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ABSTRACT

A study examined whether television's stereotypical portrayals of men and women affected children's sex role preferences. The subjects, 105 fifth and 70 eighth grade students from a predominately black urban school in the southern United States, were assigned to see one of three versions of a videotape of a family drama in which male and female characters took on various occupational, familial, and socioemotional roles. The sex-typed and sex-reversed (nontraditional) tapes were exact replicas with the male and female characters simply switching lines and roles. Some lines in the androgynous version were modified slightly to allow the characters to each take half of the feminine and half of the masculine lines and roles. The results showed that, in general, children could be influenced by short term exposure to alternative sex role portrayals. The influence was mediated, however, by age and sex of the viewer and the dimension of sex role being studied. Specifically, children who saw the sex-typed version increased the most in "sex-typedness," while those who saw the nontraditional versions increased the least or moved to a nonsex-typed preference direction. Girls of both ages showed less sex typing than did boys, especially eighth grade boys. Eighth grade girls also showed greater change than the younger girls on the socioemotional sex role dimension after exposure to the nontraditional version of the tape. (FL)

The Effects Of Androgynous Televised Portrayals On Children's Sex Role Preferences

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The Effects of Androgynous Televised Portrayals On

Children's Sex Role Preferences

The recent expansion of social roles assigned to men and women in some sectors of America has sparked renewed interest in the processes by which children acquire sex roles. Both Kohlberg's (1966) cognitive-developmental approach and Mischel's (1966, 1970) social learning theory of sex role development place heavy emphasis upon observational learning from live and symbolic models. Television may provide one of the most potent sources of vicarious learning in children's lives. Research has demonstrated that children spend more time watching television than engaging in any other activity except sleep (Schramm, Lyle, & Parker, 1961; Lyle & Hoffman, 1972; Roberts, 1973). Yet television's influence in the sex role socialization process is far from clear.

Three types of relevant investigations have been conducted -- content analyses, correlational studies, and experimental investigations. Several content analyses (Busby, 1974; Beuf, 1974; Long & Simon, 1974; O'Kelley, 1974; Sternglanz & Serbin, 1974; Streicher, 1974; McArthur & Eisen, 1976; O'Donnell & O'Donnell, 1978) were uniform in concluding that television has purveyed strongly sex stereotyped roles. Studies showed that women on television are underrepresented; are portrayed in very limited occupational roles; and are passive, dependent and affectionate while their male counterpart is active, assertive and rational.

Correlational studies among children relating the strength of stereotyped sex role attitudes to amount of television viewing have been less consistent in their conclusions. Beuf (1974), Freuh and McGhee (1975), and McGhee and Freuh (1980), found a positive correlation between the two, while Cheles-Miller (1975) found a negative relationship. Miller and Reeves (1976) correlated the viewing of specific

programs with sex role beliefs among third- to sixth-grade children. They found that those who watched several programs portraying women in traditionally male roles (e.g., "Police Woman") considered it more appropriate for women to hold these positions than children who did not watch these programs.

Correlational studies relating television viewing and stereotyped attitudes, of course, can make no assertions concerning causality. A few experimental investigations have attempted to assess television's influence on children's sex role behavior and attitudes. Atkin (1975) found that children who were shown TV commercials in which women were portrayed in typically male occupations were more likely to say these occupations were appropriate for women than were children who did not see the ads. O'Bryant and Corder-Bolz (1978a) also showed especially designed commercials to elementary school children and obtained similar results. In their study (1978b) of low income black children, however, exposure to nontraditional portrayals did not change views of appropriateness, but did result in the girls showing greater personal preferences for traditionally male jobs. An extensive study of the effects of a nationally broadcast television variety show called "Freestyle" which was specifically designed to "combat sex-role stereotyping in 9- to 12-year-old children" also found that girls were more receptive and showed greater comprehension of counterstereotypical messages than boys (Williams, LaRose, & Frost, 1981).

Two other experiments directly exploring television's impact on sex role attitudes of children, unfortunately, were less well designed. Pingree (1978) presented third and eighth graders with television commercials showing women in either traditional or nontraditional roles. The study also examined the effect of differential instructions concerning the perceived reality of the actresses (i.e., instructions that the characters were real people versus instructions that they were acting versus no instructions), yielding a three-way factorial design (age x sex role x perceived reality). However, because

Pingree analyzed the results with a four-way analysis of variance procedure (age x sex role x perceived reality x sex of child), thereby violating the assumption of random assignment and some cell sizes to inadequate numbers, the findings must be viewed with caution. Using this procedure, she found the two sets of commercials had a significantly different impact on children's attitudes about women only for the groups that had been instructed about perceived reality. For these groups, there was an interaction with sex of subject, age, and sex role portrayal, such that eighth-grade boys had more traditional attitudes about women after viewing the nontraditional stimulus, while all other groups showed the reverse pattern.

Flerx, Fidler, and Rogers (1976) conducted an interesting, though limited, film and reading intervention project designed to modify the sex role attitudes of five-year-old children at two day-care centers. The experimenters read stories containing egalitarian portrayals of sex roles to one group of children for 30 minutes a day for five days. A second group was read stories concerning traditional sex roles for the same length of time, while the third treatment group viewed egalitarian films lasting approximately 17 minutes each over seven days. One pretest and two post-tests were administered. The researchers reported that on the immediate post-test, the egalitarian film and books groups had more egalitarian attitudes than the traditional book group. Furthermore, on a second post-test one week later, the film group was found to have more egalitarian attitudes about children's play than either of the books groups, which did not differ from each other. The experimenters interpreted this latter result as suggesting that the effects of the films lasted longer than that of the book treatment. Threats to the internal validity of this experiment come from several sources, however. No attempt was made to control for differential sex role themes between the two book conditions; the researchers failed to include

a traditional film condition, limiting the conclusions that can be drawn from the presentation of the egalitarian films; and both the length and number of sessions were varied between the film and book treatments. It is also questionable whether the Flerx, et al. measures of sex role stereotypes were equally relevant to the diverse stimuli they presented.

In each of these studies, experimenters either have sacrificed control over their stimuli while maximizing what Aronson and Carlsmith (1968) have termed "mundane realism" (i.e., likeness to real-world events) or they have sacrificed mundane realism for experimental control. Pingree (1978) and Flerx, et al. (1976), employed existing television commercials and books and film, respectively, thus introducing many extraneous differences among their various experimental conditions. These differences conceivably could have confounded the test of whether the intended manipulations actually caused the obtained group differences. Atkin (1975), O'Bryant and Corder-Bolz (1978 a, b) and Williams, et. al., (1981), on the other hand, in constructing their own videotaped stimulus materials may have threatened the external validity of their studies while seeking to maximize control over their independent variables. The lack of subtlety in their stimuli also may have made subjects more susceptible to demand characteristics and hence may have compromised the internal validity of their experiments.

Furthermore, only a few of these experimental studies have taken age factors into account by including more than one age group. Evidence for age-related differences in sex role learning from television is growing. Guttentag and Bray (1976) found that both fifth-and ninth-grade boys moved further toward greater stereotyping of sex roles after a long-term educational intervention project, while at every grade level, girls showed attitudinal shifts in the nonstereotypical direction. Pingree's (1978) study with third and eighth graders

suggested an age by sex interaction such that older boys showed more conservative attitudes after viewing nontraditional women than after viewing women in traditional roles, while the younger and older girls and the younger boys showed less conservative attitudes.

Kohlberg (1966) and Pleck (1975) have proposed theoretical explanations for age differences. According to Kohlberg, ten-year-olds hold less tenaciously to traditional stereotypes than their younger counterparts. Pleck (1975) hypothesized that rigid and intolerant sex role conformity peaks in early adolescence, when children may be unsure of their competence and strengths as pubescent young men and women. Social learning theory also could be evoked to explain age-related differences. For example, direct and vicarious rewards for conformity to tradition sex roles may be greater for adolescents than pre-pubescent children. Previous studies and Wolf (1975) also suggest that such patterns of reinforcement and punishment may occur earlier and with greater intensity for boys than for girls. Thus, in attempting to unravel the possibly complicated effects of televised sex roles, researchers need to pay special attention to both age and sex factors.

Finally, most previous studies have presented children with extreme portrayals of either all sex-consistent behavior or all sex-inconsistent behavior. Yet several investigators, (Bem, 1974; Spence, Helmreich, & Strapp, 1975; Heilbrun, 1976; Kelly & Worell, 1977), developing the notion of psychological androgyny, have suggested that a tempering of traditional sex roles may be advantageous for both sexes (Worell, 1978). The term, "androgyny," is used to describe persons who are able to draw upon both same-sex and different-sex behaviors. Recent formulations hypothesize that such individuals have a full response repertoire and behavioral flexibility that is lacking in high sex-typed persons, i.e., persons who engage in sex-consistent behaviors to the relative

exclusion of sex-inconsistent behaviors. In the study described here, experimental stimuli were based on this conceptualization of sex-typed, sex-reversed, and androgynous roles. Sex-typed portrayals are defined as those in which the behaviors, roles, and attributes of characters conform to traditional cultural definitions of sex roles of masculinity and femininity. By contrast, in androgynous enactment, male and female characters display values and behaviors traditionally associated with the other sex as well as same-sex behavior. Sex-reversed portrayals are those in which the characters manifest attributes and behaviors traditionally ascribed to the other sex.

To examine the effects of all three kinds of portrayals, fifth and eighth grade children were pre-tested regarding existing sex-role attitudes; were randomly assigned to see one of the three versions of a 12 minute family drama produced especially for this project; and were administered a post-test immediately after viewing one of the video-tapes. The present study expands upon previous research in several ways. First, unlike some previous studies, it presents the various sex roles in the context of a realistic television show. The scripts feature a plot centering around a moral dilemma, taking the focus off the sex role manipulations. Second, the experiment explores the differential effects of sex-typed, sex-reversed, and psychologically androgynous role portrayals while maintaining a high level of experiental control since all other film details besided the sex role portrayal were held constant. Third, the present study investigates three dimensions of sex roles -- occupational, familial (household chores and hobbies) and socioemotional roles as suggested by Guttentag and Bray (1976) -- and assesses changes in these three aspects. Fourth, the experiment examines both males and females at two seldom-researched ages in which developmentally-related differences in reactions may be anticipated.

Specifically, the study was designed to test the following hypotheses, involving possible sex of the child by grade (age) by sex role portrayal interactions:

H 1: Short-term televised portrayals of sex roles can significantly influence the sex role preferences of children. (Main effect for treatment.)

H 2: Females will be more likely than males to change their sex role preferences in the nontraditional direction. Specifically, females who see the nontraditional portrayals (sex-reversed and androgynous versions) will show greater change in the direction of less feminine sex-typing than males in those conditions will show in the direction of less masculine sex-typing. Males who see the nontraditional portrayals will hold more highly sex-typed preferences than males who see the sex-typed version.

H 3: Fifth-grade children who see androgynous and sex-reversed portrayals will show greater preference change toward nontraditional roles than eighth-grade children.

Method

Design and Subjects

A 3 x 2 x 2 x 2 factorial design was employed with before-and-after measures on the dependent variables and with four between-subject sources of variation: presentation of the sex-typed versus androgynous versus sex-reversed television version, sex of the child, grade (age), and pre-and post-test form. The participants were 125 fifth- and 149 eighth-grade children enrolled in two Durham, N.C., predominantly black public schools. Ten fifth graders and 53 eighth graders were excluded from the study because they were absent for either the pre-test or post-test, and another 10 students were dropped because they failed to complete the dependent variable questionnaires. In addition, five fifth and 21 eighth graders who scored less than 50 percent

correct on a measure of recall of the videotape content were excluded from the analysis. Analysis was undertaken with the remaining 175 subjects. Children present at pre-test were randomly assigned to the videotape treatment groups and systematically assigned to pre-and post-test forms.

Apparatus

Three 12-minute videotapes were developed to depict a light family drama in which male and female characters took on various occupational, familial, and socioemotional roles. Although essentially the same script was used in all three experimental conditions, the roles assigned to the male and female characters varied among the three versions. The sex-typed and sex-reversed shows were exact replicas with the male and female characters simply switching lines and roles between the two versions. Some lines in the androgynous version were modified slightly to allow the female and male characters to each take half of the "Feminine" and half of the "Masculine" lines and roles. Table 1 presents a list of occupational, familial and socioemotional roles portrayed among the three versions. These roles were embedded in an unrelated plot involving a moral dilemma. It was hoped that this unrelated story focus would deflect the subjects' attention away from role manipulations and thus decrease the possibility of demand characteristics.

Insert Table I About Here

The story centers upon an adolescent brother and sister who, left alone in their house while their parents are on a weekend trip, throw an unchaperoned, wild party for their friends. The action takes place in the litter-strewn living room on the morning after the party. The children discover that some of their friends opened their parent's (version 1=father's, version 2=mother's, version 3=both parents') liquor cabinet and drank several bottles, and they debate over whether they should confess to their parents about the party and the liquor or try to cover up, getting an older friend to buy more liquor for them. As they begin cleaning up, however, one of them discovers that their parent's (version 1=mother's, version 2=father's, version 3=both parents') favorite antique gold box is missing. One adolescent is quick to form an opinion about who might have stolen the box; he or she remembers that a friend (version 1=Bucky, version 2 and 3=Becky), who has to work to support his/her family, was eyeing the box the previous night and has commented upon how much the box might net at a pawn shop. The door bell rings, and this friend enters, apologetically returning the gold box. The brother and sister feel so moved by their friend's financial dilemma and his/her decision to return the box anyway that they give him/her the money they had saved up from mowing lawns and baby sitting, money that earlier they had decided to use to replenish their parent's liquor cabinet. The friend leaves and the story ends as the two decide to be honest with their parents and return to the mammoth task of cleaning up the house.

Great care went into the creation of quality videotapes that were high in mundane realism and yet allowed maximum experimental control. Two script writers were hired and two scripts discarded before a workable script which met specifications for role portrayals and entertainment was decided upon. Actors and actresses were adolescents active in local theatre groups, and approximately 15 rehearsals were held. Finally, a private videotape company was commissioned

to shoot, process, and edit the shows. The result was three 12-minute videotapes that approximated the quality found in day-time television dramas and that displayed the necessary specific occupational, socioemotional, and familial roles.

Procedure

Pre-tests were administered to the subjects in their regular classrooms eight days before the presentation of the stimulus. Children were told that the 12-page double- and triple-spaced questionnaire was designed to find out about them and their favorite television shows. Then, on the day of the experimental manipulation, the children were taken in groups of approximately 30 to one of three separate experimental rooms in their school and presented with either the sex-typed, sex-reversed, or androgynous videotape. On this day, they were told that the researchers were interested in their reactions to this new television show and the characters in it. After watching the show, they filled out a 16-page, double- and triple-spaced questionnaire. Debriefing was omitted at the request of teachers and school officials.

Measures

The dependent measures comprised about three-and-one-half pages of each of the pre- and post-test questionnaires. The questionnaires also contained questions about the children's favorite television shows, favorite characters, television viewing habits, living situation, and parents' occupations and educational levels. The post-test questionnaires also contained questions about the roles presented in the experimental videotapes and the children's perceptions of the characters. Our purpose was to minimize the influence of demand characteristics by embedding the measures of interest in a larger questionnaire.

The measures of children's preferences for occupational, familial, and socioemotional sex roles were specially created for this study after a thorough review of the literature failed to turn up appropriate and adequate paper-and-pencil measures of these three dimensions for fifth and eighth grade children. The total preference questionnaire consisted of 49 forced-choice, dichotomous pairs of items. Each item was rated as stereotypically male (e.g., fix a car, N=45), stereotypically female (e.g., vacuum a rug, N=45) or neutral (e.g., brush your teeth, N=8) by 10 undergraduate students. Inter-rater agreement ranged from 90 percent to 100 percent for each item pair. The one judge who was responsible for disagreement in most instances wrote a note at the bottom of his rating sheet castigating the researchers for trying to "dredge up dying stereotypes."

The stereotyped occupational choices were drawn from those cited in content analyses of sex roles on television and from an actual listing of the percentages of real-life men and women in various occupations based on the 1970 Census. The household chores and hobbies items were adapted from activities lists created for an experiment by Bem (1976), and socioemotional roles were adapted from measures developed by Guttentag and Bray (1976). Eighteen item pairs depicted sex role related occupational choices (e.g., "police chief" versus "nurse"), 16 pairs featured sex role related familial roles including household chores and hobbies (e.g., "Fix a flat tire" versus "Wash dirty dishes"), and 11 pairs contained sex-role related socioemotional roles (e.g., "be gentle" versus "be rough"). Children were instructed to choose the item in each pair that they would rather be or do. Two forms (A & B) of these measures were created by rematching the masculine and feminine choices in each pair. The forms were counterbalanced; half the subjects received Form A and half received Form B on pretest. Those who completed Form A on pretest received Form B on post-test and vice versa. Females received one point

each time they picked a "feminine" choice and males received one point each time they picked a "masculine" choice. High scores thus indicated highly sex-typed preferences. Separate scores were computed for the children's occupational, familial, and socioemotional preferences. In addition, the totals for these three components were added to obtain an overall preference score.

Results

All major analyses were performed on the overall Preference scores and on each of the three sex roles dimensions: Occupational, Familial, and Socioemotional scores. These analyses were conducted using the computer package, MANOVA. Four analyses of covariances (ANOCOVA) were performed using the pretest scores as covariates:3 (TV version) x 2 (sex) x 2 (grade) x 2 (form). No effects were predicted for form and none were found. Therefore, the data were collapsed across this variable, and ANOCOVAs--3(TV version) x 2 (Sex) x 2 (grade)-were performed, again with the pretest scores as covariates.

This analysis for the sex-role Preference Total yielded main effects for television version $F(2,162) = 4.13$. $p < .05$, and for sex, $F(1,162) = 16.261$, $p < .001$, as depicted in Table 2.

Insert Table 2 About Here

The analysis for Occupational scores also indicated main effects for TV version, $F(2,162) = 6.06$, $p < .01$, and for sex, $F(1,162) = 6.01$, $p < .05$. Using Familial scores as the dependent variable, analysis of covariance showed a significant main effect only for the TV version, $F(2,162) = 3.40$, $p < .05$; and examining Socioemotional scores, this analysis yielded a significant sex by age interaction, $F(1,162) = 6.67$, $p < .01$.

These results indicate that Hypothesis 1, the main effect for treatment, was supported for the Preference Total, the Occupational and the Familial scores, but was not supported for the Socioemotional role dimension. Table 3 shows that while children on all but two of the 12 measures showed greater sex-typing after exposure children who saw the sex-typed version became more highly sex-typed on all four measures than all other children.

Insert Table 3 About Here

The first test of Hypothesis 2, the main effect for sex, was supported for the Preference Total and the Occupational scores, but was not significant for the Familial dimension. A significant sex by age interaction was found for the Socioemotional dimension. An examination of the means as shown in Table 4 indicates that males became more highly sex-typed in their overall Preference scores and in their Occupational choices, while females became less sex-typed on these dimensions. Table 5 indicates that this pattern also holds for the Socioemotional scores, with the qualification that the eighth graders show more extreme patterns than fifth graders. Older males became more highly sex-typed than younger males and older females became significantly less sex-typed than younger females.

Insert Table 4 And Table 5 About Here

A planned comparison to examine treatment effects between sex groups was significant for the Preference Total, $F(1,162) = 28.80$, $p < .001$; the Occupational scores, $F(1,162) = 21.30$, $p < .001$; the Familial scores, $F(1,162) = 6.62$, $p < .01$; and the Socioemotional scores, $F(1,162) = 75.28$, $p < .001$. The means are shown in Table 6 and indicate that girls who saw the nontraditional portrayals became significantly less sex-typed in their preferences than boys, who became more sex-typed.

Insert Table 6 About Here

A planned comparison to test whether these treatment effects hold up within the male group was significant for all four dimensions, but in the opposite direction than that predicted (Preference Total, $F(1,162)=16.27$, $p < .001$; Occupational scores, $F(1,162) = 16.27$, $p < .001$; Familial scores, $F(1,162) = 10.25$, $p < .002$; and Socioemotional scores, $F(1,162) = 55.02$, $p < .0015$) Table 7 shows that while all males, on the average, changed their preference in the traditional direction, those who saw the sex-typed version became more highly sex-typed than males who saw either of the two nontraditional portrayals combined.

Insert Table 7 About Here

A contrast to examine age differences in treatment effects (Hypothesis 3) was significant also for all four dimensions, but inspection of the means suggests a slightly different pattern than that predicted above (Preference Total, $F(1,162) = 34.98$, $p < .001$; Occupational Scores, $F(1,162) = 22.57$, $p < .001$; Familial Score, $F(1,162) = 11.90$, $p < .001$; Socioemotional score, $F(1,162) = 111.20$, $p < .001$). Table 8 shows that both fifth and eighth graders, on the average, showed more rather than fewer sex-typed preferences after presentation of the nontraditional shows, but the older children did become significantly more sex-typed than the younger children.

Insert Table 8 About Here

Finally, a planned comparison to check the age-sex interaction suggested by Pingree's (1978) work was significant for the Preference Total $F(1,162) = 4.899$, $p < .05$ and the Socioemotional scores $F(1,162) = 17.814$, $p < .001$ but non-significant for the Occupational and Familial Scores. Table 9 shows that eighth

grade males became more highly sex-typed in their Preference Totals and less sex-typed in their Socioemotional roles than all other children after presentation of the experimental stimuli.

Insert Table 9 About Here

Discussion

In general, the results of the experiment support the hypotheses, with a few exceptions among the three dimensions of the sex role preference measure. As suggested by previous studies, children can be influenced by short-term exposure to alternative sex role portrayals. Yet the results of this experiment suggest a number of complicating factors.

First, as a number of researchers (Guttentag & Bray, 1976; Wolf, 1975; Flerx, et al., 1976; Pingree, 1978) have found, males, especially adolescent males, will be much less likely than females to prefer nontraditional behaviors. Males consistently exhibited more traditional sex role preferences after exposure to any of the sex role portrayals. While exposure to non-traditional models did reduce this tendency for some male subjects, the net result was still a stronger preference for traditional sex role behavior. This propensity to become more sex-typed was greatest among the older (eighth grade) males. Females, on the other hand, exhibited the opposite pattern. Females either showed little preference change or exhibited less sex-typed preferences following exposure to any of the sex role portrayals. The tendency to become less sex-typed was significantly greater among the older females for the socioemotional roles. These findings suggest that the adoption of nontraditional roles may be more threatening and thus more difficult for boys. As both Wolf (1975) and Flerx, et al. (1976) have pointed out, both sexes may perceive that male behavior is more highly valued than female behavior in society as a whole.

Second, the results suggest that the age of children may be a significant factor in determining reactions to nontraditional sex role portrayals. While 'gnificant main effects for grade were not found, planned comparisons indicated that eighth grade males showed significantly greater sex-typed preferences after presentation of the stimuli than fifth grade males. Also, eighth grade females, on the average, became significantly less sex-typed in their preferences than fifth grade children on the socioemotional measure. The confluence of at least two hypotheses could explain these results. Sex roles may be more salient to children in the developmental stage of adolescence than in late childhood. Also, adolescent boys and girls may be more aware than fifth graders of the relatively higher values society places on "masculine" activities as compared with "feminine" activities.

Third, the fact that some of the experimental hypotheses held for some of the sex role dimensions and not for others suggests that these dimensions comprise useful distinctions. Interestingly, main effects for treatment were significant for the Occupational and Familial role dimensions but not for the Socioemotional dimension. It could be hypothesized that Occupational and Familial preferences may be easier to change than the subtler and more abstract Socioemotional roles. In fact, it seems likely that equal rights advocates have made greater strides in society at large in breaking down occupational stereotypes and in changing family roles than in altering subtle socioemotional patterns between the sexes. Also, a significant sex by age interaction was found for the Socioemotional dimension but not for the other two dimensions. Eighth graders showed significantly greater Socioemotional preference change than fifth graders, with boys moving in the sex stereotypical direction and girls shifting in the non-traditional direction. These sex by age differences may reflect greater sophistication among adolescents in detecting and understanding social and emotional roles. This finding might also be interpreted as supporting the

cognitive developmental theorists' proposition that it is not until this stage in cognitive development (formal operations) can the child deal with these more abstract concepts. At any rate, this finding suggests that interventions aimed at changing socioemotional sex role preferences may be less effective with younger children than with adolescents.

Finally, the results of this investigation suggest that the androgynous and sex-reversed television portrayals may have had different impacts upon children's preferences, depending upon their age and sex. As noted above, males as a whole became more sex-typed in their preferences no matter which television version they watched; however, those who saw the androgynous version showed the least change toward traditional preferences. Adolescent males differed from their fifth grade counterparts in their reaction to the other two versions. The older males became most highly sex-typed in their preferences after viewing the sex-reversed version, while the younger males became most highly sex-typed after watching the sex-typed version. Thus, we might speculate that adolescent males find the sex-reversed portrayals most threatening and react by becoming dogmatic in their preferences.

Females, on the other hand, showed an alternate pattern. Inspection of the means suggests that the sex-reversed version was most effective in loosening the sex-typed preferences of fifth grade girls , while the androgynous version was most effective with eighth grade females. Similar to their male agemates, the older females may have found the sex-reversed portrayals unattractive and perhaps threatening. Cognitive development theory may again help to explain the relatively weaker effect of the androgynous version upon fifth grade girls (and boys, for that matter). According to cognitive-developmental theory, fifth graders, who should be functioning at the concrete operations stage, will be less capable of entertaining the hypothetical roles involved in androgynous portrayals

than eighth graders, who should be functioning at the formal operations stage of cognitive reasoning. In other words, fifth graders, to a greater extent than eigth graders, may need stereotypes in order to effectively organize their perceptions.

It also should be noted here that all but a few of the children who participated in this experiment were black. Two recent studies (Williams, et al., 1981 and O'Bryant & Corder-Bolz 1978b) suggest that blacks and other minority children may respond differently than white children to sex role messages in the media. Williams, et al., for example, found that minority children liked television characters more than the white children did but the minority children also retained less information.

In short, the immediate impact of androgynous television content upon the sex role preferences of fifth and eighth grade children is far from simple. Androgynous portrayals likely will not reduce the sex-typed preferences of males; however, such portrayals may evoke a less dogmatic reaction among males than sex-typed or sex-reversed portrayals. Androgynous portrayals may be most likely to change the preferences of adolescent females in a nonstereotypical direction; but these portrayals may have little effect upon fifth grade females.

Table 1

Sex Roles Portrayed in Three Televisions Versions

		Sex Role Dimension		
Family Role	Name	Occupational	Familial	Socio-emotional
Version 1: SEX-TYPED				
Daughter	Julie	-aspires to be nurse/ candy striper now	-washes dishes/ cleans up house/ babysits	-fearful under stress/ supportive
Son	David	-aspires to be fire chief/mows lawns	-takes out garbage/fixes flat tires	-rational under stress/ makes decisions and solves problems
Friend	Bucky	-hospital orderly	-works to support family father deserted	
Mother		-elementary school teacher	-owns gold box	-understanding
Father		-policeman	-controls liquor cabinet	-disciplinarian
Version 2: SEX-REVERSED				
Daughter	Julie	-aspires to be fire chief/mows lawns	-takes out garbage/fixes flat tires	-makes decisions and solves problems/ rational under stress
Son	David	-aspires to be nurse/ candy striper now	-washes dishes/ cleans up house/ babysits	-fearful under stress/ supportive
Friend	Becky	-hospital orderly	-works to support family mother deserted	
Mother		-policewoman	-controls liquor cabinet	-disciplinarian
Father		-elementary school teacher	-owns gold box	-understanding
Version 3: ANDROGYNOUS				
Daughter	Julie	-aspires to be paramedic/candy striper	-washes dishes/ fix flat tires with David/mows lawns	-sometimes rational, supportive, sometimes fearful, makes decisions
Son	David	-aspires to be paramedic/paints houses	-dries dishes/ fixes flat tires with Julie/ babysits	-sometimes rational, supportive, sometimes fearful, makes decisions
Friend	Becky	-hospital orderly	-works to support family father deserted	
Mother		-policewoman	-both own gold box and control liquor cabinet	-both are disciplinarians and sometimes understanding
Father		-elementary school teacher		

Table 2

Mean Differences[a] in Pre- and Post-Test Preference Total Scores

Sex	Grade	(N)	Television Version: Sex-Typed (64)	Sex-Reversed (60)	Androgynous (51)
Male	Fifth	(58)	4.05	2.76	1.75
	Eighth	(37)	4.47	6.85	2.75
		(95)		Total(Male)= 3.79***	[b]
Female	Fifth	(47)	1.93	-2.96	.07
	Eighth	(33)	.62	.14	-2.08
		(80)		Total(Female)= -.53	
	Total[b*]		2.96	1.71	.52

Note. Greater values signify greater sex typedness, i.e., greater masculinity preferences for males and greater femininity for females.

a. Differences were calculated by subtracting each group's score on the pre-test from the similar score on the post-test. Levels of statistical significance were calculated using the pre-test score as the covariate in the analysis of covariance.

b. The overall analysis of covariance showed significant main effects for sex of subject and treatment.

*$p < .05$.

***$p < .001$.

Table 3

Mean Differences in Pre- and Post-Test Sex Role Dimension Scores by Television Version

Sex-Role Dimension	n=	Television Version: Sex-Typed (64)	Sex-Reversed (60)	Androgynous (51)
Total*		2.96	1.71	.52
Occupational**		1.33	..28	-.16
Familial*		1.21	-.10	.37
Socio-Emotional		..45	.21	.22

Note. Greater values signify greater sex-typedness.
*$p < .05$.
**$p < .01$.

Table 4

Mean Differences in Pre- and Post-Test Sex Role Dimension Scores by Sex

Sex Role Dimension	n=	Sex: Males (95)	Females (80)
Total***		3.74	-.53
Occupational*		1.26	-.33
Familial		.93	.03
Socio-Emotional[a]		.74	-.22

Note. Greater values signify greater sex-typedness.

[a] This dimension actually showed a significant sex by age interaction as shown in Table 5.
*$p < .05$.
***$p < .001$.

Table 5

Mean Differences in Pre- and Post-Test Socioemotional Sex Role Scores by Sex and Grade

Grade		Sex	
	n=	Males (95)	Females (80)
Fifth		.55	-.13
Eighth		1.02	-.34

Note. The interaction represented here was significant at $p < .01$.

Table 6

Mean Differences in Pre- and Post-Test Sex Role Dimension Scores by Sex Within Non-Traditional Television Versions[a]

Sex Role Dimension		Sex	
	n=	Males (59)	Females (52)
Total***		3.45	-1.58
Occupational***		.91	-.86
Familial**		.57	-.37
Socioemotional***		.69	-.35

[a] Non-Traditional versions were those depicting sex-reversed and androgynous sex roles..

**$p < .01$.
***$p < .001$.

Table 7

Mean Differences in Pre- and Post-Test Sex Role Dimension Scores for Males by Television Version

Sex Role Dimension	Television Version	
n=	Sex-Typed (36)	Non-Traditional[a] (59)
Total***	4.23	3.45
Occupational***	1.83	.91
Familial**	1.64	.54
Socioemotional**	.80	.69

[a]Non-Traditional versions were those depicting sex reversed roles and androgynous roles.

**$p < .01$.
***$p < .001$.

Table 8

Mean Differences in Pre- and Post-Test Sex Role Dimension Scores by Grade Within Non-Traditional Television Versions[a]

Sex Role Dimension	Grade	
	Fifth	Eighth
Total***	.46	2.18
Occupational***	-.20	.54
Familial***	-.10	.47
Socioemotional***	.07	.42

[a]Non-Traditional versions were those depicting sex-reversed and androgynous roles.

***$p < .001$.

Table 9

Mean Differences in Pre-and Post-Test Sex Role Dimension Scores (Eighth Grade Males Vs. All Other Groups)

Sex Role Dimension	Group: Eighth Grade Males (37)	All Other Age and Sex Groups (138)
n=		
Total*	5.00	.93
Occupational	1.62	.25
Familial	1.52	.24
Socioemotional***	.10	1.02

*$p < .05$.
***$p < .001$.

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