was coded according to the categories as described by McArthur and Resko. In case of doubt, the commercial was replayed. (The Appendix lists and defines these categories, including the components of each.) The variations in coding were as follows:

Central figures. McArthur and Resko reported that when it was unclear which two figures were most central, a central figure of each sex was coded. In addition, if there were only two adults present in the ad, both were always coded. In my analysis I decided to code only one central figure, if $I$ thought he or she was the "central focus" of the ad more so than any other adult figures. Thus, I did not always find it necessary to code at least two central figures in those ads which featured two or more adults, nor code an adult figure of each sex when it was unclear as to which adults were most central, as the authors defined this category. For instance, one ad for $a$ brand of potato chips featured many adult figures,
but only one was the central focus (celebrity Roy Clark) by virtue of his prominent visual exposure and credibility base. My study dealt with these indecisions by choosing only those adults, whether one or two or of the same or opposite sex, who were the central focus of the commercial under investigation. Thus, I defined this coding category somewhat differently from the authors. (See Appendix for full details and descriptions.)

Role. Roles were defined as relational (spouse, parent, girlfriend/boyfriend, or housewife) or independent (worker, professional, celebrity, or narrator-interviewer) as in the original study. In addition, I included "unknown" in the category labeled as "other" if it was impossible to determine the role of the central figure. This use of "other" to incorporate "unknown" was also applied to those coding categories outlined by the authors which employed the former term. For instance, one commercial initially showed a woman as a baseball coach for a girl's team, but her role and the location were soon altered. The woman was now in the home with her daughter as she attempted to explain the benefits of purchasing a particular brand of bread.

Location. The category "home" was specified further by including outdoors around the home, such as one's yard or patio. The category "store" also included restaurant, since it is an establishment where one purchases goods. In one sense, home and yard could be viewed as
private locations, office or place of work as semi-private, and store or restaurant as public.

Arguments. "Scientific argument" included only those arguments where actual facts, figures, statistical results, lists, or percentages were presented by the central figure. For instance, an ad for a headache remedy which stated "54\% more pain reliever per tablet than ordinary sinus remedies," or an ad for margarine with "25\% less fat or calories" would be scientific in nature.

Rewards. The "other" category included not only "unknown" but also "feels nice," "good-tasting," "comfortable," "service," or "dependability."

Type of Product. The category "foodstuffs" also included beverages, such as tea, coffee, and soft drinks.

I also discovered in my study that some of these coding categories were not mutually exclusive. At times there were simultaneous roles existing in one ad, if the commercial switched scenes, purpose, or location. For instance, in one ad a female central figure was initially portrayed as a worker, but then the ad switched to her home where she was seen as a parent. An awareness of simultaneous role portrayal seemed to be an important issue here, and is related to the notion that many roles and lccations are somewhat vague in today's ads, as discussed later. It was also found that at times all coding categories were inappropriate and that tally was omitted. The central figure was simply "there." This explains why some
tabular presentations to follow contain more or less of the specified number of central figures actually coded during the analysis.

## Validity and Objectivity of Measures

An attempt to obtain a valid and objective set of measures was provided by interrater agreement on the coding of a sample of commercials which was viewed a few days prior to the main study. This measure of interrater agreement was based on the following formula:
number of agreements
number of agreements plus number of disagreements X 100

My fellow coder was a female doctoral student, and we independently coded commercials on two successive days (Friday, October 6, and Saturday, October 7). The first coding session was inadequate, however. Interrater agreement was quite strong for all of the coding categories except "reward." Therefore, we discussed our problems with this category and attempted to clear up any other minor discrepancies at this time. Once we were convinced that the major issues were resolved and category-coding was more fully understood, we decided to code commercials for an additional two hours (Sunday, October 8, from 8:00 P.M. - 10:00 P.M.). Interrater agreement was strong for all of the coding categories in the eight commercials which were coded. The average percentage of agreement between raters regarding the characteristics of the fourteen central figures (which
were all coded correctly--nine males and five females) was 79\% for credibility, $79 \%$ for role, $100 \%$ for location, $79 \%$ for argument, $71 \%$ for reward, $100 \%$ for type of product, and 100\% for voice-over.

## RESULTS

Comparison with McArthur's and Resko's Findings

Frequency of Male and Female Central Figures

McArthur and Resko reported that in the 199 commercials which they had coded, a total of 299 central figures were noted. Males accounted for $57 \%$ of these central figures, and females 43\%, a significant difference $\left(x^{2}=5.62, p<.02, d f=1\right)$. In my replication, however, this finding was not substantiated. Of the 154 commercials I had coded, a total of 210 central figures were marked. Recall that 242 commercials were viewed, but 88 of them were omitted because they did not contain any adult central figures or they were duplications of previously coded commercials. Males accounted for $49 \%$ of these central figures ( $n=104$ ) and females $51 \%(n=$ 106), a difference which was not statistically significant $\left(x^{2}=.019, .80<p<.90, d f=1\right)$. Therefore, in my analysis the number of female central figures coded was slightly higher, whereas MeArthur and Resko found that the number of male central figures was much greater. Note that my results may have been due to the differences in viewing times, or the authors may have double-coded their
ads, a procedure $I$ did not adopt.

Basis for the Credibility of Male and Female Central Figures

The authors reported that the difference in the credibility base of male and female central figures was highly significant $\left(x^{2}=88.75, p<.001, \mathrm{df}=1\right.$ ). They found that $70 \%$ of the males were portrayed as authorities, while only $30 \%$ were portrayed as product users. Only $14 \%$ of the female central figures were portrayed as authorities, while the remaining $86 \%$ were cast as product users. Consistent with their results, I found a significant difference in the credibility base, although it was not quite as high as that which was reported in their study $\mathbf{~}^{2}=$ 14.07, $\mathrm{p}<.001, \mathrm{df}=1$ ). This can be seen by looking at Table 1. In my study $52 \%$ of the males were portrayed as authorities and $48 \%$ were portrayed as product users. This constitutes a substantial increase in the number of product users since the original study, even though this table does not specify which types of products. For adult female central figures, $27 \%$ were portrayed as authorities while $73 \%$ were cast as product users.

Role of Male and Female Central Figures
A significant $2 \times 9$ (sex by role) chi square analysis performed by McArthur and Resko indicated that male and female central figures were depicted in different roles $\left(x^{2}=111.74, p<.001, d f=8\right)$. I found strikingly

Table 1. Basis for Credibility of Male and Female Central Figures*

|  |  | Sex of Central <br> Figure |  |
| :--- | :---: | :---: | :---: |
|  | Male | Female |  |

*Data given in proportions of male and female central figures by basis for credibility. Raw data given in parentheses.
similar results, as can be seen in Table $2\left(\mathrm{x}^{2}=108.397\right.$, $p<.001, d f=8)$. It must be pointed out, however, that the expected frequency in three of the eighteen cells was less than five. Most statistical texts agree that results are still valid if expected frequencies are greater than five in at least $80 \%$ of the cells. This was confirmed in my replication, where $83 \%$ of the cells had an expected frequency greater than five.

The authors collapsed their data into a one degree of freedom matrix to determine exactly where this sex difference lay in regard to roles. They found that female central figures were more likely to be portrayed in a role which defined them in terms of their relationship to others-a spouse, parent, girlfriend, or housewife. Males were more likely to be portrayed in a role which defined them independently of others--a worker, professional, celebrity, or interviewer-narrator $\left(x^{2}=60.74, p<.001, d f=1\right)$. As had been observed by McArthur and Resko, my replication confirmed the relational vs. independent roles of female and male central figures ( $\mathrm{x}^{2}=34.604, \mathrm{p}<.001, \mathrm{df}=1$ ). Table 3 shows that $70 \%$ of the female central figures were portrayed in some type of relational role, whereas $77 \%$ of the male central figures were defined in an independent role. Specific figures were not reported in the original study.

To insure that the obtained sex difference in roles was not merely a restatement of differences in the

Table 2. Role of Male and Female Central Figures

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
|  | Spouse | $\begin{aligned} & .50 \\ & (15) \end{aligned}$ | $\begin{aligned} & .50 \\ & (15) \end{aligned}$ | $\begin{aligned} & .14 \\ & (30) \end{aligned}$ |
|  | Parent | $\begin{gathered} .26 \\ (9) \end{gathered}$ | $\begin{aligned} & .74 \\ & (25) \end{aligned}$ | $\begin{aligned} & .16 \\ & (34) \end{aligned}$ |
|  | Homemaker | $\begin{gathered} .00 \\ (0) \end{gathered}$ | $\begin{array}{r} 1.00 \\ (10) \end{array}$ | $\begin{aligned} & .05 \\ & (10) \end{aligned}$ |
|  | Worker | $\begin{aligned} & 70 \\ & (19) \end{aligned}$ | $\begin{aligned} & .30 \\ & (8) \end{aligned}$ | $\begin{aligned} & .13 \\ & (27) \end{aligned}$ |
| Role of | Professional | $\begin{aligned} & 85 \\ & (11) \end{aligned}$ | $\begin{array}{r} .15 \\ (2) \end{array}$ | $\begin{aligned} & .06 \\ & (13) \end{aligned}$ |
| Central Figure | Celebrity | $\begin{array}{r} .75 \\ (9) \end{array}$ | $\begin{array}{r} .25 \\ (3) \end{array}$ | $\begin{aligned} & .06 \\ & (12) \end{aligned}$ |
|  | Interviewer/ Narrator | $\begin{aligned} & .81 \\ & (21) \end{aligned}$ | $\text { . } 19$ <br> (5) | $\begin{aligned} & .12 \\ & (26) \end{aligned}$ |
|  | Boyfriend/ Girlfriend | $\begin{aligned} & .13 \\ & (1) \end{aligned}$ | .87 <br> (7) | .04 <br> (8) |
|  | Other | $\begin{aligned} & .36 \\ & (18) \end{aligned}$ | $\begin{aligned} & .64 \\ & (32) \end{aligned}$ | $\begin{aligned} & .24 \\ & (50) \end{aligned}$ |
|  |  | $\begin{gathered} .50 \\ (103) \end{gathered}$ | $\begin{gathered} .50 \\ (107) \end{gathered}$ | $\begin{aligned} & 1.00 \\ & (210) \end{aligned}$ |

Table 3. The Relational vs. Independent Roles of Male and Female Central Figures

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Type | Relational (spouse, parent, girlfriend/ boyfriend, housewife) | $\begin{aligned} & .30 \\ & (25) \end{aligned}$ | $.70$ (57) | $\begin{aligned} & .51 \\ & (82) \end{aligned}$ |
| of Role | Independent (worker, professional, celebrity, interviewernarrator) | $\begin{aligned} & .77 \\ & (60) \end{aligned}$ | $\begin{aligned} & .23 \\ & (18) \end{aligned}$ | .49 <br> (78) |
|  |  | $\begin{aligned} & .53 \\ & (85) \end{aligned}$ | $\begin{aligned} & .47 \\ & (75) \end{aligned}$ | $\begin{aligned} & 1.00 \\ & (160) \end{aligned}$ |

credibility base for male and female central figures, McArthur and Resko also performed a sex by role analysis in which housewives and interviewers-narrators were excluded, since these roles seemed to predominate the relational vs. independent roles for women and men, respectively. They found that women continued to be defined primarily in terms of their relationship to others--spouse, parent, or girlfriend, while men tended to be defined independently of others--worker, professional, or celebrity $\left(x^{2}=3.94, p<.05, d f=1\right)$. These results were also confirmed in my analysis $\left(x^{2}=19.61, p<.001, d f=1\right)$. Table 4 shows that $65 \%$ of the female central figures were more often portrayed in a role which defined them in relation to others, whereas $75 \%$ of the male central figures were portrayed in a role which defined them independently of others.

The Location of Male and Female Central Figures

A significant $2 \times 4$ (sex by location) chi square analysis indicated that male and female central figures were depicted in different locations for the McArthur and Resko study ( $x^{2}=14.54, p<.01, d f=3$ ). In my replication, Table 5 shows these same sex differences for location $\left(x^{2}=22.55, p<.001, d f=3\right)$. A larger number of females were seen in the home, whereas most males were seen in an occupational setting. It is interesting to note that $41 \%$ of the total locations were unknown or other, which suggests that many locations in ads are

Table 4. The Relational vs. Independent Roles of Male and Female Central Figures - Homemaker and Interviewer-Narrator Excluded

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Type | Relational (spouse, parent, girlfriend/ boyfriend) | $\begin{aligned} & .35 \\ & (25) \end{aligned}$ | $.65$ <br> (47) | $\begin{aligned} & .58 \\ & (72) \end{aligned}$ |
| of Role | ```Independent (worker, professional, celebrity)``` | $\begin{aligned} & .75 \\ & \text { (39) } \end{aligned}$ | $\begin{aligned} & .25 \\ & (13) \end{aligned}$ | $\begin{aligned} & .42 \\ & (52) \end{aligned}$ |
|  |  | $\begin{aligned} & .52 \\ & (64) \end{aligned}$ | $\begin{aligned} & .48 \\ & (60) \end{aligned}$ | $\begin{aligned} & 1.00 \\ & (124) \end{aligned}$ |

Table 5. Location of Central Figures

somewhat nebulous. This was also true for roles, where roughly one-fourth were either other or unknown (see Table 2). There may be a definitive trend for roles and locations to be vague in today's television commercials. This "vagueness" may suggest a change in the portrayal of men and women in future ads. By introducing uncertainty in these ads, media advertisers may be able to circumvent current sex-role stereotypes. This was alluded to earlier in my coding procedures when I discussed simultaneous roles. These roles also suggest that vagueness may constitute uncertainty as well as ambiguity in commercial advertising.

The category subdivisions were also collapsed into a $2 \times 2$ matrix in accordance with whatever subdivisions seemed to be contributing most of the overall effect. McArthur's and Resko's report revealed that female central figures were depicted in the home proportionately more often than were male central figures ( $x^{2}=8.24, p<.01$, df $=1$ ). Consistent with their findings, my analysis found sex differences by home location as well. As reported in Table 6, I found that $65 \%$ of the female central figures were depicted in the home, whereas only $35 \%$ of the male central figures were so defined $\left(x^{2}=9.81, p<.01\right.$, df $=1$ ). McArthur and Resko did not report any figures to substantiate their results, which would lend themselves to comparative analyses.

Table 6. Location of Central Figures by Home

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Location of | Home | . 35 | . 65 | . 36 |
|  |  | (27) | (50) | (77) |
|  | All other categories | . 58 | . 42 | . 64 |
| Central <br> Figure |  | (77) | (57) | (134) |
|  |  | . 49 | . 51 | 1.00 |
|  |  | (104) | (107) | (211) |

were depicted in an occupational setting proportionately more often than were females ( $\mathrm{x}^{2}=8.65, \mathrm{p}<.01, \mathrm{df}=1$ ). My findings replicate their data as well, and were as significant as their results ( $\mathrm{x}^{2}=17.01, \mathrm{p}<.001, \mathrm{df}=1$ ). As can be seen in table 7, only $12 \%$ of the female central figures were located in an occupational setting, whereas $88 \%$ of the male central figures were so defined. (One should note, however, that occupational setting constituted only $12 \%$ of the total locations coded.) McArthur and Resko again did not report individual figures in their study.

McArthur and Resko discovered that the tendency for females to be depicted more frequently in the home and for males to be depicted more frequently in an occupational setting held true even when only male and female product users were analyzed $\left(x^{2}=3.00, p<.10, d f=1\right.$, and $x^{2}=$ 13.14, $p$ < . 001, df = 1 , respectively). These results, however, were not confirmed in my replication for home ( $x^{2}=1.24, .20<p<.30, d f=1$ ) but only for occupational setting ( $x^{2}=15.39, p<.001, d f=1$ ) when the credibility base under investigation was that of product user. These results are reported in Tables 8 and 9. Thus, for the home setting, there was something inherent in the role of product user which confined one to the home. Male and female central figures in a home setting did not differ in regard to product usage as a basis for credibility. That is, it was not the sex of the central figure

Table 7. Location of Central Figures by Occupational Setting

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
|  | Occupational Setting | $.88$ (22) | $.12$ <br> (3) | $\begin{aligned} & .12 \\ & (25) \end{aligned}$ |
| Location of Central | All other categories | $\begin{aligned} & .44 \\ & (82) \end{aligned}$ | $\begin{gathered} .56 \\ (104) \end{gathered}$ | $\begin{gathered} .88 \\ (186) \end{gathered}$ |
| Figure |  |  |  |  |
|  |  | . 49 | . 51 | 1.00 |
|  |  | (104) | (107) | (211) |

Table 8. Location of Product User Central Figures by Home

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Location of | Home | . 33 | . 67 | . 41 |
|  |  | (17) | (34) | (51) |
|  | All other categories | . 43 | . 57 | . 59 |
| Central <br> Figure |  | (32) | (42) | (74) |
|  |  |  |  |  |
|  |  | . 39 | . 61 | 1.00 |
|  |  | (49) | (76) | (125) |
| $\left(x^{2}=1.24, .20<p<.30, d f=1\right)$ |  |  |  |  |

Table 9. Location of Product User Central Figures by Occupational Setting

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Location of | Occupa- <br> tional <br> Setting | $.82$ (14) | .18 <br> (3) | $\begin{aligned} & .14 \\ & (17) \end{aligned}$ |
| Central | All other categories | $\begin{aligned} & .34 \\ & (35) \end{aligned}$ | $\begin{aligned} & .66 \\ & (73) \end{aligned}$ | $\begin{gathered} .86 \\ (108) \end{gathered}$ |
| Figure |  | $\begin{aligned} & .39 \\ & (49) \end{aligned}$ | $.61$ <br> (76) | $\begin{aligned} & 1.00 \\ & (125) \end{aligned}$ |
| $\left(x^{2}=\right.$ | < .001, d | = 1) |  |  |

which accounted for differences in home location, although I did find sex differences for occupational setting as in McArthur's and Resko's study. Table 9 shows that $82 \%$ of the male product users were located in an occupational setting as compared with $18 \%$ of the female central figures who were also product users.

Arguments Given by Male and Female Central Figures

A significant $2 \times 3$ chi square analysis (sex by argument) was reported by McArthur and Resko for differences in arguments given by central figures in support of a product $\left(x^{2}=9.21, p<.01, d f=2\right)$. When category subdivisions were collapsed into a $2 \times 2$ matrix, their results also revealed that males were significantly more likely than females to give any type of argument ( $x^{2}=$ 27.69, $\mathrm{p}<.001, \mathrm{df}=1$ ). In my replication $I$ did not find any significant sex differences by type of argument in either the $2 \times 3$ analysis or in the one degree of freedom matrix $\left(x^{2}=3.97, .10<p<.20, d f=2\right.$ and $x^{2}=$ .274, . $50<p<.70, d f=1$ ).

Table 10 shows that the arguments given by male and female central figures were fairly constant. Only the argument categorized as "scientific" differed significantly for males and females, but one must note that such arguments constituted only $9 \%$ of the total sample.

When my figures were collapsed into a $2 \times 2$ matrix, the null hypothesis again was not rejected. Table 11

Table 10. Arguments Given by Male and Female Central Figures


Table 11. Comparison of Argument Given by Male and Female Central Figures - One Degree of Freedom Analysis

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Argument | Scientific or nonscientific | $\begin{aligned} & .51 \\ & (68) \end{aligned}$ | .49 <br> (65) |  |
| Given by Central | No <br> Argument | $\begin{aligned} & .47 \\ & (36) \end{aligned}$ | $\begin{aligned} & .53 \\ & (40) \end{aligned}$ | $\begin{aligned} & .36 \\ & (76) \end{aligned}$ |
| Figure |  | $\begin{gathered} .50 \\ (104) \end{gathered}$ | $\begin{gathered} .50 \\ (105) \end{gathered}$ | $\begin{aligned} & 1.00 \\ & (209) \end{aligned}$ |
| $\left(x^{2}\right.$ | $50<p<.70$ | $\mathrm{df}=$ |  |  |

shows that both male and female central figures were as likely to give an argument, scientific or otherwise. In McArthur's and Resko's study, $30 \%$ of the female central figures gave no argument at all as compared with only 6\% of the male central figures. As Table ll shows, I found that $53 \%$ of the female central figures and $47 \%$ of the male central figures gave no argument at all, results which were quite different from those reported by the authors.

Rewards Offered by Authority Central Figures

In the original study male and female authorities did not differ in the rewards which they offered to the viewer for using the product they were advertising $\mathbf{~}^{2}=$ 5.36,. $30<p<.50, \mathrm{df}=4$ ). In my replication, however, a difference in rewards seemed to be evident. A significant chi square analysis was found, but unfortunately it was statistically inaccurate. That is, less than $80 \%$ of the cells had an expected frequency greater than five conly 75\%, or six out of the eight expected cell frequencies, were adequate). A test for significance was not warranted since the approximation of the sample statistic to the chi square distribution was not very close; comparisons would be virtually meaningless. Nonetheless, Table 12 presents the raw data for this coding category.

Table 12. Rewards Offered by Authority Central Figures - Raw Data Only

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
|  | Social <br> enhancement | (2) | (9) | (11) |
| Type of Reward Offered | Selfenhancement | (7) | (5) | (12) |
| by Central | Practical | (22) | (5) | (27) |
| Figure | Other | (23) | (9) | (32) |
|  |  | (54) | (28) | (82) |

Rewards Reaped by Product User Central Figures

McArthur and Resko found no significant sex differences in the general categories of rewards accruing to males and females. Male and female central figures were equally likely to receive social enhancement, self-enhancement, practical, or other rewards (p > .25). Strikingly similar results were found in my analysis ( $x^{2}=$ 2.38,. $30<p<.50, \mathrm{df}=3$ ). Table 13 presents a listing of the data and shows these consistencies, particularly for the practical and other categories. For the practical category, $50 \%$ of the males and $50 \%$ of the females reaped such rewards. In the other category, the results were $42 \%$ and $58 \%$ for males and females, respectively. Since McArthur and Resko did not present any tabular results, comparisons and specific interpretations could not be made.

The authors did discover sex differences in the type of reward received within the subcategory of social enhancement $\left(x^{2}=21.21, p<.001, d f=5\right)$. When the data were collapsed into a one degree of freedom matrix, they found that females were more likely than males to obtain the approval of family and the opposite sex as reward for using a given product, while males more frequently obtained the approval of their friends, social advancement, and career advancement. However, the authors found no significant differences in the type of self-enhancement or

Table 13. Rewards Reaped by Product User Central Figures

|  |  | Sex of Central <br> Figure |  |
| :--- | :--- | :--- | :--- |
|  |  | Male | Female |

practical rewards received by males and females who used a given product. In my replication $I$ am unable to report any specific results. The expected cell frequencies for the subcategories of social enhancement, self-enhancement, and practical rewards were below the minimum acceptable level for appropriate chi square analysis. There were simply not enough subjects in these categories to permit meaningful comparisons.

Product Types Associated with Male and Female Central Figures

A $2 \times 4$ (sex by product type) chi square analysis by McArthur and Resko indicated that male and female product users were associated with different types of products $\left(x^{2}=8.97, p<.05, d f=3\right)$. In my replication this finding was also substantiated. In fact, the results were almost identical $\left(x^{2}=8.00, \mathrm{p}<.05, \mathrm{df}=3\right)$. Table 14 lists these differences in product types for male and female central figures. The data were then collapsed into a $2 \times 2$ matrix to find out whether or not female product users were more likely than males to be identified with home products. These results were confirmed in my study $\left(x^{2}=4.01, p<.05, d f=1\right)$, as well as in McArthur's and Resko's analysis ( $x^{2}=6.12, p<.02$, df $=1$ ), the latter at a slightly higher significance level. They reported that $33 \%$ of the female product users were portrayed using home products as compared with $13 \%$ of the male product users. As shown in Table 15, I found that

Table 14. Product Types Associated with Male and Female Central Figures

|  |  | Sex of Central <br> Figure |  |
| :--- | :--- | :---: | :---: |
|  |  | Male |  |

Table 15. Comparison by Home Product Associated with Male and Female Central Figures - One Degree of Freedom Analysis

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Type of | Home Product | . 37 | . 63 | . 22 |
|  |  | (17) | (29) | (46) |
| Product | All other Products |  |  |  |
|  |  | . 54 | . 46 | . 78 |
| Associated |  |  |  |  |
| with Central |  | (88) | (76) | (164) |
| Figure |  | . 50 | . 50 | 1.00 |
|  |  | (105) | (105) | (210) |

$63 \%$ of the females and $37 \%$ of the males were portrayed as home product users.

In regard to product types, McArthur and Resko also reported that there was a general and consistent tendency for males to appear as authorities on a product which was used primarily by females. They found that while males comprised only $16 \%$ of the home product users, they accounted for $86 \%$ of the authorities on these products $\left(x^{2}=\right.$ 34.41, $\mathrm{p}<.001, \mathrm{df}=1$ ). Similarly, males accounted for $78 \%$ of the authorities on body products, but only $33 \%$ of the body product users $\left(x^{2}=20.99, p<.001, \mathrm{df}=1\right)$. I found similar trends for home products $\left(x^{2}=11.21, p<.001\right.$, $d f=1)$ and body products $\left(x^{2}=10.30, p<.01, d f=1\right)$ as seen in Tables 16 and 17 , and these results were as definitive as those reported by McArthur and Resko. In my study of home product types, males comprised $18 \%$ of the home product users and accounted for $67 \%$ of the authorities on these products (Table 16). Thus, these aspects of male central figures have not changed considerably from the results reported in the original study. As for body product types, Table 17 shows that males comprised $32 \%$ of the body product users and $85 \%$ of the authorities on these products. Again, the authority vs. product user dichotomy for body product type does not seem to be changing as far as the male central figure is concerned.

The only product type which was not substantiated in my replication was that of food products. McArthur and

Table 16. Home Product Type Associated with Authority and Product User Central Figures

|  |  | Sex of Central <br> Figure |  |
| :--- | :---: | :---: | :---: |
|  |  | Male |  |

Table 17. Body Product Type Associated with Authority and Product User Central Figures

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
|  | Product User |  |  |  |
| Basis for |  | (11) | (23) | (34) |
| Credibility of | Authority | . 85 | . 15 | . 28 |
| Central |  | (11) | (2) | (13) |
| Figure |  | . 47 | . 53 | 1.00 |
|  |  |  |  | (47) |

Resko reported that men comprised $95 \%$ of the authorities on food products, but only $40 \%$ of the food product users ( $\mathrm{x}^{2}=20.99, \mathrm{p}<.001, \mathrm{df}=1$ ). As one can see in Table 18, I failed to find the same results. Males comprised only $48 \%$ of the authorities on food products and $52 \%$ of the food product users $\left(x^{2}=.11, .70<p<.80\right.$, df $=1$ ). Of course, there is the possibility that I defined the food category differently.

Time of Day
The analysis by McArthur and Resko revealed that differences in the presentation of male and female central figures were quite constant over time. That is, whatever differences there were were as likely to occur in the morning and afternoon as in the evening. The authors did not report any statistical results to substantiate their argument. In my analysis, however, there were differences across time; the presentation of male and female central figures differed by time of day $\left(x^{2}=6.59, p<.05, \mathrm{df}=\right.$ 2) as shown in Table 19.

McArthur and Resko did find, however, that $70 \%$ of the central figures in evening hours were male as compared with $52 \%$ in the morning and afternoon. The reason for this comparison, the authors argued, was that in the evening males were most likely to be watching television, while in the morning and afternoon most viewers were female. One can see that the differences were most evident when morning

Table 18. Food Product Type Associated with Authority and Product User Central Figures

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Basis for | Product <br> User | $.52$ <br> (26) | $.48$ (24) | $.67$ <br> (50) |
| Credibility | Authority | . 48 | . 52 | . 33 |
| of Central |  | (12) | (13) | (25) |
| Figure |  | . 51 | . 49 | 1.00 |
|  |  | (38) | (37) | (75) |

Table 19. Sex of Central Figure by Time of Day

|  |  | Sex of Central Figure |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
|  | Morning | . 46 | . 54 | . 19 |
|  |  | (18) | (21) | (39) |
|  | Afternoon | . 40 | . 60 | . 38 |
| Time |  | (32) | (48) | (80) |
| of | Evening | . 59 | . 41 | . 43 |
| Day |  | (54) | (37) | (91) |
|  |  | . 50 | . 50 | 1.00 |
|  |  | (104) | (106) | (210) |
|  | $<.05, \mathrm{df}$ |  |  |  |

and afternoon data were combined and compared with the evening. These results were confirmed in my replication $\left(x^{2}=6.19, p<.02, d f=1\right)$. Morning and afternoon central figures were collapsed into one category and compared with data from those commercials viewed in the evening. Table 20 shows that $59 \%$ of the central figures in evening hours were male as compared with $42 \%$ in the morning and afternoon. On the other hand, females comprised only 41\% of the evening central figures and $58 \%$ of the morning and afternoon figures. Females differ in the morning and afternoon as compared with the evening. Obviously, women are not seen as often as central figures during those hours when television is most likely to be watched by men.

## Additional Findings

The Number of Central Figures During News Programming

McArthur and Resko did not sample television commercials during news programing, which usually runs from 6:00 P.M. - 6:30 P.M. locally and from 6:30 P.M. - 7:00 P.M. nationally. As reported earlier, they had found a tendency for central figures to be predominantly male in the evening, which was also confirmed in my replication. However, I had decided to carry this one step further to see whether or not there was a significant difference in the number of male and female central figures shown during the six o'clock news hour. This seemed to be an important point, especially since most men are home at this time

Table 20. Sex of Central Figure by Time of Day - One Degree of Freedom Analysis

and frequently watch news programs. Therefore, I had expected a preponderance of male central figures during this time. This was not the case, however $\left(x^{2}=1.48\right.$, $.20<p<.30, d f=1)$. A chi square goodness-of-fit test revealed that $61 \%(n=20)$ of the central figures during the news hour were male as compared with $39 \%$ ( $\mathrm{n}=13$ ) for females. Thus, there were no significant sex differences for those commercials sampled during news programming on Tuesday, Wednesday, and Saturday.

The Frequency of Central Figures on Saturday

The original study did not sample television commercials on the weekend, whereas I had watched programs for a total of seven hours on a Saturday. As noted earlier, I found a tendency for the central figures to be predominantly male in the evening. This was also confirmed in my analysis of Saturday evening programming only. A chi square goodness-of-fit test found that there was a significant difference between the number of male and female central figures seen during Saturday evening $\mathbf{x}^{2}=9.53$, $p<.01, d f=1)$. I found that $76 \%$ of the evening central figures were male ( $n=26$ ) as compared with $24 \%$ for females ( $n=8$ ) . Recall I had discovered that $59 \%$ of the evening central figures were male and only $41 \%$ were female when the entire three day sample was taken into consideration.

I expected a greater number of male central figures to be shown on Saturday afternoon, since the World Series
game and other sports events were scheduled at this time. The chi square results, unfortunately, did not lend themselves to significant meaningful comparisons. However, the results led me to believe that there was a significant difference between the number of male and female central figures shown during Saturday afternoon. In my small sample, $68 \%$ of the central figures in the afternoon were male, whereas only $32 \%$ were female.

I also could not analyze those ads televised during Saturday morning cartoon shows. Only three commercials out of the twenty-two surveyed could be coded according to the criteria outlined by McArthur and Resko. The other nineteen had no adult central figures in them. They often included children only, or cartoon and fantasy figures, such as Fred Flintstone, Count Chocula, and Ronald McDonald.

The Voice-Over
The voice-over, as the term suggests, refers to the voice of the off-camera announcer which often accompanies commercially advertised products. I found that the voice urging the viewer to buy the product was nearly always male; women were rarely used in this regard ( $x^{2}=139.86$, $\mathrm{p}<.001$, $\mathrm{df}=3$ ). Of the 163 commercials which contained some type of voice-over, $62 \%$ were accompanied by a male voice, whereas the female voice was heard in only $2 \%$ of the cases (see Table 21).

Table 21. Frequency of Occurrence of Voice-Over Which Accompanies Commercials

|  |  | Percentage | Raw Total |
| :---: | :---: | :---: | :---: |
| Type of | Male | . 62 | 101 |
|  | Female | . 02 | 2 |
| Voice- |  |  |  |
|  | Chorus | . 10 | 17 |
| Over | Other | . 26 | 43 |
|  |  |  | $\mathrm{N}=163$ |

## DISCUSSION

The present investigation of commercial advertising has revealed sex differences which, for the most part, replicate and extend the evidence of sex stereotyping reported by McArthur and Resko. One of the most striking differences, however, was that females appeared as frequently as males in my ads. Given that women comprise over one-half of our population, one would expect that approximately one-half of the central figures in the media would be women (McArthur and Resko, p. 217). Their speculation was confirmed in my analysis. The number of central figures was almost equally divided between the sexes. This was quite unexpected, since men were found to outnumber women in McArthur's and Resko's analysis, and this finding seemed to serve as a basis for validating their subsequent research. Perhaps the differences in our results could be explained by my clarification of the coding category "central figure." The authors seemed to me to be very unstructured in their use of this category; I had thought it would be best to code only those figures who were the central focus of the ad.

In the future a category entitled "group ads" or "group figures" may be more significant in determining
role analyses. This may incorporate "minor" figures as well as "central" figures only, and the former would undoubtedly have some relevancy to the "group figures" category. An example would be the "I want to give the world a Coke" ad, where numerous faces representing various ethnic groups and nationalities are depicted.

It should also be noted that my coding problems could have been minimized if the authors had sent me a copy of their codebook procedures. I had tried repeatedly to obtain such material from them, but to no avail. Nonetheless, I think my methodological analysis was warranted. There were notable differences in the quality as well as in the quantity of the portrayal of males and females in most of the coding categories, which were consistent with McArthur's and Resko's findings. More females are portrayed as authority figures in today's commercials, although this trend is still not as high as that reported for male authority central figures. The male continues to be the authority figure, although my analysis revealed that this trend seems to be declining, whereas females continue to be portrayed predominantly as product users. It seems to me that women product representatives are most often seen performing domestic tasks involving the advertised product. That is, they demonstrate the product features by simply using the product. Women seem to win the smiles of their husbands, children, and guests with the help of the product. Male product representatives, on the
other hand, most often demonstrate but do not actually use the advertised product while making product feature claims.

My role and location analyses also confirmed McArthur's and Resko's findings. The sexes appeared in different roles and locations. The television commercials of America have portrayed women in limited or undesirable roles, such as young mother, middle-aged housewife, or old lady. These ads appear to overlook the married or single woman who is intelligent, sensitive, employed, supports herself, has talents and hobbies, or is skilled at her profession. Females in my ads were often presented in terms of their relationship to others; males tended to be portrayed in a role which defined them independently of others. I would say the sexes differed in their behavior as well as in their roles, which, in turn, is related to their credibility base. For instance, males more often manifested expertise concerning the advertised products. While males were thus presented as more knowledgeable than females, females were more often portrayed in search of knowledge. Perhaps this explains their higher representation among product users in ads. As Lands and Brennan (1974) state, advertisers obviously believe that men are trusted and believed much more often than women.

The observed sex differences in behavior found in these ads parallel those differences reported by Child, Potter, and Levine (1946) in their study of children's
textbooks. Just as female characters in children's books were less likely than the males to be knowledgeable, so were the female figures in television commercials less likely than the males to possess expertise.

While data on roles and location indicated what were seen in television commercials, it might be more appropriate to discuss what was not seen. Women lawyers, doctors, business executives, scientists, engineers, and professors were conspicuously absent from these ads. And although there are millions of working wives in this country, a commercial was seldom shown featuring them. In the world of the television commercial, women are housewives or low-level employees. Seldom do they combine employment with management of their homes and personal lives. When location is considered, the female is oftentimes pictured in the home, helping to sell some product found in the kitchen or bathroom. Those women who are shown away from home relate to people in a service role, either as a stewardess on an airplane or as a secretary in an office. And occasionally, an attractive model is seen advising other women how they too can look beautiful. These results confirm those reported by Coleman (1971) and Courtney and Whipple (1974) concerning work roles and location of product usage, respectively. Women were more likely to be featured in the home, displaying products often used in the kitchen or bathroom. Occupations are sex stereotyped as well in these
ads, which parallels those results found by Head (1954), DeFleur (1970) and Coleman (1971). This implies that the occupations which are sex-typed "female" not only are consistent with the culture's stereotypes toward women, but they are occupations that are unlikely to lead to rights to distribute scarce goods and resources. Women were more likely to be portrayed as consumers than producers. $\}$ Their roles as housewife and primary purchaser override those of authority and producer, the latter most often reserved for the male figure.

These findings suggest that males in these ads have more varied "worldly" roles, emphasizing their importance or dominance in the sphere of employment or occupation, while females are circumscribed by their domesticity, passivity, submissiveness, or sexuality, and overrepresented in family or home occupations. It seems to me that if these results are viewed from the perspective of someone in the feminist movement, their criticisms are well taken. The image of the female, as shown in these ads, is in line with conventional stereotypes. These notions are supported by Duberman (1975) when she noted that occupations are linked to sex roles. Women are not portrayed as autonomous human beings, but are primarily sex-typed. Commercials presenting the image of the "nodern" woman are virtually nonexistent; they reinforce instead the assumption that a woman's only valid function is that of wife, mother, or servant of men. Thus, occupational opportunities
should be available for each sex according to interest and talent. The sex labeling of occupations has restricted the creative contributions of many talented individuals.

In addition to differences in the quantity and quality of their behavior, male and female central figures in the original study differed in the consequences of their behavior, but I failed to find similar results except for rewards reaped by product user central figures. The differences between their results and mine may be explained, in part, by the strong specifications I required for the category "scientific argument" in my coding procedures. They were probably not as stringent in their analyses. Perhaps this was a grave error on my part, but, of course, it would have been helpful if they had provided some concrete examples of their coding format. Furthermore, their reluctance to outline coding categories more succinctly may have been the reason for some of my insignificant tabular results, especially in regard to the reward categories.

As far as product types associated with male and female central figures were concerned, the only difference between their results and mine was in the category "food product." McArthur and Resko found a consistent tendency for males to appear as authorities on food products which were used primarily by females. My replication, however, represented a definite reversal trend. Males may not always be the authorities on a product which
is used primarily by females. Perhaps the roles of males and females in television commercials are changing in regard to the relationship between the sex of the characters in the commercials and the product category advertised, as my results for food products suggest.

Nonetheless, females in today's ads are most often shown representing cleaning products, cosmetics, and home appliances, whereas males are most often shown representing cars, travel, banks, and industrial products. The lack of women in the latter supports the stereotype that a woman has no interest or ability in so masculine an area as mechanics or machines, as noted by Dominick and Rauch (1972). She is still primarily shown in the kitchen or bathroom of the home serving her husband or children.

Finally, my replication of McArthur's and Resko's study of commercials by time of day revealed that there are differences across time in the presentation of male and female central figures. The authors did not find such results, but failed to provide any specific figures for comparative purposes.

Concerning the additional analysis I did, I found no significant sex differences for central figures portrayed during news programming. This was quite unexpected, since I had predicted a preponderance of male central figures during the news hour when men are most likely to be home from work. Perhaps my results are a reflection of the small sample size as well.

Unrelated to this but also involving the news is the problem with products advertised during the news broadcast, especially the local news. Oftentimes, various portions of the news (sports or weather, for instance) have only one sponsor, and this could result in a select group of products advertised. This is indirectly related to the simple fact that there are two kinds of ads which can be seen throughout the day: national and local. Local restaurant and furniture ads are but one example of this.

In looking at Saturday programming, the results led me to believe that male and female central figures differed by time of day. As was found during evening programming on a weekday, more males appeared in television ads during Saturday evening than females. Perhaps television sponsors believe that the number of male viewers is higher during the evening hours, especially on weekends when men do not ordinarily work. But this does not explain why there was not a preponderance of male central figures during news programming when men are just as likely to be home. Again, this may reflect television sponsorship, or it may be that commercials during these times are directing their efforts toward "family" matters rather than specific male or female products. The number of furniture ads shown during the news hour is a case in point. This is the type of ad which is likely to contain as many male as female central figures, a fact which I noted while coding.

This notion concerning the time of day when men and women are most likely to be home somewhat parallels the results of Hennessee's and Nicholson's (1972) study when they found that the life style and problems of working women are virtually ignored in commercials. They found that ads for cars, banks, and insurance accounted for 3.2\% of the daytime commercials, as opposed to $19.1 \%$ in prime time when men are most likely to be at home. These sexsegregated ads seem to be saying that women are incapable of making important decisions alone.

Recall that some insignificant results were obtained due to the small expected cell frequencies, especially during Saturday cartoon programming. Perhaps my findings indicate that the commercially produced television ads viewed by children carry different messages about the appropriate behavior for males and females. I would say that males and females appear in different proportions and roles during Saturday morning shows. This suggests that for today's children, television ads may be an important source in the learning of stereotyped sex roles. According to Liebert (1973), they may be an important source of children's expectations and prejudices.

The voice-over accompanying many television commercials seemed to substantiate many of the results obtained by statistical analysis. For instance, my findings suggest that females lack credibility. Their small voices are often followed by a male voice-over, the voice of
authority, which confers the stamp of approval on the product. The male voice urging the viewer to buy the product is usually gentle, wise, helpful, and a bit seductive. It seems to me that male authority is a built-in assumption, and it teaches women to look up to men as experts. Female voice-overs, on the other hand, were most likely to occur during cartoon shows when dolls were the advertised product. A soft, soothing, "motherly" voice was evident here, offering comfort and reassurance. Thus, my results are consistent with Lands' and Brennan's (1974) study which found that females were overwhelmingly characterized as "soft spoken."

These results are also similar to those concerning stereotyped images of women as reported by Courtney and Whipple (1974). They found that men are overwhelmingly present as the voice-over in television commercials, accounting for $89 \%$ of the total. This male presence was found to be as dominant in daytime commercials, presumably addressed primarily to women, as it was in evening commercial programming.

It is interesting to note that oftentimes it was the voice-over, rather than an on-camera central figure, which gave factual, concrete, evidence in favor of using the product (scientific argument) or served as the reward or credibility base. Note the following scientific arguments given by voice overs:

Aspirin is what pediatricians recommend almost two to one over any other pain or fever reducer.

Rolaids consumes forty-seven times its weight in excess stomach acid.

This may explain the lack of scientific arguments given by central figures, since voice-overs frequently served in this capacity.

One implication of the present findings is that if one wishes to diminish the sex stereotyped behavior which is so prevalent in our society, a change in the representation of males and females in television commercials is a useful step forward. This study also suggests that appropriate changes in television's portrayal of the sexes could serve to increase socially desirable, nonstereotyped behaviors on the part of both sexes.

In the future studies could analyze television commercials by voice-over only to see if it continues to be the voice of authority. An analysis conducted later in the evening could be undertaken as well to determine whether or not such sex differences are as evident in these later time periods. The sample of programming and coding categories could also be broadened and defined more succinctly to alleviate insignificant results.

APPENDIX

APPENDIX<br>LISTING OF CODING CATEGORIES<br>AND THEIR COMPONENTS

Central Figure - Those adults appearing in the ad who were the central focus by virtue of either speaking or having prominent visual exposure.

Credibility - Suggests plausibility, but more clearly stresses worthiness of belief. Credibility of central figure was categorized as product user when depicted as a user of the product being advertised; the basis for credibility was categorized as authority when depicted primarily as someone who "has all the facts" about the advertised product.

Role - Refers to the manner in which the central figure was cast.

Category includes:
Relational - spouse, parent, girlfriend/boyfriend, housewife, and other (unknown)

Independent - worker, professional, celebrity, interviewer/narrator, and other (unknown)

Location - Locale in which the central figure was depicted.
Category includes:
Private - home or yard
Semi-private - office, place of work,or occupational setting

Public - store, restaurant, or park
Other - (unknown)
Argument - A coherent series of reasons offered by a central figure on behalf of a product.

## Category includes:

Scientific - actual facts, figures, statistical results, lists, or percentages presented by the central figure

Nonscientific - opinions and personal testimonials in favor of using the product

No Argument - central figure merely displayed a product or was being persuaded by another to use it

Reward - That which is given, offered, or received for some service or attainment.

Category includes:
Social enhancement - opposite sex approval, family approval, friend's approval, social enhancement, career advancement, and other or unknown

Self-enhancement - psychological improvement, attractiveness, cleanliness, health, and other or unknown

Practical reward - saving time, labor, or money
Other - feels nice, good-tasting, comfortable, service, dependability, or unknown

Type of Product - Product associated with central figure.
Category includes:
Body product - appearance aids, body hygiene-cleanliness products, clothing, and health products

Home product - exterior and interior household goods, household cleaners, and laundry and dish detergents

Foodstuffs - includes beverages as well, such as tea, coffee, and soft drinks

Other - pet food products, sporting and recreational items, automobiles and automotive products, insurance, services, and other

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