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Effects of Gender Identity, Child Development and Televised Counter-Stereotyped Messages about Masculinity on Male Children's Gender Stereotypes

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# EFFECTS OF GENDER IDENTITY, CHILD DEVELOPMENT AND TELEVISED COUNTER-STEREOTYPED MESSAGES ABOUT MASCULINITY ON MALE CHILDREN'S GENDER STEREOTYPES

By

Jeffrey Eugene Brand

# A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

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Mass Media Program

#### ABSTRACT

# EFFECTS OF GENDER IDENTITY, CHILD DEVELOPMENT AND TELEVISED COUNTER-STEREOTYPED MESSAGES ABOUT MASCULINITY ON MALE CHILDREN'S GENDER STEREOTYPES

By

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This study examines the effects of three factors—counter-stereotyped television portrayals of men, gender identity and development—on boys' gender stereotypes. The literature suggests that boys are more resistant to attitude change by counter-stereotyped messages than girls, but androgynous and middle-childhood boys might be less resistant to these messages than masculine and adolescent boys. Males receive less attention than females in the counter-stereotyping media effects literature, although males are viewed as an at-risk audience. Previous counter-stereotyping research generally has exposed subjects either to traditional or nontraditional portrayals; this study used three deviation conditions (slight, medial and extreme) to which boys were assigned.

Four hypotheses predicted that (1) the greater the magnitude of content deviation, the larger the impact on gender stereotypes of androgynous males and the smaller the impact on gender stereotypes of masculine males; (2) androgynous males, more than masculine males, would indicate positive attitudes toward counter-stereotyped content; (3) the greater the magnitude of content deviation, the larger the impact on gender stereotypes of 11-year-old males and the smaller the impact on gender stereotypes of 15-year-old males; and (4) 11-year-old males, more than 15-year-old males, would indicate positive attitudes toward counter-stereotyped content.

Boys (n=238) in grades 5 and 10 were randomly assigned to one of three 4.5 minute viewing conditions where male characters' behaviors deviated slightly, medially or extremely from normative expectations according to pretests. Boys were tested for gender identity (androgynous or masculine) before viewing the stimulus; after viewing, for gender stereotypes (male role, male physical quality and sexist attitudes and attitudes toward women).

Gender identity and gender stereotypes represented different dimensions of gender schema as predicted in the literature. Analysis of variance produced no support for the first and third hypotheses. The second hypothesis test approached, but did not achieve, significance. The fourth hypothesis was supported.

Results suggest that male youths have moderate to traditional gender attitudes that can be tempered through exposure to counter-stereotyped messages in middle childhood. Adolescence, regardless of gender identity, may be too difficult a period for the male to assuage his gender stereotypes from stimuli such as these. Copyright by JEFFREY EUGENE BRAND 1995 To my grandmother and friend, Mildred

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# **CHAPTER 1: INTRODUCTION**

Young males are a population at risk in Western countries (Maslen, 1995). Contradictory demands of ensconced male socialization and feminist social change leave boys with mixed messages about what beliefs they should subscribe to and what it means to be a male (Bly, 1990). The size of the problem is large and it appears to be worsening as the concern over equity for girls leaves the problems of male socialization without attention (Legge, 1995). While television has been implicated as an agent of socialization, academic attention dedicated to changing gender attitudes and values has almost exclusively focused on how these relate to equality for women and girls.

Research suggests that television contributes to children's gender attitudes. Content analyses routinely show that television is consistent in its traditional portrayal of gender roles, traits and behaviors—especially for males. This study focuses on the role of television portrayals of males' behaviors in affecting boys' gender attitudes. It asserts that television is but one factor that interacts with other factors to contribute to boys' views about gender. Yet it is a factor that is worthy of study so television may be used in the future as a prosocial influence to help the male child audience develop positive views about the complexity of the 'new masculinity' (Legge, 1995).

So, the question to be answered here is, how do important factors, such as age and personality characteristics, interact with televised counter-stereotypical portrayals of men to affect young males' gender stereotypes?

#### Background

Media effects research may be characterized as having a "problem orientation" (Roberts & Bachen, 1981, p. 309). Issue orientation is precisely endemic to the effects perspective which is concerned with the influence of mass communication on audiences. For example, parents, teachers, scholars and politicians repeatedly question the effects of television on its viewers. They ask how television affects beliefs and thoughts (cognition), feelings (affect), behavior and behavioral intentions (conation)—and how television affects human physical well-being. They ask how media affect different audience groups, particularly children, the special audience (Comstock et al., 1978). While television has been the medium of greatest concern to critics, the influences of other electronic and various print media have received their share of consideration (cf., Garramone & Atkin, 1986; Roberts & Maccoby, 1985).

Further, critics deliberate on the effects of specific content—like news, sports, comedy, mystery, horror and so on. They question the potency and longevity of media effects. And although most of this research has been concerned with behavior, especially aggressive behavior resulting from violence on television, cognitive and affective outcomes in themselves have been recognized as important and worthy phenomena of study (Chaffee, 1977). Berkowitz (1984) argues that the worth of studying cognitive effects of mass communication is in understanding which cognitive processes lead to overt behavior.

A popular domain of media effects research has been the development and maintenance of stereotypes about, and negative attitudes toward, various social groups in the present multicultural society (Greenberg & Heeter, 1982). Most of the attention in this area has been given to television content effects on racial and gender stereotypes.

Stereotyping research has looked at three basic questions about television: (1) does television create or contribute to new stereotypes, and if so, in what way?; (2) does

television modify (reinforce or resist) existing stereotypes?; (3) can television convert negative stereotypes to positive ones?

The following text reports empirical research designed to add knowledge to a growing understanding about the effects of televised gender portrayals on children's stereotypes of the sexes. Before proceeding with a review of relevant literature, a brief discussion about meanings given to key constructs throughout this text is warranted.

# Constructs

One of the difficulties for social science is the clear and precise application of concepts to represent phenomena of interest (Chaffee, 1991). In no area is this more apparent than in research on the gender effects of television. Capricious use of a number of social psychological constructs in earlier research necessitates elucidation for clear understanding of the ideas here.

#### Sex and Gender

First, it is important to clarify the terms *sex* and *gender*. Perhaps because the term sex has presented some writers and readers with discomfort for its allusion to the practice of intimate sexual behavior, the term gender has been used often in media effects research to refer to one's biological sex (especially for demographic purposes). Yet Deaux (1985) clearly differentiates the term sex for describing the biological categories of male and female. By comparison, gender refers to the socially prescribed collection of psychological traits assigned to each biological condition. As Deaux argues, this application of the terms *is* not simply a matter of semantics, but an important distinction which helps clarify our understanding of the source of differences (i.e., biological or social) between females and males.

Sex Role

Second, the construct *sex role* requires clarification. Although Deaux (1985) argues the term sex role should be avoided because of its multipurpose application in the psychology literature, it frequently appears in media effects work suggesting that the term may have special utility there. Durkin (1985d) provides a simple framework.

The term sex role refers to the collection of behaviours [sic] or activities that a given society deems more appropriate to members of one sex than to members of the other sex.... In short, in areas of work, leisure and interpersonal relationships, specific ways of behaving are more likely to be adopted by and expected of members of a specific sex. (p. 9)

Thus, while gender refers to psychological appropriations to the sexes, sex roles are the behavioral characteristics society assigns to each sex. Unfortunately, both terms have been used in the literature in such a way as to be synonymous. It appears the problem stems from the confusion over psychological traits versus roles or behaviors. Indeed, many measures of stereotypes about gender have included items assessing both behavioral roles and psychological traits within the same scale (cf., Spence & Helmreich, 1974). As a result, gender must be applied not only to psychological traits, but behaviors as well. For purposes of this study, gender and sex role are used synonymously to refer to the traits and behaviors assigned uniquely to males and females.

# Attitudes, Traits and Stereotypes

Having elucidated the terms sex, gender and sex role, a third clarification must be made among the constructs attitudes, personality traits and stereotypes. Ajzen (1988) offers clear definitions on the first two terms. "An attitude is a disposition to respond favorably or unfavorably to an object, person, institution or event" (p. 4). By comparison a personality trait is, "a characteristic of an individual that exerts pervasive influence on a

broad range of trait-relevant responses" (p. 2). Ajzen explained that both concepts denote behavioral outcomes:

In the case of attitudes, these responses are evaluative in nature and they are directed at a given object or target .... Personality traits, by contrast, are not necessarily evaluative. They describe response tendencies in a given domain, such as the tendency to behave in a conscientious manner, to be sociable, to be self-confident, etc.... Evaluations can change rapidly as events unfold and new information about a person or issue becomes available, but the configuration of personality traits that characterizes an individual is much more resistant to transformation. (p. 7)

Hamilton and Trolier (1986) present stereotypes as, "cognitive categories that are used by the social perceiver in processing information about people," (p 128). Thus, stereotypes are a special collection of attitudes focused on a specific grouping or category of attitude object. For example, one might believe that men are stronger than women (cognition) and feel that weak men are abhorrent (affect). Separately, these are attitudes; together and combined with similar positions they form stereotypes. Comparatively, a readiness to be independent and have strong emotions may represent a personality trait.

# Gender Identity and Gender Stereotypes

These concept clarifications lead to two key constructs used in this study. The first is *gender identity*—a self-reported set of personality traits and dispositions related to social **expectations for one's sex**. Gender identity is one's view of self with regard to masculine **and feminine personality traits**. The second is *gender stereotypes*. As Durkin (1985d) **clarifies**, gender stereotypes are,

... the structured sets of beliefs about the personal attributes of women and men. This definition captures the general agreement of social psychologists interested in the study of stereotypes that they are organized cognitive structures that facilitate the categorization and simplification of the social environment. (p. 11)

Both concepts reflect components of the gender belief system of an individual. Gender identity is diagnostic of the self's masculine and feminine traits, gender stereotype is an evaluative grouping of attitudes about traits and behaviors believed to be appropriate for generalized males and females as learned from socialization.

# **Review of the Literature**

Media academics believe television causes gender stereotyping among children (Bybee, Robinson & Turow, 1985). An argument will be forwarded here to suggest that the effect of television on youths' gender stereotypes is subtle and interactive, yet powerful enough to be measured with a clear knowledge of critical antecedents. The review begins by exploring different beliefs that might comprise gender stereotypes to bring understanding about their composition. Then it will attend to literature on the role of television in the presence of gender stereotypes. Finally, this section will examine the presumed antecedents of gender stereotypes contributed by the viewer (audience) and television content (portrayals).

#### Nature of Gender Stereotypes

As Deaux and Kite (1985) have noted, gender stereotypes have, until recently, been studied from the restricted point of view of personality traits. Normative attitudes about gender in Western culture reflect beliefs about role behaviors, emotional characteristics (traits) and physical characteristics of females and males (Deaux, 1985). While some roles, traits and characteristics for the sexes overlap, many are believed to be the domain of one Sex or the other. That is, social observers associate some characteristics exclusively with

females and others only with males. Television, it has been argued, shows its audiences these roles, emotions and behaviors commonly in such a way as to reflect and seldom challenge the values and beliefs of the dominant culture that determine which characteristics are associated separately with each sex (Seidman, 1992). Indeed, children and adults hold similar expectations making these gender beliefs relatively ubiquitous, invariant and thus normative. The typology for organizing the dimensions of gender stereotypes presented below is adapted from Deaux and Kite (1985) and Deaux (1984). Gender stereotyping attributes are divided into beliefs about roles, behaviors, traits and physical characteristics. While occupations have sometimes been conceptualized separately from roles and behaviors, their observable characteristics make them roles nonetheless and will be subsumed under that category in this discussion.

Further, for conceptual clarity, roles and behaviors are distinguished on the basis that roles are functional situations in which people are found, behaviors are their responses, initiatives, acts and activities in these situations. This conceptualization is not new. Behaviors exhibited by television characters have been identified as important as the roles in which characters are portrayed (Perloff, et al., 1982). Yet the distinction is rarely discussed in the media effects literature. Even in the social psychology literature, "surprisingly little work has been done to define . . . stereotypes very precisely," (Deaux, 1984, p. 112). By separating roles and behaviors as distinct components of gender stereotypes, one adds more exactitude to observing differential effects of gendered television portrayals. The concept of androgyny and its portrayal on television has lead **researchers** in this area to suggest that diversity in behavior (as much as in role) is an **important** factor affecting gender stereotypes (Durkin, 1985d).

#### **Beliefs about roles**

Roles, those contexts in which people are found, can be conceptualized as manifesting distinct domains such as work, family, natural and leisure. Each individual holds beliefs about roles appropriate for females and males in these domains.

*Work roles* include those jobs in which one expects to find each of the sexes (Signorielli, 1990; Wroblewski & Huston, 1987). Working women, for example, traditionally are expected to perform in service professions as flight attendants, secretaries, nurses, receptionists, waitresses, teachers, nannies and cosmologists. Men are expected more often in the professions and heavy labor jobs traditionally as doctors, lawyers, scientists, business people, contractors, builders and so on (Blaske, 1984). The foregoing dichotomy among work roles is misleading. As Deaux (1984) reports, people's beliefs about how females and males differ are assumed to be relativistic rather than absolute and that there will be a considerable amount of overlap between different evaluations. For example, television news personalities were once only male. Today, it would be unlikely to find consistent expectations among children or adults that only men should be newscasters in light of the near-universal male-female news teams in most newsrooms.

Family roles are those positions and placements assigned to men and women at home related to caring for children or the elderly, maintaining the home, its various tools and contents and serving in a relational capacity as mother, father, sister, brother and so on. Here, television characters are often seen in relationship to their spouse or their children and are thus, husband and father, wife and mother, brother and sister. These social and farnilial positions are distinct from the behaviors in which the characters might engage. Thus, "Tim Taylor" is a husband and father. In some episodes he is a brother and in others, an uncle. Depending on the social context, his family role changes and his behaviors may not invariably fit his role.

More broadly, *natural roles* might be those contexts in which people are found by virtue of the natural social gathering and placement of the population. Shoppers, neighbors, seniors, youth, all represent natural situations in which people are placed. Natural roles may be conceptualized as relativistic roles that occur automatically when people are seen together. For example, a schema of the public park may contain children playing and elderly citizens resting on park benches. Quite aside from their activities or behaviors, their roles are clear and occur naturally. In this example, two roles have been identified: Children and senior citizens.

The final role category for discussion here is *leisure*. This group of roles becomes conceptually more entangled with behaviors because we often think of our roles in "time-off" as being leisure *activities*. Yet, being a TV viewer is quite different from crying while watching television or operating a remote control device. Thus, one can identify broad-based leisure behaviors as roles in the same way occupations, all of which have their basis in specific activities, can be conceptualized as roles. Traditionally, men are sports fans, gardeners, campers, hunters, technophiles and the like. Women, by comparison, are craft makers, socializers, bakers and volunteers. Both might enjoy and be expected in theaters, diners, and at vacations—demonstrating the likelihood of considerable overlap in many leisure roles.

# **Beliefs about behaviors**

Behaviors are tasks, activities and actions undertaken by social actors. How can behaviors, in the context of television's influence on gender attitudes, be understood? Consider the role of father. Normative expectations suggest that fathers behave in relation to earning money, working, repairing the home, paying bills, pronouncing family decisions and so on (Scheibe, 1979). Rarely does the role of father include these behaviors: Washing babies, changing their diapers, clothing, entertaining, educating and feeding children, showing sorrow, grief or fear, cooking meals, washing dishes and doing

laundry. Mothers on television cook, sew, bake, clean, shop, care for children and generally maintain the home interior while rarely mowing the lawn, working in the garage or taking out garbage.

Now consider the professional. Career men are expected to act independently and with authority. Rarely may they need help from, or require the confidence of, a colleague. Even more rarely should men follow orders of female superiors. They give orders, make decisions and sign important documents (Henderson, Greenberg & Atkin, 1980). In laborious work, behaviors are even more distinctive with men lifting, pushing, pulling, digging and driving. Comparatively according to convention, women take orders, conduct support activities, confide in coworkers and show emotion at work. Even in labor-intensive work, they are in charge of courier work or lighter equipment.

Within leisure roles, traditional behaviors of men are competitive. Infrequently, men participate in group-cooperative activities like aerobic exercise; only in exceptional conditions, might men lead such activities. Hunters are unlikely to show remorse or act sensitively on television. They are quiet and short with their words. Campers are likely to be sure and decisive. They engage in heavy work. At movies, men don't cry but women might. Women are expected to be talkative in their more social leisure activities, men less so. After a meal, men request the check and pay the bill.

In most role contexts, it is normative for males to exhibit showmanship, to show off. One expects male television characters to do things for themselves and make important decisions. Within any role, the behaviors of television characters (or for that matter people in real life) can be consistent or inconsistent with the role because the role has a number of situational and identifiable characteristics of which behavior is but one component.

#### **Beliefs about traits**

Traits are enduring characteristics assumed to guide behavior. They are often inferred by the social observer as an explanation for behaviors, roles or physical characteristics. The traits normatively assigned to men in Western culture tend to be those of competition, independence and aggression. Conversely, those assigned to women tend to be expressive, nurturant and cooperative. Indeed, popular writers and philosophers have suggested that young males are socialized to be antisocial and young females prosocial from very early ages (Miedzian, 1991).

The vast majority of sex role research focuses on normative beliefs about differential emotional or personality traits of men and women (Bem, 1981b; Deaux, 1985; Deaux & Kite, 1985; Spence, Helmreich, & Stapp, 1975). Indeed, many measures that purport to assess masculine and feminine personality dimensions and stereotypes about males and females are derived from beliefs about personality traits. Females are believed to be emotional, considerate, open, gentle, kind, creative, expressive and so on. Males are believed to be independent, competitive, worldly, adventurous, self-confident, ambitious, decisive and so on.

To the extent that these traits can be conveyed overtly (crying to reflect emotionality and expressiveness for females and erect posture and gaping stride to convey independence and self-confidence for males), it is possible to observe them. Thus, it is more consistent with prevailing stereotypes if television characters who most often cry are women while those who "walk tall" are men. But here lies the conceptual confound. Television viewers with or without a long association with characters are likely to infer traits from behaviors and roles. Watching a soap opera with a backstabbing businessman or a gossiping secretary for years may provide a great deal of evidence about the personality traits endemic to a character, but this is only evidence. Thus, what needs to be studied about the effects of televised gender portrayals on viewers' stereotypes is how behaviors affect viewers'

attitudes and, perhaps, in what ways viewers infer personality characteristics from specified behaviors compared with generalized roles. It is rare to see a portrayal of a woman in the role of mother asleep in front of the television while it is rather common to see television fathers "engaged" in this behavior. The question arises, what does this tell the viewer about traits expected of males in the fatherhood role?

# **Beliefs about physical characteristics**

Physical characteristics involve the shapes of female and male bodies, the relative abilities assigned to each and observable qualities such as hair style, jewelry and clothing. In many cases, roles, behaviors and emotional traits may be inferred from a television character's physical appearance.

#### **Body Characteristics**

The normative expectation is that men are taller and heavier than women; that women have less strength than men; that women are more flexible or limber while men have bodies that allow endurance; that women's bodies are more soft, less muscular and more rounded while men's bodies are firmer, more muscular and angular. Men's fingernails are groomed short and undecorated while women's are grown longer and decorated. Men are expected to have more body hair while women are expected only to have hair on their heads with all other hair removed. Men's hands, one might argue, are intended to be rough and weathered from work according to the traditional myth while women's hands should be smooth and protected. Mediated norms for body types may have changed in recent years with the advent of youth-oriented content like music television (Brown & Campbell, 1986; Seidman, 1992). Thus, the importance for males having muscular or "strong-looking" bodies may be increasing; although it appears that no empirical evidence exists yet to Validate this assumption.

#### Clothing, Hair and Jewelry

Television portrayals suggest that fashion or types of clothing and accessories are donned separately by men and women. While men traditionally wear slacks and suit coats, women wear dresses and high heals. Clothing color is another component of the physical characteristics belief structure. Consider that, within the traditional hegemony, men wear whites and darks of basic or restricted patterning, except perhaps for neck ties, while women wear bright colors regularly with a variety of patterns only to wear darks in occasions of mourning, for example. Moreover, men traditionally wear little if any jewelry while women are expected to wear necklaces, rings, broaches, scarves and similar fashion accessories.

Television males with long hair are a rarity. When they do appear, their characters are likely to be outside the confines of normal society. They might be criminals, outcasts, or entertainers, but the majority of men who do have long hair on television are unusual (Craig, 1992). Although the converse is not true (that is, women may have short hair and enjoy membership in the majority), one might observe casually that more women than not have at least shoulder-length hair on television. Furthermore, it is less acceptable for men to color their hair than women. Having made this point, it is necessary to point out that ads for men's hair color do exist and these products are likely popular inasmuch as they have been available for many years. Nevertheless, ads for women's hair color do not

Television characters who deviate from these norms are laughable. When men wear loud colors they are "abnormal." In situation comedies, they're the brunt of jokes. In Police or crime shows, they're lunatics or on the fringe of society. Comparatively, women who dress in more conservative clothing that mimics male suits are overbearing, dominant and laughably atypical (i.e., Murphy Brown).

The skeptic will note, however, that men have begun wearing jewelry including earrings, wearing bright colors, and donning unisex clothing like warm-up suits in a wide variety of locales and contexts. Yet, these nontraditional physical characteristics probably are not what inform the expectations of most children and adults.

#### Summary

Stereotypes are informed multifactorially. Four factors (roles, behaviors, traits and physical characteristics) have been discussed here to demonstrate the complexity with which a study of television portrayals may be conducted. In effects research more than roles could be considered in the stimulus design; behaviors, traits and physical characteristics may also be of importance in producing stereotypes in audiences. While television is relatively consistent in its gender stereotyped message, small examples of nontraditional content are available as demonstrated in the next chapter's discussion of stimulus materials for this study. Indeed, with dual incomes, unrealistic demands on the energies of women and blurring of fashion lines and role expectations, men and women certainly are cast in atypical characterizations more often today than in the past. Thus, although television is showing these changes, they are likely to comprise a small proportion of the total universe of largely traditional portrayals shown on television.

# The Role of Television for Gender Stereotypes

Television may create, maintain or change gender stereotypes although much of the **literature refers vaguely** to these three domains. For example, the word *contribute* seems to **be a** catch-all for these ideas as in, "television's contribution to . . . sex-role stereotypes," (Morgan, 1987).

Literature on gender stereotype creation tends to follow developmental theories; the **most** complete work in this area is Durkin's text on developmental and social psychological **factors** of television and sex roles (1985d). The maintenance literature suggests

socialization theories in concert with other agents including parents (cf., Jeffries-Fox & Jeffries-Fox, 1981). Persuasion and social psychological theories pervade the change literature which predicts that existing stereotypes can be modified through various attitude adjustment and persuasion processes (cf., Johnston & Ettemma, 1982). Each of these views will be explored in turn.

## Television portrayals create gender stereotypes

Frueh and McGhee (Frueh & McGhee, 1975; McGhee, 1975; McGhee & Frueh, 1980) presented an influential set of studies on the ability of television to create gender stereotypes. They claimed to find that children who were heavy TV viewers (more than 25 hours per week) had more traditional sex role stereotypes than those who were light viewers (less than 10 hours per week). Television viewing was measured using a 7-day aided recall survey on which programs were listed in time slots (like the format of *TV Guide*) from 7:00 a.m. to 11:00 p.m. Gender stereotypes in the first study were assessed using the It Scale for Children (Brown, 1956). Four age groups were tested in the studies: Kindergarten, second, fourth and sixth grades in study one and first, third, fifth and seventh grades in study two (the same children were used in both studies a year apart). Neither age nor sex interacted with television viewing to produce differential results in the first study, but television itself produced a main effect. That is, heavy viewers, regardless Of age or sex, were more likely to be sex-typed than light viewers.

In the second study in which the Sex Stereotype Measure (Williams, Bennett & Best, 1975)<sup>1</sup> was used, the authors again found that heavy TV viewers made more frequent **Stereotyped** choices on both male and female items (McGhee & Frueh, 1980). However, **an** interaction between TV viewing and age was found only for male items in such a way

<sup>&</sup>lt;sup>1</sup> This scale measures children's beliefs about the personality characteristics associated with each sex by showing silhouette figures of a male and a female and asking a series of personality characteristic questions about the silhouetted individual.

that heavy TV viewers reported more stereotyped responses as their age increased while light TV viewers reported less stereotyped responses as they aged.

The primary criticism of this research has been that the data are correlational and a directional effect has been inferred. The authors have defended their approach by illustrating that the television gender portrayal environment is consistently traditional and many children watch much of that content. Yet the question persists, does heavy television viewing cause gender stereotypes or do highly gender stereotyped children watch more television?

Another limitation of the research by Frueh and McGhee is the use of the It Scale. The It Scale suffers from two problems: (1) the dimension of children's gender belief system being measured is unclear (e.g., Does it assess gender identity or gender stereotypes?) and (2) although it discriminates boys and girls, some girls score in the masculine range indicating that the It Scale presents built-in masculine cues (Lenny, 1991).

One can add to these criticisms observations that become clear in the literature reviewed below: (1) a child's sex is not a sufficient measure of gender orientation since a child possesses a gender identity—distinct from (biological) sex—that may interact with other factors to influence gender stereotypes and (2) children in the age groups examined by Frueh and McGhee are relatively uniform in their gender stereotypes compared with Younger children (i.e., preschoolers) and older children (i.e., teenagers). Given the shortcomings of this early research and its widely cited influence in the literature on development of gender stereotypes, more work is needed in this area if social scientists are to understand the contribution of television to the development of gender stereotyping.

Although other work has been done (cf., Durkin, 1985d; Signorielli, 1990), **Skepticism toward the entire literature about media effects on gender stereotypes has been Cxpressed (Durkin, 1985b). The criticisms center on the observation that most of the** 

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research is correlational and it assumes that much heavy viewing occurs with regularity by individuals and that gender portrayals on television are consistently traditional.

Despite criticisms aimed at the majority of television stereotyping effects research, other worthy efforts have been noted. One example is a study to determine the (short-term) effects of beauty ads on attitudes about the importance of physical appearance among female adolescents (Tan, 1979). Fifty-six 16- to 18-year-old females were randomly assigned to one of two conditions in which they viewed either a series of TV beauty ads (treatment group) or a series of commercials not relevant to feminine issues such as dog food (control group). Females in the treatment group evaluated the importance of attractiveness "to be liked by men," (p. 285) more highly than females in the control group. However, the importance of beauty for career roles, wife roles and personal desirability did not reach significance—although all results were in the expected direction. From this research one may take the view that television teaches certain gender stereotype dimensions to female youth. The obvious limitation of this research is its inability to be generalized to **males** and other dimensions of gender stereotypy.

Yet another study demonstrates formation of gender stereotypes with the aid of television. O'Bryant and Corder-Bolz (1978) showed eight commercials in each of nine half-hour video tapes containing cartoons to 67 ethnically diverse female and male children ages 5 to 10 years over a 4-week period. Half the subjects viewed commercials with Wornen in traditional work roles while the other half saw women in nontraditional work roles in commercials specifically designed for the study. Three criterion variables were observed including occupational learning, occupational stereotyping and occupational Preferences. The authors found striking evidence for television as a teacher of occupational roles. That is, children learned which environmental or locale settings belonged to which job classifications from pretest to posttest. Further the children learned from the models in the advertisements and learned which sex belonged in which job according to their

condition. The authors also found that children in the traditional roles condition were more likely to report that women only were appropriate for the role. They concluded, "it is evident that even short 60-sec television commercials can subtly transmit 'lessons' to children about appropriate occupations and life styles," (p. 241).

Other relevant studies that suggest a relationship between television exposure and acquisition of gender stereotypes (especially about work roles) are discussed elsewhere at length (cf., Caplan, 1981; Wroblewski & Huston, 1987) and will not be reviewed here.

Finally, Signorella and her colleagues conducted a meta-analysis of studies on developmental changes in children's gender stereotypes suggesting a powerful role for television (Signorella, Bigler & Liben, 1993). Sex, intelligence (IQ), television viewing, maternal employment and item response option—forced choice (e.g., choosing between either a male or female for each item) and non-forced choice—were antecedents. Regardless of question type or response option, television was positively related to stereotypes. For two studies using forced choice questions, the meta-analysis produced a d-statistic of 1.0 with a 95% confidence interval (CI) of 0.60 to 1.33; the significance of hornogeneity was p = .00. Three studies using nonforced choice questions were sig rificant as well (d = .25, 95% CI = 0.05–0.44); the significance of homogeneity, however, was not significant (p = .16).

#### Television portrayals maintain gender stereotypes

Although little evidence exists exclusively to affirm that television gender portrayals **Work** to maintain children's existing gender stereotypes, many authors have recognized the **Possibility** in their work (Greenberg, 1982; McGhee & Frueh, 1980; Perloff, Brown, & **Miller**, 1982; Pleck, 1976). Other authors infer reinforcement effects from content **analyses** (e.g., Trotter, Decker & Woldman, 1993). Much of the literature reflects this **large**ly untested view (cf., Signorielli, 1989). Pleck (1976) for example suggests that because many young male children have developed rigid, traditional and incomplete expectations for the male role, and because there exists a greater number of traditionally gender stereotyped male (compared with female) models on television, there are many more opportunities for confirmation of existing stereotypes among males. Durkin (1985b) likewise argues that the presence of too many social factors and developmental stages implies children's gender stereotypes vary over time. He asserts that when television portrayals and parents' attitudes are in concert, television simply enhances the family's socialization of a child's gender stereotypes.

Once children reach middle childhood (ages 6 to 12), it is clear that they already have learned a great deal about gender association. The work of Huston and her colleagues provides an example (Huston, Greer, Wright, Welch & Ross, 1984). Children in grades 1 through 6 were shown a series of television commercials that contained content that was neutral to both sexes but differentially used formal features (e.g., sound, action, cuts, fades, dissolves, pacing and so on) stereotypically found either in male-oriented or femaletargeted ads. The authors found that all children understood the gender stereotyped connotations of the ads. While accuracy increased with age, all children were keen observers of the appropriateness of different formal features for men's ads versus women's ads. Moreover, while gender identity did not predict these attitudes, home television viewing did.

Ruble and her colleagues (Ruble, Balaban & Cooper, 1981) found that television reinforced gender stereotypes for young children who had achieved gender constancy (developed a clear understanding that males remain males and females remain females). Children between ages 4 and 6 viewed a cartoon in which a commercial was placed showing either two boys or two girls playing with a gender-neutral toy. Some children saw no commercial. Children who had already developed a clear understanding of gender Perceived the toy as appropriate for a same-sex sibling (an attitudinal expression) only if the
model in the commercial was also the same sex. The authors concluded that television is a powerful reinforcer of gender stereotypes for children who had developed clear gender attitudes and a potentially powerful teacher for those who were still developing these beliefs.

Although playing with toys and performing chores may be at odds for children, the present analysis suggests that television similarly affects children's beliefs about them. In a study of television's effect on children's gendered beliefs about chores, Signorielli and Lears (1992) found that as television viewing increased, so did traditional stereotypes about chores among 4th- and 5th-grade children. With a sample of 530 children (50% female, 64% white), Signorielli and Lears measured television viewing "between the time you get home and dinner" and "between dinner and the time you go to bed" (p. 161). They also measured two sex-role domains: attitudes about chores and actual chore behavior. Attitude questions asked respondents to answer with "boys only," "girls only" or "either girls or boys" to a collection of seven chores like "wash or dry the dishes," "mow the lawn" and so on. Behavior questions asked respondents to indicate whether they did any of the same chores. Overall, boys were significantly more likely than girls to give sex-stereotyped responses; however, for both boys and girls, increased television viewing produced greater stereotyped responses (r = .25, p  $\le$  .001, n = 526). Interestingly, television viewing was not related to actual chores performed, suggesting that expectations of their work at home may be less traditional than—or even at odds with—the belief reinforcement furnished by television. For both boys and girls, there was no relationship between attitudes about chores and doing same sex chores (e.g., boys doing "boy chores" and girls **doing "girl chores**"). However, there was a significant negative relationship between boys' **attitudes** and doing "girl chores" (r = -.41,  $p \le .001$ ) and girls' attitudes and doing "boy **Chores**"  $(r = -.43, p \le .001)$ .

Morgan (1987) similarly found positive relationships between gender stereotypes and television viewing in a longitudinal study of television viewing and sex-related chore behaviors and attitudes among 8th-grade adolescents. Although, television viewing did not predict actual chore behavior, chore behavior appeared to mediate the relationship between television viewing and attitudes toward division of chores. Morgan found that for boys, gender stereotypes were affected by television only if their chore behaviors were nontraditional (e.g., they washed dishes, helped with cooking and performed other stereotypically female chores). But for boys whose chores were in concert with traditional expectations, television was not related to gender stereotypes. The opposite was found for girls: scoring low on the behavior measure predicted low scoring on the attitude measure regardless of television viewing; but television viewing was positively related to gender stereotypes among high scoring girls on the behavior scale. These findings suggest behavior is a differential conditional influence for attitudes among boys and girls. "For boys, the overall result is one of convergence; conversely, television has no impact on girls' attitudes unless their behavior tends to follow traditional sex roles," (p. 280). Thus, one might argue that television alters traditional stereotypes about chore roles for boys who might otherwise take a nontraditional view and reinforces these for girls who would be likely to subscribe to the traditional view as a result of their behavior.

Television may also reinforce knowledge of and attitudes about work roles—a specific gender stereotype. Through content analysis of open-ended responses of 7th-, 8th- and 9th-grade students, Jeffries-Fox and Jeffries-Fox (1981) revealed that, especially for boys, work roles were traditionally stereotyped. Further, the authors found that attitudes about work roles were based on real-life experiences with social interactions and C>pectations. The adolescents explained that their views were supported by television Portrayals and that parental socialization and real-life experiences mediated role knowledge.

Unfortunately, the collection of research available only indirectly refers to the function of television as a reinforcer of gender stereotypes. Claims such as, "studies have also shown that media can reinforce . . . sex-typed perceptions," (Perloff, Brown, & Miller, 1982, p. 265) seem premature, although intuitively appealing. If television supports or reinforces existing stereotypes, then it makes these stereotypes more impregnable to change. One might imagine a study in which children's stereotypes are measured after exposure to stereotypical, counter-stereotypical and neutral television gender stimuli. Following the stereotype measure(s), additional measurement for certainty of response could be assessed in such a way as to determine how likely the child thinks it would be for her response to change. No such study has yet been published and the foregoing analysis has provided only indications of a reinforcement model.

# Television portrayals change gender stereotypes

If the evidence for television's contribution to creating and reinforcing children's gender stereotypes has been unconvincing, one only need examine the counter-stereotyping research in this literature to understand that television can contribute to children's beliefs about gender (Blum, 1990; Durkin, 1985c; Eisenstock, 1984; Flerx, Fidler, & Rogers, 1976; Jeffery & Durkin, 1989; Morgan & Rothschild, 1983; Signorielli, 1990; Wroblewski & Huston, 1987).

The most profound findings among intervention studies designed to reduce traditional sex role stereotypes have come from the "Freestyle" project in which 13 episodes of a Public television (PBS) program called "Freestyle" were produced and shown in some Public schools and private homes and not shown in others (LaRose, 1989). The programs Contained depictions of males engaged in domestic behaviors, females playing school Contact sports and so on (Johnston & Ettema, 1982; Williams, LaRose, & Frost, 1981). Having viewed the episodes, especially with in-class discussion as a mediator, boys and Sirls between ages 9 and 12 more readily accepted nontraditional behaviors for males and

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In a less extensive examination of short-term effects, Davidson, Yasuna and Tower (1979) showed different network cartoons to 36 5- and 6-year-old girls divided into three groups of 12. One group saw a high stereotype program, another saw a neutral program and the third group saw a reversed stereotype program. The reversed stereotype cartoon specifically dealt with whether girls could have the same rights in a clubhouse as boys. The girls were then tested for their gender stereotypes using the Sex Stereotype Measure for Children (Williams, Bennett & Best, 1975). As expected, the young females in the neutral and high stereotype viewing conditions scored equivalently with traditional stereotypes on the post-test while the reversed stereotype group scored significantly lower, indicating less traditional views.

Durkin and Akhtar (cited in Durkin, 1985d, p. 98) conducted an experiment in which 5- and 6-year-old children were twice tested for their gender attitudes one week apart. Before the second test, children were randomly assigned to one of three conditions: Counter-stereotyping program, weather program, or no program. Children who viewed the counter-stereotyping content provided more nontraditional responses in the post-test than in the pre-test while both the weather program and no program groups scored at the Same stereotyping level on the post-test as on the pre-test.

There have been failed attempts to produce changes in gender stereotypes, however. In a series of three studies, elementary-age children were shown a 2 min 30 sec video of a nale nurse and female doctor treating a 7-year-old boy who ostensibly had symptoms of

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the flu (Drabman, Robertson, Patterson, Jarvie, Hammer, & Cordua, 1981). Most children incorrectly and stereotypically recalled the doctor as male and the nurse as female suggesting that pre-existing stereotypes may filter television portrayals—an issue that will be revisited below.

# Audience Antecedents of Gender Stereotyping

If television affects the gender stereotypes of children, this influence is neither unidimensional nor linear<sup>2</sup>, but part of a more complex interaction between individual audience characteristics and televised content (cf., Durkin 1985d). Past research has recognized that different audience characteristics condition the effects of mediated gender portrayals and determine, in part, gender stereotypes (cf., Calvert & Huston, 1987). Among these are sex, gender identity and development.

# Sex

The gender stereotyping literature is uniform in finding that boys are more rigid than girls in their beliefs. Indeed, this finding surfaced in the earliest studies (Brown, 1957) and continues to appear in more contemporary research (cf., Wroblewski & Huston, 1987). Boys have been found to be more resistant to counter-stereotyping media interventions than girls (Durkin, 1985c; List, Collins, & Westby, 1983), they appear to use television content more for work role information (Jeffries-Fox & Jeffries-Fox, 1981), boys tend to express more traditional attitudes about gender roles than girls (Flerx, et al., 1976; Katz & Boswell, 1986; Smith & Russell, 1984; Wroblewski & Huston, 1987), they are more resistant to changing from traditional to nontraditional toys and they are less likely to identify with male models who change their behaviors than girls are with female models who engage in counter-stereotypical behaviors (Sedney, 1987). This knowledge calls

<sup>&</sup>lt;sup>2</sup> is view has been deemed the "naïve effects" model by Durkin (1985b, p. 206).

structures of young males to produce more flexible attitudes. Part of this understanding may be informed by examination of the gender belief system.

# **Cognitive Schemas and Gender Identity**

An important and widely observed antecedent of gender stereotyping is the cognitive schema (cf., Bem, 1981b; Bem, 1983; Collins & Wellman, 1982; Deaux, 1985; Deaux & Kite, 1985; Frable & Bem, 1985; Hamilton & Trolier, 1986; Judd & Kulik, 1980; Levy, 1989; Levy & Carter, 1989; Liben & Signorella, 1980; Liben & Signorella, 1987; Markus, 1977; Martin & Halverson, 1981; Meadowcroft & Reeves, 1989; Mills, 1983; Payne, Connor, & Colletti, 1987; Reeves & Garramone, 1982; Spence, 1991; Spence & Helmreich, 1981; Walsh-Childers, 1991). Schemas are cognitive structures that guide information processing functions like attention, encoding, storage-and-retrieval and inference (Taylor & Crocker, 1981). The structure itself is elusive (it is an intangible organization of the brain) and there have been calls for research to further understand schema content (cf., Smith & Russell, 1984). However the hypothesized effects of this theoretical form are readily observable. For example, assuming the schema aids information processing in such a way as to guide perception and memory for gender portrayals on television, schema theory predicts that counter-stereotyped portrayals may become reversed in memory to lead most audience members to recall the schema-consistent (e.g., traditional) sex in the role.

#### Inferences about TV characters

If schema theory is correct, TV footage of an astronaut in a space-suit, floating Outside the space shuttle, will likely be recalled later by most television viewers as male because the mediated encounter is interpreted by the schema and stored in a schema-Consistent way to ease understanding. Likewise, a male nurse and female doctor are likely be reversed in the recall of children as has been empirically demonstrated (Drabman, et al., 1981)<sup>3</sup>. Insofar as pre-existing knowledge and attitudes negotiate the effects of television on its viewers, television content itself is less powerful than a simple linear effects model would predict.

In one experiment (List, Collins & Westby, 1983), 3rd-grade children were pretested for their stereotype level (high, medium or low traditionality) using the Sex-role Learning Index or "SERLI" (Edelbrock & Sugawara, 1978). Children then viewed a traditional program and a nontraditional program in which a female was shown in a domestic or professional role. It was discovered that high-stereotype children recalled more role-relevant (traditional) than role-irrelevant (nontraditional) behaviors while lowstereotype children recalled an equal number of behaviors from the two video portrayals.

## Gender Identity

Gender identity is one's self-described traits and characteristics that produce an overall evaluation of the self as masculine, feminine, androgynous (both masculine and feminine), or undifferentiated (neither masculine nor feminine) (Bussey & Bandura, 1984; Deaux, 1985; Deaux & Kite, 1985; Katz & Boswell, 1986; Levy, 1989; Marcus & Overton, 1978).

Like other schematic structures, gender identity is presumed to be a function of Possessing knowledge about the traits, behaviors, characteristics, and so on that define one's gender (Bem, 1981b; Deaux, 1985; Liben & Signorella, 1987). The relationship between gender identity and gender schema has been a topic of debate (Bem, 1982; Markus, 1977; Markus, Crane, Bernstein, & Siladi, 1982), but there is evidence that identity and stereotyping are distinct factors (Archer, 1989; Jackson, Hodge, & Ingram, 1994), although the interaction between gender identity and television may produce

<sup>&</sup>lt;sup>3</sup>One might expect, however, that at some point—when several characters are portrayed in counter-Stereotyped behavioral roles and are clearly sexed—schemas must accommodate the contradictory information.

differential stereotyping outcomes (Calvert & Huston, 1987; Reep & Dambrot, 1988). Just as gender itself is a predictor of gender role attitude rigidity, children's gender identity is also a predictor of resistance to change (Eisenstock, 1984). For example, masculinity is an inflexible identity; and while femininity is more flexible than masculinity it is less flexible than androgyny. Thus, androgyny is believed to be the gender identity that predicts the most flexible gender attitudes while masculinity predicts the least flexible (Eisenstock, 1984; Sedney, 1987). Insofar as this holds for young audiences, counter-stereotyped television content should be most influential in establishing nontraditional gender attitudes and beliefs among youth who identify themselves as androgynous.

Social Judgment Theory (cf., Eagly & Chaiken, 1993) provides an explanation for the process by which masculine males might retain their traditional gender attitudes in spite of experiencing counter-stereotyped male portrayals. The theory predicts that prior attitudes lead to an evaluation of persuasive messages. This evaluation then affects whether agreement with persuasive messages occurs. The theory would suggest that the gender identity of young males would affect evaluation of television content that would then determine whether attitude change occurs toward the nontraditional direction. The theory offers two factors that influence attitude change: (1) *assimilation or contrast* processes and (2) *ego-involvement*.

First, social judgment theory predicts that a child's pre-existing gender attitudes serve as *anchors* against which counter-stereotyped television messages are judged for either assimilation (closer to the existing anchors) or contrast (dissimilar to the existing anchors).

When a counter-stereotypic message is assimilated toward the child's anchor (that is, his **Pre**-existing attitude), persuasion or attitude change toward a nontraditional position is **favored** or facilitated. When the message is contrasted away from the child's anchor, **Persuasion** is hindered such that the attitude is not moved toward a nontraditional position, **but** is more likely to remain entrenched in a traditional position.

Latitude widths determine whether a counter-stereotyped message is assimilated or contrasted. The theory posits three such latitudes: Latitude of acceptance (LA), latitude of noncommitment (LN), and latitude of rejection (LR). The relative width of each of these latitudes determines whether the counter-stereotyped portrayal is assimilated or contrasted (messages that are within the LA—or in the LN near the LA—will be assimilated while those within the LR—or near it in the LN—will be contrasted).

The second factor influencing attitude change after assimilation or contrast is the extent to which the attitude is a component of one's self-concept. *Ego-involvement* affects the latitude within which one accepts a persuasive message. As ego-involvement increases, so increases the LR and so decreases the LN. (The size of one's LA is not affected by involvement.) Further, the theory holds that ego-involvement amplifies both assimilation and contrast because the initial attitude is more securely anchored.

Ego-involvement is especially provocative in the present analysis since it has been argued that gender attitudes and gender identity are highly ego-centered for masculine sextyped males (Bem, 1981b; Bem, 1982; Markus, 1977; Markus, Crane, Bernstein, & Siladi, 1982). Apparently this is true for adolescent males as well. If social judgment theory and past research on sex and gender identity are correct, then the LR of masculine males may be rather large indeed.

Masculine males, social judgment theory would accord, have a very wide LR and narrow LN compared with androgynous males. This is illustrated in Figure 1. Given different extremity levels of counter-stereotyped messages, what would be the response of masculine males compared with androgynous males?



Figure 1: Judgment Latitudes for Masculine and Androgynous Males

Adapted from Eagly & Chaiken, 1993

Faced with counter-stereotyped gender messages that present only a slight deviation from societal norms (i.e., a father, without the mother present, sharing breakfast with his daughter), masculine males may evaluate the messages as being within their LA or nearby in the LN. Under this condition, one would expect assimilation and potential for attitude change in the nontraditional direction to be maximized. One assumes the same would hold for androgynous children, but that the persuasive message would not maximize attitude change.

Seeing a counter-stereotyped gender message that deviates extremely from the norm (i.e., a business executive showing deep sorrow by crying in front of his colleagues), masculine males probably will evaluate the message as being within the LR or nearby in the LN. Under this condition, one would expect contrast and no potential for attitude change. Moreover, given the expectation that the original attitude position is more securely anchored in masculine males, the contrast effect is likely to produce more traditional attitudes among masculine males who see an extreme counter-stereotype message than those who see a message that presents only slightly counter-stereotyped content as a function of attitude bolstering. Among androgynous males, for whom gender attitudes would be less ego-centered, one might expect the extreme message to land within the LA or nearby in the LN. In this case, assimilation should produce more robust gender attitude change.

One television effects study can be brought to bear on this prediction. Nine- to 12year old females and males were first tested for their gender identity and then shown a halfhour video-tape of a counter-stereotype program featuring a strong female character and secondary male character (Eisenstock, 1984). Subjects then responded to questions about their sex-role preference and their identification with the characters in the program. Overall, male and female masculine children were less likely than androgynous and feminine children to identify with nontraditional sex-role portrayals.

Another provocative study suggests that the core of male children's stoicism is power perceived to be associated with the male role and male traits (Jeffery & Durkin, 1989). Male, especially masculine male, children may fear that this power would be forfeited if traditionally feminine roles or traits are adopted by their models and themselves.

Taken together, findings by Eisenstock (1984) and Jeffery and Durkin (1989) suggest that masculine males would express less favorable attitudes toward counterstereotyped portrayals than androgynous males. Although this has not yet been tested, the prediction is borne by social judgment theory.

Findings that males are most resistant to counter-stereotyped content predict that gender identity interacts with television content to produce differential attitudes about gender—especially for traditionally sex-typed males. While androgynous males should show decreased traditional attitudes as the extremity of counter-stereotypical portrayals increases, masculine males should show increased traditional attitudes as a function of the same increases in content extremity. In other words, on the basis of empirical evidence and the implications of social judgment theory, one would expect androgynous males to be more susceptible to increasingly extreme counter-stereotyped portrayals while masculine males would be increasingly resistant. Moreover, traditional males should express less favorable attitudes toward counter-stereotyped portrayals than nontraditional males.

## Conceptual Hypotheses

- H<sub>1</sub>: The greater the magnitude of content deviation, the larger the impact on gender stereotypes of androgynous males and the smaller the impact on gender stereotypes of masculine males.
- H<sub>2</sub>: Androgynous males will report more favorable attitudes toward counterstereotyped content than masculine males.

# Development

Another remarkably consistent finding in gender stereotyping research is that preschool children and adolescents are more rigid in their beliefs than middle-childhood youths (Durkin, 1985d; Edelbrock & Sugawara, 1978; Flerx, et al., 1976; Kalisch & Kalisch, 1984; McArthur & Eisen, 1976a; McArthur & Eisen, 1976b; O'Bryant & Corder-Bolz, 1978; Ruble, Balaban, & Cooper, 1981; Thompson, 1975; Wroblewski & Huston, 1987). Young children are more rigid, "because of their need for consistent conception of sex role behavior and their low tolerance for ambiguity" (Perloff, 1982, p. 268). Adolescents, however, "face the stereotyped demands and sanctions of the peer group." Middle-age children, by comparison, have more capacity for belief flexibility than their younger counterparts and more freedom from peer pressure about gender than older groups as depicted in Figure 2.

Figure 2: Boys' Resistance to Counter-stereotyped Messages by Age



This U-shaped distribution—which represents younger children and adolescents as quite resistant in their acceptance of counter-stereotyped behaviors and middle-age children as more flexible—has been empirically documented in different studies (cf., Galambos & Almeida, 1990; Smith & Russell, 1984; Stoddart & Turiel, 1985). The consistency of this finding, with its relevance to gender effects of television, has lead Durkin (1985b) to comment, "... it is hoped that future work will ... test further the consequences of varying television messages upon viewers of different ages" (p 201).

Differential responses to and effects from television at different ages bespeaks the concept of child development. A variety of approaches and issues are brought to bear on child development. For example, among the approaches are behaviorism and humanism; among development issues are moral, cognitive and psychosexual development (Thomas, 1985). Gender-role development, which is a form of cognitive development, is another issue of importance in children's growth and aging (Kohlberg, 1966). Cognitive and gender-role development are relevant here.

Piaget's theory of cognitive development (Piaget & Inhelder, 1969) is widely recognized for its explanatory and predictive power related to how children progress through stages of cognitive awareness. The theory predicts four levels or stages of child development that represent a hierarchy of mental conceptions. Of importance here are the last two stages: The concrete operations period (ages 7 to 11 years) and formal operations period (ages 11 to 15).

During concrete operations, children can undertake actions related not necessarily to objects seen or touched, but to objects that can be imagined or perceived and which are presented to them in the present. Comparatively, children in the formal operations period need not relate to objects, but can also perform mental tasks related to assumptive and propositional concepts for different dimensions in time.

Important for this discussion is the characteristic of the late concrete operations period and early formal operations period: flexibility. Children at this stage (ages 10 to 13 years) are moving from conceptualizing things only as they are (e.g., women *stay* at home more than men) to conceptualizing the way things could be (e.g., men *could stay* at home more than women). Because of this capacity, children in late-middle childhood (who are on the cusp of formal operations) may be more flexible in their gender attitudes as they conceptualize possible alternatives (and their acceptability) for gender roles, behaviors, traits and so on.

Kohlberg's theory of gender-role development (Kohlberg, 1966) is based on Piaget's cognitive development approach and identifies periods of cognitive changes in gender identity and gender stereotypes. The theory posits that children learn and adopt the behaviors and characteristics of their own sex through five key stages. Motivation to master and adopt social components of one's sex is the key to completion of the stages.

The fourth and fifth stages of Kohlberg's model are of most importance in the current discussion. Children enter the fourth stage, called Gender Constancy, beginning around age four. In the early period of this stage, children accept and adopt the socially defined behaviors and attitudes of their sex (Soderman, 1988). Children in this stage insist on gender-specific behavior and judge atypical behavior to be "as wrong as moral transgressions" (Stangor & Ruble, 1987, p. 12). However, as children progress through the fifth and last stage called Gender Role Identification (around age 8), they tend to relax their views having developed certainty about their gender role. Although boys appear to do this later and to a lesser extent than girls (Katz & Boswell, 1986), the most flexibility among children's gender-role attitudes occurs as they cross from middle-childhood to adolescence at approximately 11 years.

In all theories of development, age is a critical variable. As the individual grows and matures, it changes its "orientation" toward gender regardless of theoretical view of this change (e.g., psychosexual or cognitive). Thus, as children age, their views of the social and physical world change. This change is reflected, for example, in measurement of their gender stereotypes at different ages. The interaction of external factors (such as television portrayals) and internal factors (such as developmental stages) on these stereotypes presents a problem for how transitory changes may occur.

Social judgment theory provides insight on the role of development for males' acceptance of counter-stereotyped messages and subsequent effects of acceptance on attitude change. To the extent that adolescent males are stoic in their gender attitudes like masculine males, we would expect the same pattern of findings for adolescent and middlechildhood males as for masculine and androgynous males respectively as illustrated in Figure 1. Slight deviation portrayals would fall within the LA or nearby in the LN for adolescent males, leading to assimilation and potential for attitude change in the nontraditional direction.

But adolescent males likely would evaluate an extreme message as being within the LR or nearby in the LN in which case we would predict contrast and no attitude change. Additionally, because the original attitude position is more securely anchored in adolescent males, the contrast effect is likely to produce more traditional attitudes among those who see an extreme counter-stereotyped portrayal than for those who see a milder portrayal. Among middle-childhood males, for whom gender attitudes would be less ego-centered, we expect extreme messages to land within the LA or nearby in the LN—aiding assimilation and producing more robust gender attitude change. As with masculine males, one might further expect that, regardless of message extremity, adolescent males will have less favorable feelings than middle-childhood males toward counter-stereotyped content.

#### **Conceptual** Hypotheses

- H<sub>3</sub>: The greater the magnitude of content deviation, the larger the impact on gender stereotypes of middle-childhood males and the smaller the impact on gender stereotypes of adolescents.
- H4: Middle-childhood males will report more favorable attitudes toward counterstereotyped content than adolescent males.

#### Summary

The foregoing evidence suggests that males are a special audience worthy of consideration in the literature on gender-role effects of television. This audience must be examined for antecedents like gender identity and development to understand how these characteristics play upon television content to which this audience is exposed. The characteristics of this content are considered in the following section.

### Content Antecedents of Gender Stereotyping

When considering the effects of television on young people's gender stereotypes, it is imprecise to conceptualize the medium without considering aspects of its content (Roberts & Maccoby, 1985). For a number of years, Huston and her colleagues have been conducting research on the relationship between content and gender stereotyping by examining formal features of the medium and their implications for schematic processing (Fitch, Huston, & Wright, 1993). Many other content studies have been completed in this area, followed by several comprehensive reviews (Downs, 1981; Durkin, 1985a; Ferrante, Haynes, & Kingsley, 1988; Kalisch & Kalisch, 1984; O'Bryant & Corder-Bolz, 1978; Peterson & Pfost, 1989). As Perloff (1982) has suggested, content analyses have been plentiful in the TV and gender stereotyping research areas, but studies of actual effects have been less forthcoming. The research will not be reviewed here, except to discuss the effects on audiences of television content in terms of stereotyping quantity, traditionality and variability.

# Quantity

Cultivation hypothesis asserts that more of one content class than another can contribute to distorted beliefs about the real world (Signorielli, 1990). Overall, television is dominated by males 3-to-1 over females with higher proportions of males (5-to-1) shown on children's television (Bretl & Cantor, 1988; Ferrante, et al., 1988; Greenberg, 1982; Scheibe, 1979). On one hand, under-representation of women on television is likely to disadvantage girls' self-esteem and career aspirations (Katz & Boswell, 1986; O'Bryant & Corder-Bolz, 1978; Wroblewski & Huston, 1987). On the other hand, over-representation of males is potentially problematic for modeling behaviors among both boys and girls since young viewers tend to imitate and identify with models of the same sex (McArthur & Eisen, 1976b). "These sex differences in frequency of appearance and behavior suggest that television is likely to have a greater impact on boys than girls. The relative paucity of female models for girls to imitate might also suggest that girls will show more cross-sex imitation than boys" (pp. 348-349).

# **Traditionality**

Traditional portrayals of gender roles and behaviors assist development and maintenance of traditional gender stereotypes while nontraditional portrayals can lead to counter-stereotypical beliefs. If this assertion is correct, then television more often reinforces than converts traditional gender stereotypes because most gender portrayals on television are traditional (Downs, 1981; Durkin, 1985a; Ferrante, et al., 1988; Kalisch & Kalisch, 1984). Females are more often shown in roles emphasizing nurturance, community and relationships while males are shown in roles of competition, independence and career (Greenberg, 1982). Men are competent in business while women are less so. Conversely, women are competent as parents and men are less so. Behavior is also different for the sexes on TV with males more often acting as experts, problem-solvers and

aggressors with women acting as product consumers, learners and victims (McArthur & Eisen, 1976b).

#### Variability

Content that switches either in traditionality or quantity (or both) may lead to moderated stereotyping effects; yet television is relatively consistent and abundant in its traditional portrayals of the sexes (Gerbner, Gross, Morgan, Signorielli, Neuman, Wagner & Pearl, 1984). While the mass availability of cable and VCRs for children and adolescents (Greenberg & Heeter, 1987) might provide greater potential for alternative gender portrayals, this outcome has not been found (Berg, 1984; Heeter & Greenberg, 1985; Wartella, 1988). In fact, cable television access "seems to exacerbate the acquisition of traditional sex role images" (Morgan, 1983, p. 46). Furthermore, newer televisionrelated technologies such as the videocassette recorder and infrared remote control may not alter the cultivation effect observed in so many studies of television and social perception (Perse, Ferguson & McLeod, 1994).

In sum, television shows more males than females, portrays them in traditional roles more often than in nontraditional roles and does so with remarkable consistency, despite increases in alternative viewing options and behaviors. Interestingly, content analyses of gender portrayals almost universally consider role portrayals while ignoring the depiction of behaviors. The conclusions that follow are based on an analysis of roles and not behaviors, as such. The literature would be updated considerably by a content analysis in which the unit of measure was behavioral portrayal. Nevertheless, not all content is equal and some television portrayals, as demonstrated with the counter-stereotyping literature, produce differential outcomes; this conclusion, then, supports the assertion here that multidimensional television content is an important antecedent variable in a model of television's effects on gender stereotypes.

# **Problem Identification**

As the collection of research in the effects literature has matured, a great deal of sophistication has come to approaching and studying effects of television on its viewers. Consider the following passage from an excellent review of the field by Roberts & Maccoby (1985):

The terms "media" and "media content" are no longer viewed as unidimensional constructs. The audience is no longer conceived as an undifferentiated mass with exposure taken almost for granted. Recognition of the multidimensionality of media effects has led to more complex conceptualizations of effects, including not only consideration of their nature (e.g., cognitions, attitudes, behaviors), but also such dimensions as time, unit of analysis, degree of content specificity (e.g., a specific behavior versus a class of behaviors), and type of impact (e.g., establishing, changing, or stabilizing a response). Finally, there is a growing theoretical attention to identification and elaboration of the role of third variables in the media-effects relationship. (pp. 542-543)

This study considers the effects of three independent concepts—television gender messages, gender identity and development—on the gender stereotypes of 10- to 11- and 15- to 16-year-old boys. It also compares their affective responses to different television content and measures inferences about the sex of an ambiguous stimulus person in a traditionally male role.

The knowledge that boys are more resistant to gender attitude change calls upon researchers to understand more clearly what mechanisms may operate on the belief structures of young males to produce more flexible attitudes. For this reason, this study examines gender stereotypes of male children only.

Stockard and Johnson (1992) wrote,

The different foci of men and women at young adulthood result in strain for both sexes. ... the father is often heavily involved in his own work activities and other pursuits. He may be launching a career when the children are born, and he may have little time to spend with his family. ... our society is unusual in the stress placed on young mothers (p. 233).

This writing demonstrates a recurrent theme in the feminist media effects and general literature. Young males are being "written off" with the presupposition that eons of maledomination have given male problems and male issues too much exposure; thus they need not be considered in current social debate. An examination of content analytic and experimental effects research on media and gender suggests a keen effort by female scholars in the last two decades with male academics giving this area less play. Yet, one could argue that changes in social expectations about the young adult male role in the past decade have placed new and unprecedented stress on fathers, husbands, boyfriends and sons.

Although these men must retain many mythical characteristics of the *old male*, they are forced to reckon with a sense of power loss and *new male* characteristics (Bly, 1990). This argument suggests the need for at least some attention to the social pressures of young males in late twentieth century Western culture. If these males are to become the prosocial and productive partners in a gender-equal world, their "at-risk" status (Miedzian, 1991) will require attention by social scientists and policy-makers.

As the literature review suggests, male children are consistently more rigid than female children in their gender stereotypes; although it appears that subtleties of gender identity may account for some of the difference with masculine males being particularly resistant to counter-stereotyped messages. Development also appears to affect stereotypes

as boys in early childhood (up to age 5 or 6) and adolescents appear to be least flexible while middle-childhood males (ages 7 to 12) appear to be most flexible. Further, television depictions of males engaged in varying degrees of counter-stereotyped behavior may differentially affect boys' stereotypes.

Males are a particularly important audience to study for counter-stereotyping effects of television if for no other reason than much of the research considers the effects of television's nontraditional messages about female roles on the attitudes and beliefs of girls while attending less to the effects of male portrayals on boys. A more substantial justification, however, is evidence indicating that males constitute a more problematic audience because they tend to resist the nontraditional gender messages that females accept.

Gender identity of these males should be assessed looking for differences between androgynous and masculine sex-types to represent more flexible and less flexible schemas respectively. Different ages should be observed as well to compare middle-childhood and adolescent males representing the more flexible and less flexible ages respectively.

Further, three levels of gender behavior portrayals should be shown such that one portrayal shows men in traditional roles but engaged in nontraditional behaviors that deviate slightly from normative expectations while other depictions show men in traditional roles but engaged in behaviors that deviate from normative expectations to medial and extreme degrees. These portrayal conditions are suggested for three reasons: (1) counterstereotyping studies have already demonstrated the effects of traditional versus nontraditional portrayals; (2) there is a general understanding that males tend to be less influenced by nontraditional portrayals than females; and (3) low, medium, and high levels of deviation may shed additional light on the potential of counter-stereotyping television content to affect a problematic audience. To reiterate Durkin's point (1985d), there is a

need to assess the relationship between individual variables and different kinds of gender portrayal content.

# Independent Concepts

To review and clarify, three independent concepts are under investigation: Counterstereotyping portrayals, gender identity and child development. The observable or measurable counterparts to these are described in more depth under the heading "Manipulations and Measures" in Chapter 2.

### **Dependent** Concepts

Three dependent constructs were identified above: (1) gender stereotypes, (2) content attitudes, and (3) schematic inference. An array of scales exists to measure gender attitudes and beliefs about others. Gender attitudes are multidimensional rather than unidimensional constructs (Archer, 1989, Jackson, Hodge & Ingram, 1994); this suggests that multiple measures are necessary to test hypotheses about attitude change related to gender. These are reviewed in Chapter 2.

# CHAPTER 2: METHODOLOGY

# Overview

Testing hypotheses required two steps. Step one involved locating and pretesting stimulus materials and identifying and pretesting measurement tools. Step two was informed by hypothesis tests. Two pretest procedures were conducted. One pretest involved assessing the stimulus materials to categorize vignettes into slight, medium and extreme deviation categories. A second pretest evaluated the feasibility of using the paperand-pencil instrument with both age groups under investigation.

Two hundred thirty-eight males ages 10-11 and 15-16 were randomly assigned to one of three comparison conditions. Subjects completed a pretest measure of their gender identity, viewed a 4 min 30 sec stimulus tape, then responded to a battery of items assessing gender stereotypes. Conditions differed only in terms of the stimulus tape contents. Tapes showed vignettes and advertisements of men in traditional roles but engaged in nontraditional behaviors at three pre-determined deviation levels: Slight, medial and extreme. One scale was used to measure gender identity; four scales assessed gender stereotypes. Subjects also responded to demographic and content assessment items. Details about subjects, stimulus materials, manipulations, measures, instrument, pretests, procedures and analyses follow.

# Subjects and Location

The experiment was conducted in three elementary schools and one high school in a Southeastern Michigan school district in late May and early June, 1994. A total of 482 male and female children from grades 5 ( $\bar{x} = 10.77$  yrs) and 10 ( $\bar{x} = 15.26$  yrs) as

detailed in Table 1 participated in the procedure. The superintendent and principals of three elementary schools and one high school were contacted, introduced to the study and invited to participate. All agreed to permit administration of the study in the appropriate schools. Each elementary school contributed three 5th grade classes and the high school contributed nine 10th grade classes in English and history. This provided access to nine classes in each grade.

	Grade		
- Sex	5	10	Total
Male	132	106	238
Female	158	86	244
Total	290	192	482

**Table 1:** Study Participants

# Stimulus Materials

Three stimulus tapes were constructed by a pretest process described below. Tapes contained portrayals of men in traditional roles but engaged in non-traditional behavior at one of three levels: Slight, medial or extreme. Each tape was 4 min 30 sec in length and each contained a mix of five distinct elements; these included advertisement clips and vignettes of television entertainment programs. The first 15 seconds of each tape contained a clip of an astronaut (sex-ambiguous stimulus person) working on a spacecraft in orbit around the earth.

# Stimulus Pretest Procedure

The first task was to locate or create materials that showed males in traditional roles but engaged in nontraditional behaviors. Ecological validity and control were issues weighed against one another; both were factored along with cost and time. Creating stimulus materials with high ecological validity proposed to exceed all budgetary and time constraints placed on this project. Yet these would produce the highest level of control possible for the hypotheses in this study. The compromise was to find pre-existing content and test children's reactions to it before conducting the study. Because portrayals with potential for appropriate stimulus characteristics for this study had appeared on television, it was decided that content would be recorded and actual broadcast or cablecast portrayals would inform the stimulus tapes following a pretest of deviations as evaluated by children judges.

To find television content depicting males in traditional roles but engaged in nontraditional behaviors, a wide range of television content was recorded. Materials were selected by the principal investigator and edited onto tapes which were later shown to 5thand 10th grade children for pretest evaluation. These respondents served as judges who ranked the portrayals for their deviation from normative male behaviors. Content for stimulus materials used to test the hypotheses was chosen based upon the scores assigned to each vignette by the children.

During the months of February, March and April, 1994, approximately 250 hours of commercial, public and pay television content was recorded onto Video Home System (VHS) tapes using Super Long Play (SLP), 6-hour, speed on a consumer quality video cassette recorder (VCR). The VCR was connected to a nationally represented cable company. At the time of the study, this service provided over 30 programmed channels plus pay-per-view (PPV), community access and community notice board channels. For present purposes, programmed channels are those that contain scheduled entertainment and/or news content that is listed in a programming guide.

Programs were recorded in each of four dayparts divided by 6-hour segments beginning with overnight (from midnight to 6 a.m.) and continuing with morning (6 a.m.

to noon), afternoon (noon to 6 p.m.) and evening (6 p.m. to midnight) blocks. All days of the week were canvassed. The majority of taping occurred during afternoons and evenings on weekdays and Sundays and mornings on Saturdays because these dayparts were most likely ones during which young people viewed television. Sampling was random rather than systematic, but each commercial, pay and public television channel was represented at least once with heavier emphasis on major broadcast and cable-only network channels to which young people attend most (e.g., ABC, CBS, NBC, PBS, FOX, Nickelodeon). Appendix A provides a matrix of available and sampled programmed channels by daypart.

Recorded tapes were scanned for "candidate material," which was defined as any program scene or advertising content that, on the face of it, showed men in traditional roles but engaged in nontraditional behaviors (e.g., a father doing laundry). Scanning involved playing tapes either at two or four times normal playback speed. When candidate material appeared, the tape was played at normal playback speed and the scene or advertisement was viewed from start to finish. Segments that appeared to show nontraditional male portrayals were indexed for later inclusion on pretest tapes.

Three pretest tapes were constructed in April 1994 from candidate material through an iterative process involving children who helped score the relative deviations of portrayals contained on the tapes. Scenes were edited into vignettes by the primary investigator with the assistance of an advanced undergraduate telecommunications student with experience in video editing. Each vignette was cut to include only portrayals of males in these traditional roles/nontraditional behavior classes while eliminating irrelevant and potentially contraindicative behaviors. In many cases, portrayals of men in nontraditional behaviors could be found in commercial advertisements. These were also edited to exclude spurious information such as the behavior of an additional character. Vignettes and commercials ranged from 10 seconds to 45 seconds with a mean running time of 25 seconds.

The first tape included 21 program vignettes and television commercials. This tape was shown to 24 children in grade 5 as shown in Table 2. The second version of the pretest tape included 22 vignettes and advertisements, 15 of which appeared on the first tape. This collection of candidate materials was shown to 19 students in 10th grade. The third tape introduced all new content including 24 vignettes and ads; it was shown to 22 students in 5th grade. All children who participated in the evaluations were enrolled in a public school located in south-central Michigan.

	Grade		
Pretest Tape	5	10	
One			
Male	10		
Female	14		
Two			
Male		13	
Female		6	
Three			
Male	11		
Female	11		
Total	46	19	

**Table 2: Tape Pretest Participants** 

Pretest tape construction and testing processes transpired as they did for three reasons. First, there were many more candidate portrayals than could be shown to a group of child evaluators in one sitting; the viewing and evaluation procedure was limited to one hour to avoid respondent fatigue and fit within the schedules of teachers. Second, only three teachers who agreed to allow the pretest to be conducted in their classrooms were located in the time available; two were 5th grade teachers, one was a 10th grade teacher. Third, because the candidate portrayals appeared to contain a variety of behaviors and roles, it was decidedly better to allow the children to provide feedback on as much different content as possible to be compared with assessments of the investigator.

Pretest tapes contained video and sound from the vignettes and ads, each of which was separated by 5 sec of blackness and silence. Most segments seemed to show males in normative roles but undertaking atypical behaviors for males in those roles. However, to test the assumption that the candidate materials differed from normative portrayals, the tapes included a few vignettes or advertisements that appeared to the investigator to show men in traditional roles engaged in traditional behaviors. A summary description of all portrayals selected for pretesting is in Appendix B.

The pretest procedure was identical in each case. The investigator was introduced by the classroom teacher and began with an explanation of the proposed task ("... watching television shows and telling how feel about them"). Children were told that those who did not want to participate were not required to do so and could either "follow along" or work on "other things" at an assigned location in the library. In only one case did a child choose not to participate. The student remained in the room and attended to school work. Children were provided with an instrument used to evaluate each portrayal after viewing it. The tape was stopped for 15 to 20 seconds between portrayals so that children could evaluate each one independently.

Children were then given a desktop-published booklet of more than 20 pages with the length determined by the number of vignettes to be evaluated by that group. They were instructed not to open the booklet until asked to do so. They were given a pencil (with the imprimatur of the investigator's university) which they were told they could keep. The booklet included a cover, instruction page, example page and 21 to 24 "TV Sample" pages each of which contained six 5-point Likert items. These items informed the children's

evaluations of each portrayal. Appendix C contains a sample of the test booklet. Common items for each portrayal included:

1) "I enjoyed this story."

2) "The man (men) in this scene is (are) like men in the real world."

3) "This TV sample surprised me."

4) "The man (men) in this scene is (are) like most other men on TV."

5) "The behavior of the man (men) in this scene was normal."

Further, one item was unique to each portrayal focusing on the behavior shown, (e.g., "Most men on trips call their wives to ask for money.").

Once the materials were distributed, children were instructed to open the booklet to the first page and follow along as the instructions were read aloud by the investigator. They were then asked to look at the example on the following page. This, too, was read aloud. Upon reaching the end of this page, children were asked to wait before turning the page and instructed not to turn each page until told to do so. They were asked if they had questions; questions were answered about the procedure only. When no further questions appeared forthcoming, children were instructed to view the television screen. Each portrayal was played, followed by a pause in the tape. Respondents were instructed, "turn to the next page, TV Sample [number]." Fifth-grade students followed along as the investigator read each item and waited as they marked their responses. Tenth-grade students completed the items without the assistance of the investigator.

Vignettes and advertisements were chosen for experimental conditions based on the evaluations of child judges. Because every portrayal was evaluated by children on five common items and one item unique to the portrayed behavior, a mean score was calculated

for each evaluation item (e.g., "The behavior of the man (men) in this scene was normal.") across all portrayals. These mean scores were then subjected to a test of reliability using Chronbach's Alpha to determine which combination of scores might comprise the optimal index to reveal children's feelings about just how mild or extreme were the behaviors shown in each vignette. Four of the six items (alpha = .84, n = 65) produced the deviation score used to differentiate normative, slight, medial and extreme behavioral deviations for use in each experimental condition; all items intercorrelated at  $p \le .01$ . The two items that detracted from the reliability score were: "I enjoyed this story," and "This TV sample surprised me." These were not included in the deviation score.

A mean evaluation was calculated for each portrayal using the four reliable items. This calculation was applied to all 51 portrayals judged by children. The procedure yielded wide variance across the judgments with range of 2.32 from a potential of 4 since the scoring range was from 1 to 5. The mean evaluation of portrayals was  $\bar{x} = 3$  with a low  $\bar{x} = 1.74$ , high  $\bar{x} = 4.06$  and standard deviation 0.5. Lower scores indicated a judgment that the behavior portrayed in a vignette or ad was atypical of males. Higher scores indicated an evaluation that the behavior was approximately normative.

## Stimulus Tape Contents

Three stimulus tapes were produced on the basis of children's evaluations. The first stimulus condition tape contained portrayals that the children judged as essentially normative, deviating only slightly from the norm. The second tape contained portrayals that children assessed as medially deviant. Tape three included a number of portrayals deemed most deviant from normative male behaviors. Each condition tape included an ambiguous stimulus scene showing a fully-suited astronaut working from a tether in space. This vignette was used to test inferences made about the gender of an otherwise gender-ambiguous person. Each tape lasted 4 min 30 sec and contained five unique portrayals, as described below, in addition to the ambiguous vignette which was common to all

conditions. Table 3 shows the deviation evaluation scores of vignettes on each stimulus tape.

# **Slight Deviation Condition**

The slight deviation tape contained four advertisements and one television movie vignette. The first ad was for Crest toothpaste. In a dentist office waiting room father and son enjoyed each others' company, the boy copied his father's physical behaviors (e.g., crossing legs then crossing arms). The father delivered a dialogue on his son's oral health and his (the father's) concern for the boy's general development. He appeared as the only father in the lounge. The father explained as the ad closed that he was his son's role model but didn't want him to be, "just like me, I want him to be better than me."

The second ad featured a young father, approximately 25-30 years of age, seated at the dinner table with his toddler who was seated in a booster chair. The mother was not shown. The father was feeding his child what was ostensibly "baby" food saying, "Here's your din-din, big fella," while he sat down to a McDonald's Big Mac. The child protested over his food and reached for his father's. The father attempted to persuade the child, "No, this is daddy's din-din." The ad closed with the child, in apparent rebellion, removing his spoon from his dish and dropping it on the floor. The father bent over to retrieve it and the child reached for the Big Mac.

A scene from the made-for-TV movie, "The Dennis Byrd Story," informed portrayal three. The movie was shown on the Fox network during the taping period. In this vignette, football player Byrd is in the hospital, in traction for a broken neck. He is visited by a teammate who begins to show emotion, concern and disbelief upon seeing Byrd. His voice is breaking and he is crying telling his teammate "It's not supposed to end this way." Byrd explains that "it hasn't ended" and comments before the segment ends, "Don't you go soft on me."

Condition	Vignette	Mean Deviation Score
	Crest	3.7
	McDonald's	3.4
Slight	Dennis Byrd	3.2
	Motrin	3.3
	Rock Financial	3.5
Mean		3.4
	Tide	2.9
	Johnson's	3.2
Medial	A time to heal	2.8
	Clairol	2.9
	Frugal Gourmet	3.0
Mean	*****************	3.0
	Fleischman's	2.7
	Corelle	2.7
Extreme	Vertigo	2.5
	Drug Prevention	2.8
	Northern	2.7
Mean		2.6

 Table 3: Mean Deviation Scores for Stimulus Vignettes

Fourth in this series of slight deviation portrayals featured a father and daughter in what appears to be an attic playroom. The daughter, approximately 5 years old, is serving imaginary tea to her father who is about age 40. Motrin IB pain reliever was the advertiser. Wife and mother were absent from this portrayal. The voice-over explained that the man had a headache but has taken the advertised product and can get on with, "the things that really matter." Daughter asked, "Good tea, huh daddy?" He replied, "It's excellent tea Becky, excellent."

Finally for the slight deviation condition tape, a husband and wife were discussing purchase of a new home and the husband lamented over increased interest rates. The ad was for Rock Financial, Inc., a mortgage company. The wife, who apparently has researched the issue, responds to his concern by showing him the newspaper ad with an approach offered by the mortgage company, he defers to his wife's expertise and agrees with her conclusion about using the company.

# **Medial Deviation Condition**

Three ads and two program vignettes comprised the medial tape. Tide was the first advertiser. A 55-year-old man was depicted and narrated, "A&B Party Rentals is a family business." He was shown talking to employees examining linens, stains, pouring Tide laundry soap, setting out linen and pushing a large industrial laundry cart. The man explained his expertise in removing tough stains. The ad closed with him saying, "I'm 55 years old and I'm still doing the laundry.

The second of five medial portrayals was an ad for Johnson's Baby Shampoo. A male voice-over declared, "Any tear-free shampoo is OK for your baby." A father, about 35, stopped a stream of any shampoo and remarked, "Not my baby." He was then shown washing his baby in a baby's bath, gently massaging and shampooing the baby's scalp. A female voice-over commented on the merits of the shampoo as the father was then shown
toweling the baby, brushing its hair, cooing and interacting with it, then holding and rocking it to sleep. Lastly, the father kissed the baby on its head. The tagline at the end was stated by the female voice, "... because your baby is all that matters." No adult female was shown in the ad.

Third in the medial deviation line was a scene from the made-for-TV movie, "A time to heal" about the trials of a husband and wife after the wife attempted recovery from a coma as a complication of childbirth. In the scene, the two are in bed and the wife explained to the husband that she graduated from grade five. He responded, "Great, just great. You just graduated from the fifth grade." He got up from bed. She queried without emotion, "What's the matter with you?" With emotion and sorrow, his voice cracking, he responded, "I just want my wife back. [pause] I just want my wife back."

Clairol Men's Choice hair coloring gel was the fourth portrayal. This fast-paced ad showed six different men in traditional roles including, photographer, father, architect, businessman, sportsman and spouse. The male voice-over explained, "Not one of these guys has a single gray hair." A man was shown in the middle of these role portrayals, dispensing the gel and rubbing his hands through his hair. The tag line was, "Is it by chance or by choice."

Finally among the medial deviation portrayals was a vignette from "The Frugal Gourmet." The chef was shown cooking meat as the scene opened. He discussed the merits of a lemon reamer and proceeded to explain the process of reduction. He was shown manipulating a large frying pan, lemon and reamer, pepper grinder and a cooking wine bottle.

## **Extreme Deviation Condition**

In this last condition, three ads, a public service announcement and one vignette from a movie on pay cable were used. The first was an ad for Fleischmann's margarine

portraying a family on their back yard deck. A father, approximately 40 years of age was shown with his daughter of about eight. They were dancing and viewed in sweeping slowmotion movement. The father's dialogue was placed over music, "The way I figure, I have two choices. I can knock myself out worrying about how I should live or I could spend my time actually enjoying life by doing little things that make sense." The product was shown followed by a return to the activity and a smiling mother.

The second portrayal was an ad for Corelle dishes from Corning. With a basketball game being announced presumably on television in the background, a 30-year-old man was shown setting the kitchen table. His wife and daughter were shown entering through the front door. As they entered the kitchen, he stopped and placed his hands in his pockets and lifted his shoulders in boy-like anticipation. The announcer commented, "Here comes the pass. He shoots!" Then the man's wife remarked, "How sweet," and give him a kiss. Then the announcer concluded, "He scores!"

A scene from the movie, "Vertigo" was in third position on this tape. Actor Jimmy Stewart was shown in an office stepping up on a stool as a woman, presumably a peer or secretary, looked on. The character states, "Ah, why this is a cinch. I look up ... I look down. I look up ... I look down." Upon gazing out the office window down several stories, the character was struck with the look of terror and appeared to perspire instantly. He then fainted and fell into the woman's arms. She commented, "Oh John," in a sympathetic tone.

The fourth extreme deviation portrayal was a public service announcement that showed a tight close-up in black-and-white of an adolescent about age 16 who was giving a confession of how alcohol ruined his life. The statement he made was, "Getting out of control. Started drinking every day 'till I needed it so bad that I started stealing and getting myself in trouble with the law. That's when I was out of control. Alcohol doesn't make

you feel good," [nervous chuckle and break in voice] "it just ruins your life." His facial expression was one of fear and shame.

Finally, a commercial for Northern tissue showed a girl approximately 6 years of age walking up in pajamas and looking through interior French doors to see her father reading the paper in a corner easy chair. The female voice stated, "It's bedtime, but first it's story time . . ." The girl walked up to the chair and next was shown sitting beside her father who was reading a story book. She looked up to him as he read. In the final scene she was shown asleep and the father looked down at her and smiled. No adult female was shown in this scene.

## **Manipulations and Measures**

Independent and dependent variables are reviewed here. These follow the conceptual definitions and clarifications presented in Chapter 1.

#### Independent Variables

Three independent concepts were identified in Chapter 1: Counter-stereotyping portrayals, gender identity and child development. These concepts can be operationalized respectively with the variables "behavioral deviation content," "sex-type" and "age."

Counter-stereotyping portrayals are manipulated and represented by the variable, *behavioral deviation content*. Behavioral deviation content is manipulated at three levels: Slight, medial and extreme. Gender identity is observed with two conceptual values: Traditional and nontraditional. Gender identity is represented by the variable *sex-type* for which values are measured as masculine and androgynous to correspond to the traditional and nontraditional concepts, respectively. Child development is observed with two conceptual values: middle-childhood and adolescence. Development will be represented by the variable *age* for which there will be two observable values: 5th grade and 10th grade.

## **Behavioral** Deviation Content

Behavioral deviation content is defined as the extent to which the TV portrayal is *inconsistent* with normative definitions and expectations for masculine behaviors in normative role portrayals. Conceptually this phenomenon must be continuous with variability contributed by the following dimensions: appropriateness of the role for males (including work roles, family and domestic roles, and leisure roles), and *in*appropriateness of the behavior, traits and physical appearance for the role (including sensitivity, crying, long hair, high-pitched voice, active parenting, cooking and so on). In other words, while the role portrayal is consistent with normative expectations for male characters on TV, the behavior deviates in a certain degree from the norm, thereby creating a role-behavior discrepancy. Again, behavioral deviation content is the variable level of the counter-stereotype portrayal concept. In manipulation of this variable, subjects experience "saturated exposure" to the content (cf., Tan, 1979) by viewing one of three videotapes with multiple portrayals of men whose behavior deviates slightly, medially or extremely.

## Sex-Type

The two most widely used measures of gender identity are the Bem Sex-Role Inventory (BSRI) and the Personal Attributes Questionnaire (PAQ) (Archer, 1989; Bem, 1979; Bem, 1981b; Bem, 1983; Boldizar, 1991; Spence, 1991; Spence & Helmreich, 1981; Spence & Helmreich, 1983; Thompson & Melancon, 1986). For males, different studies produce different proportions in each of the identity categories, although the differences are small and may be a function of sample peculiarity. In one study (Gynther, Davis, & Shake, 1991), 23% of college males scored masculine on the BSRI, 20% feminine, 28% androgynous and 29% undifferentiated. In another study using the BSRI (Mills & Bohannon, 1983), 52% of a normative college male sample and 36% of football and police cadet students scored masculine, 8% of normative and 9% of the football and police cadets scored feminine, 27% and 41% were androgynous, and 13% and 14% were

undifferentiated among the normative and football/police cadet students respectively. In a sample of males ages 8 to 14 (Stericker & Kurdek, 1982), 44% were masculine, 3% feminine, 34% androgynous and 19% undifferentiated using a modified version of the BSRI.

Sex-type, the variable representation of gender identity, can be operationalized with children by using a modified version of the BSRI (Bem, 1974; Bem, 1979; Bem, 1981a; Bem, 1984). The Children's Sex Role Inventory-Short (CSRI) was developed and tested with 145 3rd, 4th, 6th and 7th graders and re-tested a year later with 130 of the original sample (Boldizar, 1991). The factor structures and the relationships between the masculine (M) and feminine (F) scales on the original BSRI and the CSRI were parallel. The short CSRI contains 10 feminine, 10 masculine, and 10 neutral items. Masculine sex-typed children are identified as such if their score on the M scale is above the median split while their score on the F scale is below the median split. Androgynous sex-typed males are identified as such if both their M scale and F scale scores are above the median split on each.

#### Age

Child development is operationalized by selecting children from different grade levels such as 5th grade public school classrooms (10- and 11-year-olds) to serve as a proxy for middle-age children and 10th grade public classrooms (15- and 16-year-olds) to represent adolescents.

## **Dependent Variables**

The literature review suggested three dependent concepts—gender stereotypes, content attitudes and schematic inference. Gender stereotypes are represented by a variety of attitude domains. Variable counterparts tapping four theoretically distinct stereotype domains were uncovered in the literature for use in the present study: "Male role norms," "physical prowess," "attitudes toward women" and "sexism." Content attitudes are assessed with the variable "content favorability." Schematic inferencing is assessed by content inference. Each of these are described more fully below.

### Male role norms

Male role norms, those social norms that dictate what men should feel and do, is operationalized using the Male Role Norms Scale—MRNS— (Thompson & Pleck, 1986). This 26-item Likert scale taps three normative dimensions including status, toughness and anti-femininity. The original scale used a 7-point intensity range from "very strongly agree" to "very strongly disagree," but can be adapted for use with middle-age children by applying a 5-point range. On the face of it, language and concepts are understandable to 10- and 11-year-old children. The scale has a known reliability of .86 with college-age adults. Individuals are scored on this scale by summative ranking. Higher scores indicate more traditional masculinity attitudes. The value of this scale is that it focuses strictly on attitudes about masculinity without making comparisons to femininity or female roles, it does not measure gender identity, and it has a known factor structure and high reliability<sup>4</sup>.

#### **Physical prowess attitudes**

Physical prowess attitudes reflect the importance that is placed on "ideal" men having physical strength, agility, endurance and muscular physical features. No scale has been published in academic journals or the social psychological handbooks to assess the degree of importance that is placed on 'ideal' physical characteristics. Yet such a dimension clearly may exist among gender stereotypes with corresponding beliefs about the physical characteristics of the 'ideal' female. Work in this area has begun with sex differences and dimensional structures in the assessment of physiques (Salusso-Deonier, 1993). Thus, to the extent that beliefs about the physical characteristics of males and females may be one

<sup>&</sup>lt;sup>4</sup>For a concise summary of the MRNS and similar measures of masculinity attitudes, see Thompson, Pleck and Ferrera (1992).

dimension of gender stereotypes, such a measure is needed for use in social-psychological research on gender attitudes.

The author constructed a scale to operationalize the variable, physical prowess attitudes. A pre-test of 20 five-point Likert items is described below. Five items were designed to test each of four predicted dimensions of a construct tentatively labeled "male physical prowess": strength, agility, endurance and body muscularity.

## Attitudes toward women

A scale developed in the mid-1970s by Spence and her colleagues to assess the extent to which one has pro-feminist attitudes, the Attitudes toward Women Scale (AWS) is one of the most widely used measures in social psychology (Bailey, Less, & Harrel, 1992; Galambos, Petersen, Richards, & Gitelson, 1985; Nelson, 1988; Sattem, Savells, & Murray, 1984; Spence, et al., 1975; Spence & Helmreich, 1972; Spence, Helmreich, & Stapp, 1973). Not only has the scale been used with college-age adults (Spence, et al., 1975; Spence & Helmreich, 1972; Spence, et al., 1973) and across Western cultures (Nelson, 1988), the AWS has been adapted for use with children and teenagers as well (Galambos, et al., 1985). The AWS has been used to help explain sexual assaults by males against females (Sattem, et al., 1984), and has been compared or used in conjunction with other measures to assess gender attitudes (Archer, 1989; Gayton, Sawyer, & Baird, 1982; Sattem, et al., 1984).

Although this scale is now dated, its adapted version to younger respondents and its dominance in the literature maintain its usefulness especially in research with children. The Attitudes toward Women Scale for Adolescents (AWSA) is a 12-item scale that has been used with children in grades 6 to 12 (Galambos, et al., 1985). It has been tested for test-retest reliability and internal consistency with both boys and girls. Chronbach's Alpha for

the 12 items with male adolescents was .78. Individuals are scored by mean ranking. A higher score indicates more feminist attitudes.

#### Sexism

Sexism is one potential dimension of gender stereotypes. It may be defined as, "unfavorable attitudes or actions towards a gender group and its members predicated solely or partly upon the basis of gender," (Durkin, 1985d, p. 13). Indeed, discovering beliefs about work and family roles has been central to the measurement of stereotypes about gender. Adult role attitudes include stereotypes about roles—including work, family, leisure and so on—that one expects to be doing as an adult compared with roles anticipated for spouse. While a variety of methods has been used—such as open-ended listing (Zuckerman & Sayre, 1982), aided lists (Wroblewski & Huston, 1987), identification with characters in role portrayals (Eisenstock, 1984), recall tasks of nontraditional stimuli (Blaske, 1984; Drabman, et al., 1981), and knowledge and appropriateness of specified roles (O'Bryant & Corder-Bolz, 1978)—one simple approach for measuring adult role attitudes has been offered in the form of a 20-item scale using 5-point Likert measures (Rombough & Ventimiglia, 1981).

The Rombough/Ventimiglia Sexism scale measures attitudes toward gender in three areas: Internal division of labor (family roles), external division of labor (work roles) and sex differences (traits and behaviors). The Sexism instrument has produced an alpha of .94 for the 20 items and reliabilities above .7 for each of its three sub-scale dimensions of family roles, work roles and behaviors and traits. The items are written in basic language with concepts that children in grade 5 should understand. Individuals are scored by summative ranking. Higher scores indicate more sexist role attitudes.

## **Content favorability**

Items tapping content favorability to operationalize the concept of content attitudes may assess enjoyment, liking, interest and memorability. Because this variable is relatively manifest and the measures used throughout the literature similarly assess general likability of content, a series of items was created for use in the present study described later in this chapter.

## **Content** inference

Schematic inferencing is the extent to which pre-existing knowledge and attitudes negotiate the effects of television on its viewers by causing them to make stereotypical inferences about ambiguous stimulus objects. Each stimulus tape in this study includes one vignette in common: A traditionally male role portrayal with correspondent traditional behaviors but the individual performing in this role is ambiguous with regard to gender. In this case the stimulus is an astronaut working while hovering over a spacecraft orbiting Earth. Schematic inferencing can be tested by asking subjects two questions about the likelihood that the astronaut is a male and the likelihood that the astronaut is a female with five choices from "not at all possible" to "very possible." The traditionality of the inference can thus be calculated by the difference between male and female scores.

#### Concept Summary

The literature unveiled four dependent variables informing the gender stereotypes concept to be assessed in this study: Masculinity attitudes, male physical ideals, feminist attitudes, sexist and role attitudes. Table 4 presents both independent and dependent constructs and their empirical counterparts.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Following the pretest procedure described below, the male sexist attitudes concept was dropped from the study leaving four dependent gender stereotype concepts. A scale which is correlated with the AWS but measures a distinct dimension (particularly for females) of gender stereotypes—with a focus on roles and behaviors—is the Macho Scale (Gayton, et al., 1982; Gynther, Davis, & Shake, 1991; Sattem, et al., 1984; Villemez & Touhey, 1977). This scale purports to measure adherence to sexist attitudes and discriminatory practices such that males are seen as superior to females. High scorers on Macho tend to

Position	Concept	Variable	Measure / Manipulation
Independent	Counter- Stereotype Portrayal	Behavioral Content Deviation	Slight, Medial, or Extreme
	Gender Identity	Sex-Role	CSRI
•	Development	Age	Grade
Dependent	Masculinity Attitudes	Male Role Norms	MRNS
·	Male Physical Ideals	Physical Prowess Attitudes	Constructed 20-Item Scale
·	Feminist Attitudes	Attitudes Toward Women	AWSA
•	Role Attitudes	Sexism	Sexism Scale
•	Content Attitudes	Content Favorability	Constructed Multiple Items
•	Schematic Inference	Content Inference	2 Items

 Table 4: Summary of Manipulations and Measures

score low on AWS. While this scale has not been used with children, its multiple items, all of which have strong ability to discriminate between high and low scorers on the scale, make it potentially adaptable to younger respondents in a shorter and reworded form. The original scale included 28 five-point (0-4) Likert items.

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Masculinity attitudes are represented by the variable *male role norms* that includes three components of masculinity attitudes: Status norms, toughness norms and antifemininity norms. The components and the overall variable are treated as having continuous values leading to an interval level of attitude traditionality.

Male physical ideals are identified by the variable *physical prowess* that is constructed of four predicted dimensions of male physical ideals: strength, agility, endurance and muscularity. Value treatment for this variable is continuous leading to an interval score reflecting attitude traditionality.

Feminism is identified by the continuous unidimensional variable attitudes toward women. The interval score would suggest how traditional is the attitude.

Role attitudes are represented by the variable *sexism* that includes three dimensions treated as continuous variables indicating traditionality: Family roles, work roles and traits and behaviors.

Content favorability is represented by the continuous variable *content attitudes* composed of up to 12 distinct items, pending internal consistency and factor analyses. The schematic inference concept is represented by the continuous unidimensional variable *content inference* operationalized by two items.

### Instrument

A 15-page, desktop-published booklet was developed as the measurement instrument. Primary components included a cover, instruction page, two example pages and 11 pages of items from scales selected and tested according to the following pretest procedure.

## Instrument Pretest Procedure

Many of the scales assessing gender identity and gender attitudes used elsewhere in the literature have been revised downward to accommodate the reading and response capabilities of middle-age children. The first task in developing the paper-and-pencil instrument was to locate such measures. Task two involved pretesting these with children the same age as those selected for participation in the hypothesis tests. A description of the instrument pretest procedure follows.

Four factors would determine the success of the instrument used. First, children ages 10 and 11 had to comprehend it. Second, it needed to be sufficiently short to be completed within 45 min for the slowest 10-year-old readers. Third, the instrument had to serve as a treatment pretest and posttest and therefore, it required special construction that allowed a break between the first part and the remainder of the survey. Fourth, the tool had to measure all variables for the hypothesis tests and two of three independent variables.

A pretest instrument was constructed to assess the duration needed to complete the pencil-and-paper measurement procedure with 5th and 10th grade children and to determine the feasibility of instructions, wording, scales and demographic items. Of particular interest were the physical prowess items. The Physical Prowess Scale had not been used previously and its dimensional and reliability characteristics were not known. Also of interest were the Male Role Norms and Sexism scales, which had not been reported in the literature as having been used with children. The usability of the Macho Scale (Villemez & Touhey, 1977), which had been used with university undergraduates, was likewise a focus for concern.

These scales first were placed on draft pages and given to an elementary language arts and reading consultant in the district where hypothesis testing was scheduled to take place. The consultant's instructions were to observe and make suggestions about the formatting of

the items on the page, note items that contained concepts or issues which might be inappropriate for 5th grade children, circle words too difficult for a 5th-grader and suggest alternatives.

The draft pages were returned with concern expressed about thematic content of five items and a number of suggestions about wording. The items reflecting mature themes included four from the Macho Scale and one from the Sexism Scale. Issues included a wife's right to abortion, job protection during and after pregnancy, women playing "hard-to-get", married men described as "henpecked" and women's rights to "sexual freedom." Words and phrases that were identified as potentially inappropriate for 5th graders included "emotionally suited," "envious," "feminine," "intuition," "gourmet," "rational," "greater authority", "encouragement", "independent" and "discriminated against".

It was decided to remove the problem items from the Macho scale and reduce it to the 10 items that most discriminated between stereotyped and nonstereotyped males in the original study. However, this is the only scale for which inclusion of items was affected. Other scales, because they have been created and tested to be whole, were not reduced. However, in as few places as possible, words were replaced with more age-appropriate synonyms or phrases. Thus, minor changes were made to the scales for use in the pretest. Each of the scales are presented, in turn, with items shown as they were used in the pretest instrument and, where appropriate, with original wording. The CSRI is presented first, followed in order by the AWSA, MRNS, PPS and Sexism scales<sup>6</sup>. The CSRI contained 30 items for which no changes were made. Table 5 contains items in the CSRI-masculine scale, CSRI-feminine scale and the neutral items.

<sup>&</sup>lt;sup>6</sup> Because it was not used in the study, the Macho scale is not presented here.

# Table 5: CSRI Items

#### **Masculine Scale Items**

I can control a lot of the kids in my class. When a decision has to be made, it's easy for me to take a stand. I'm a leader among my friends. When I play games, I really like to win. I am sure of my abilities. I stand up for what I believe in. I am good at sports. It's easy for me to tell people what I think, even when I know they will probably disagree with me. I make a strong impression on most people I meet. I am good at taking charge of things.

#### Feminine Scale Items

I care about what happens to others. When someone's feelings have been hurt, I try to make them feel better. I am a warm person. I am a kind and caring person. I like babies and small children a lot. I am a gentle person. I am a cheerful person. When I like someone, I do nice things for them to show them how I feel. I like to do things that girls and women do. It makes me feel bad when someone else is feeling bad.

I feel bad when other people have something I don't have.

#### **Neutral Items**

People like me. I have many friends. It's easy for me to fit into new places. I'm always loosing things. I like to do things that other people do. I am a moody person. I like acting in front of other people. I never know what I'm going to do from one minute to the next. I always do what I say I will do.

Item as Used	Original Item <sup>1</sup>
Swearing is worse for a girl than for a boy.	
On a date, the boy should pay all expenses.	On a date, the boy should be expected to pay all expenses.
On the average, girls are as smart as boys.	
More support in a family should be given to sons than daughters to go to college.	More <i>encouragement</i> in a family should be given to sons than daughters to go to college.
It is all right for a girl to want to play rough sports like football.	
In general, the father should have more say than the mother in making family decisions.	In general, the father should have greater authority than the mother in making family decisions.
It is all right for a girl to ask a boy out on a date.	
It is more important for boys than girls to do well in school.	
If both husband and wife have jobs, the husband should do a share of the housework such as washing dishes and doing the laundry.	
Boys are better leaders than girls.	
Girls should be more concerned with becoming good wives and mothers than wanting a professional or business career.	Girls should be more concerned with becoming good wives and mothers than <i>desiring</i> a professional or business career.
Girls should have the same freedoms as boys.	
<sup>1</sup> Problem wording is italicized.	

 Table 7:
 MRNS Items

Item as Used	Original Item <sup>1</sup>		
Status	Norms		
Success in his work has to be a man's most important goal in life.	Success in his work has to be a man's central goal in life.		
The best way for a young man to get the respect of other people is to get a job, take it seriously, and do it well.			
A man owes it to his family to work at the best-paying job he can get.			
A man should work overtime to make more money whenever he has the chance.	A man should generally work overtime to make more money whenever he has the chance.		
A man always deserves the respect of his wife and children.			
It is important for a man to have the respect and admiration of everyone who knows him.	It is essential for a man to always have the respect and admiration of everyone who knows him.		
A man should never back down in the face of trouble.			
I always like a man who's totally sure of himself.			
A man should always think everything out cooly and logically, and have wise reasons for everything he does.	A man should always think everything out cooly and logically, and have <i>rational</i> reasons for everything he does.		
A man should always try to show he is confident even if he really doesn't feel confident inside.	A man should always try to project an air of confidence even if he really doesn't feel confident inside.		
A man must stand on his own two feet and never depend on other people to help him do things.			
<u>Toughness Norms</u>			
When a man is feeling a little pain he should try not to let it show very much.			
Nobody respects a man who often talks about his worries, fears, and problems.	Nobody respects a man very much who frequently talks about his worries, fears, and problems.		
A good saying for a man would be "When the going gets tough, the tough get going."	A good motto for a man would be "When the going gets tough, the tough get going."		
I think a young man should try to become physically tough, even if he's not big.			
Fighting is sometimes the only way to get out of a bad situation.	Fists are sometimes the only way to get out of a bad situation.		
A real man enjoys a bit of danger now and then.			
In some situations a man should be ready to use his fists, even if his wife or his girlfriend would object.	In some kinds of situations a man should be ready to use his fists, even if his wife or his girlfriend would object.		
A man should always refuse to get into a fight, even if there seems to be no way to avoid it.			
Antifeminir	nity_Norms		
It bothers me when a man does something that I consider "womanly."	It bothers me when a man does something that I consider <i>feminine</i> .		
A man whose hobbies are cooking, sewing, and going to the ballet probably wouldn't appeal to me.			
It is a bit embarrassing for a man to have a job that is usually done by a woman.	It is a bit embarrassing for a man to have a job that is usually <i>filled</i> by a woman.		
Unless he is really desperate, a man should not accept a job as a secretary.	Unless he was really desperate, I would probably advise a man to keep looking rather than should not accept a job as a secretary.		
If I heard about a man who was a hairdresser and a good cook, I might wonder how manly he was.	If I heard about a man who was a hairdresser and a <i>gourmet</i> cook, I might wonder how <i>masculine</i> he was.		
i think it's very good for a boy to be taught to cook, sew, clean the house, and take care of younger children.	I think it's extremely good for a boy to be taught to cook, sew, clean the house, and take care of younger children.		
might find it a little silly or embarrassing if a male friend of mine cried over a sad love scene in a movie.			
Problem wording is italicized.	•		

## Table 8: PPS Items

It is important for men to have strong muscles. Being able to lift heavy things is important for men. Men need to be able to move fast. Guys should be able to work for many, many hours without wearing out. If a guy is tired after a short time, it's O.K. for him to give up on something. Having a lot of muscle is a very important part of being a man. Guys should be strong enough to move big pieces of furniture around. When they work outdoors, women have to rest more often than men. It is O.K. for men to be slow when they move around. It is cool for a guy to have big muscles in the arms and legs. Men can react to things faster than women. Being physically powerful is not important for men these days. A man can do more tricks with roller blades than a woman. The ideal man has a body like a weight lifter. A husband and a wife should have the same amount of physical strength. The average man should be able to ride a bicycle for several miles without getting tired. The weaker a guy is, the less of a man he is. Women like guys with lots of muscles. Men need to be quick and sure-footed. Staying awake for a very long time is manly.

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Table	9:	Sexism	Scale	Items
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Item as Used	Original Item <sup>1</sup>
The job of plumber is equally suitable for men and women.	
It is all right for the woman to have a career and the man to stay home with the children.	
Men make better engineers than women.	
Working women are too independent.	
Women should not be prevented from getting manual labor jobs.	Women should not be discriminated against in getting manual labor jobs.
Driving a truck is equally suitable for men and women.	
It is more important for a wife to help her husband than to have a career herself.	
A woman should willingly take her husband's name in	
The husband should make the major decisions.	
The husband should handle the money.	
A woman should wait until her children are out of school before she goes to work.	
A woman's purpose in life should be to take care of her family.	
Women should stay home and care for the children.	
The major duty of the wife is to keep her husband and children happy.	The major <i>responsibility</i> of the wife is to keep her husband and children happy
Women should have the same sexual freedom as men.	
Men are more emotionally suited for politics than are women.	
Young girls are entitled to as much independence as young boys.	
Men are better leaders than women.	
Women are more envious than men.	
Women have more intuition than men.	

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AWSA items are listed in Table 6. Four of the 12 items were modified as shown in the table. Items informing the MRNS are shown in Table 7. Of the 26 items informing the scale and subscales, 14 were modified. Subscales are demarcated by lines. Table 8 shows the items informing the PPS scale as used in this study. The 20 items were designed for this study and, therefore, required no re-writing.

Items informing the Sexism Scale are in Table 9. Inclusive of 20 items, the scale has four subscales as indicated in the table. Of the items, only two were modified for use with middle-age children.

The pretest instrument was a 14-page desktop-published booklet with cover, instruction and example pages plus 11 pages of items. The cover identified the booklet as "A survey about people in America" and showed silhouette clip-art graphics of a television, female head, male head and family. The instruction page was mostly filled with text set in large, 14-point, Times font with a 24-point heading, "Instructions." The instruction page included an introduction, instructions for doing the survey and procedural details. The example page—headed with "Example" in 24-point type—provided a sample statement and worked through each response possibility outlining which number to circle for each potential attitude respondents might have for the item. Printed at the bottom of the page was a black box with white text and down arrows instructing the respondent to "BEGIN."

Each Likert item in the survey book was placed in its own box in 12-point Times typeface with an adjoining box to its right containing response options. Items for each scale were on one page or two consecutive pages in a matrix format. The first two pages contained the CSRI. Page three included demographic items placed here to serve as a similar break between the CSRI and attitude scales as would occur by viewing the video at this point in the experimental procedure. Demographics items included age, sex, number of siblings, grade level in school, favorite TV shows and amount of time spent viewing

television on weekdays and weekends. Pages four and five contained the physical prowess items; page six included questions for the Macho scale; the MRNS informed pages seven and eight; page nine held the AWSA; the sexism scale items appeared on remaining pages, 10 and 11.

The top of each page included "Instructions for this page" with directions for that page's items set in Helvetica 12-point typeface. The bottom of every page, except the second page and the last page, included a black box with white letters and down arrows instructing the respondent to "CONTINUE." The bottom of the second page (separating the gender identity measures—CSRI—from other items) and the last page included a black box instructing the respondent to "STOP!" The rationale behind placing this message at the conclusion of the CSRI was to check whether respondents attended to this instruction which would be used in the experiment to alert respondents to stop working on the survey and prepare to watch the manipulation tape between the gender identity pretest and the gender attitudes posttest. The last page also included the message, "Thank you for completing this survey."

Two central Michigan public schools agreed to allow testing of the instrument pretest: one provided a 5th grade class (n = 25) and the other a 10th grade group (n = 21). Twenty males and 26 females were included in the sample. The same instrument pretest was used in both settings. The time allotted to the entire procedure was 55 minutes with the teacher introducing the primary investigator who then explained that he was "trying out a new survey and would like you to help me see how it works." Before the booklets were distributed, students were told that taking the survey was completely voluntary which was explained as, ". . . you do not have to answer questions you don't feel like answering and you do not have to do the survey if you don't want to." The teacher in each room asked for those who did not want to try the survey to take their books with them to the library with the teacher. No students refused the survey.

All students were then given pencils with the imprimatur of the investigator's university. They were told to keep the pencils when done with the survey. Booklets were distributed while students were instructed to leave them closed on their desks until told to open them. Once booklets were distributed, the investigator instructed students to open their survey books to the first page with the word "Instructions" printed at the top. The investigator read the page aloud and asked if there were any questions. Students were again offered to refuse the survey based on a review of the voluntary nature of the procedure. As there were no questions and no rejections in either 5th grade or 10th grade administration, students were told to turn to the next page labeled at top with, "Example." The example item, "Characters on TV are like people in the real world," and sample responses were read aloud. Students were to mark on the booklet itself. This student in grade five asked whether students were to mark on the booklet itself. This student was instructed in the affirmative. Students were then advised, "turn to page one and begin the survey. If you do not understand a word or a question, you may skip the question or you may raise your hand and I will try to explain it to you."

As students progressed through the survey, and the investigator roamed the room to assess progress and look for problems, a student would occasionally raise a hand for clarification. Items which caused the most problems were noted. No questions were asked about demographic items or items of the CSRI, MRNS or AWSA. Three 5th grade students asked about the physical prowess item, "Men need to be quick and sure-footed." Further, the last two items on the sexism scale, "Women are more envious than men" and "Women have more intuition than men" lead to questions from four 5th grade children; two asked about both and two different children asked about one or the other. One student asked for clarification of the sexism item, "Men are more emotionally suited for politics than are women." No 10th grade students requested clarification for any item on the instrument.

Among 5th grade students, most completed the instrument within 35 minutes. Only one student was still working after 45 minutes had passed. Students began raising their hands after five minutes had passed because they had come to the message at the bottom of page two instructing them to stop. They were instructed to continue at that point. Once approximately a third of the students had raised their hands about this item, all students were asked to continue and ignore the message. Students in grade 10 began to finish within 25 minutes and all completed the task within the remaining 20 minutes. Like the 5th graders, 10th graders began to notice and question the investigator about the stop message on page two.

Analyses of the pretest instrument illustrated the internal consistency among items, and thus the reliability of scales, as displayed in Table 10. The primary scales are shown in the first column and subscales, where appropriate, in the second column. Five items were removed from the physical prowess scale to optimize the relationship between the number of items and its reliability. Overall reliability for the physical prowess scale with 20 items was alpha = .90. With five items removed, the reliability improved somewhat to alpha = .92. All major scales produced quite acceptable reliabilities above alpha = .80 except for the Masculine scale of the CSRI with alpha = .71 and the Macho scale which was reliable at alpha = .60.

A principal components factor analysis using varimax rotation was conducted on 20 items of the physical prowess scale and on the 15 items remaining after performing the reliability analysis and elimination of five items. The first produced an unsatisfactory five factor solution with 13 of the 20 items loading at least .65 on one factor and not loading higher than .399 on any other. The second analysis produced a three-factor solution with eight items loading at least .65 on one factor and below .40 on any other.

Scale	Subscale	N of Items	Alpha
CSRI / Feminine		<b>9</b> *	86
CSRI / Masculine		10	.00
Physical Prowess		15	.92
Macho		10	.60
MRNS		26	.91
	Status Norms	11	.74
	Toughness Norms	8	.76
	Antifem. Norms	7	.78
AWSA		12	.82
Sexism	•••••••••••••••••••••••••••••••••••••••	20	.88
	Division of Labor	14	.86
	External Labor	6	.68
	Internal Labor	8	.83
	Sex Differences	6	.60

 Table 10:
 Pretest Scale Reliabilities (Chronbach's Alpha):

Five items loaded on the first factor which could be labeled, "important traditional male features" while the remaining three items loaded on two factors, both of which might be labeled "androgynous male features." This analysis did not produce the solution anticipated, dividing items into approximate categories of muscularity, strength, agility and endurance.

Problem items were indicated by the number of respondents who chose not to respond. In no instance did an item have more than two missing respondents thus indicating that any given item was answered by 96 percent of respondents.

During data entry for the first group of respondents (grade 5), it was discovered that one of the ten feminine items of the CSRI had been omitted inadvertently from the instrument. This was included in the pretest instrument for the 10th grade respondents.

On the basis of the pretest procedure, the following alterations were made to the instrument to create a final form. First, due to the relatively low reliability of the Macho scale (perhaps a function of removing the sensitive items and using only those reported by its authors to be most discriminant), it was decided not to use this tool in the test of hypotheses. The MRNS appeared to be a contemporary and precise measure of male attitudes about male characteristics while the Macho scale was more dated and less clearly defined. It seemed reasonable to use all 20 items of the physical prowess scale for the hypothesis tests since time permitted, overall reliability was good and it was difficult to obtain a satisfactory understanding of the factor structure with the small pretest sample size. Further factor analyses and reliability statistics would be run using the study sample.

Second, it was decided that the scales were usable for this study and that further revision of the items, while perhaps appropriate for adapting some items to the younger readers, was not warranted. Doing so might have altered the scales in a way which would not be clear to the investigator. Although some items contained in the sexism scale and MRNS include concepts which, on the face of it, are beyond the reading level of some 5th grade children, all scales were completed in their entirety by at least 22 of the 25 students in grade 5. Further, the scales presented acceptably good reliability.

Third, students had little trouble working with the instrument in the form presented. They neither had trouble with manipulating the booklet, reading the text, following directions, nor responding to each item with the adjacent response options—except for four 5th grade students who showed some confusion when the response options changed from four on the CSRI to five on the physical prowess scale. No 10th grade respondents commented on any aspect of the presentation. Teachers in both grades were given a copy of the pretest instrument and asked to critique it for ease of use. They suggested no changes and remarked on the clarity of instructions and value of presenting items in boxes with response options attached at right. On the basis of the minor confusion caused for a few students in grade 5, it was decided to group the CSRI (Children's Sex Role Inventory) and the AWSA (Attitudes toward Women Scale for Adolescents) pages together and insert a second instruction sheet for the remaining scales which had five response options.

Fourth, no student took longer than the allotted time to respond to the total instrument. This outcome lead the investigator to believe that the number of measures and length of the instrument were appropriate for use in the experimental procedure.

#### Instrument Structure and Content

The final product, presented in Appendix D, was 15 pages in length and designed similarly to the pretest instrument. The instrument used with all respondents included a cover page with the words, "A survey about TV & people in America" in a contemporary 48-point sans-serif typeface called "Optane." Below the words was a collection of clip-art graphics including a television, male and female silhouetted heads, and a silhouette of a family group including an adult male, adult female, young female and young male.

Depending on the condition in which the instrument was used, a letter corresponding to the condition was located inside the screen area of the television graphic.

Page two was headed with the word "Instructions" set in 24-point Optane. Below this was "Introduction" set in 14-point Bold Times Roman. The statement read, "This is a survey about people in America. There are many questions on how you feel about men and women in the real world. Before you read the examples that show how to do this survey, there are some things you should know:" This was followed by ten specific instructions, each of which was preceded by a large standard bullet. The ninth item prepared subjects for the interruption to view the stimulus. The bottom of the page contained the following statement in 14-point Times Italic, "Look at the example on the next page and then begin the survey."

The next page was headed with "Example" in a 24-point Optane font as on the previous page. It then offered an example item set in 12-point Helvetica similar to the form in which most items on the instrument appeared. As with the pretest, this page demonstrated how to respond to the question for each possible response option. In other words, the four-point scale was shown with four examples. Each one showed a circled number which corresponded to the attitude for that example as described above in 12-point Times Roman. Thus, "If you disagree a lot, then you would circle a 1 like this:" was followed by adjoining boxes with the item to the left and the response options to the right with the numeral 1 circled. The bottom of the page displayed a reverse-type (white on black) message in 14-point Helvetica all-caps, "bookcased" in down-arrows instructing the subject to, "BEGIN."

Pages one and two contained 30 items of the CSRI. The top of the page included the words, "Attitude Survey Page [number]" in 14-point Optane. Each subsequent page included these words and the corresponding page number. The page tag was separated

from the page instructions by a double line. "Instructions for this page:" followed by specific details appeared at the top of this and every page. Items from the CSRI were shown in boxes to the left with response options to the right. The question, "How true of you is this?" appeared in Times Roman Bold above the items and the response anchors, "Not True", "A Little True", "Mostly True" and "Very True" were set above the corresponding numbers for response options. The bottom of page one instructed the respondent to "CONTINUE" in reversed 14-point Helvetica all-caps, bookcased in downarrows. The bottom of page two instructed students to "STOP" in reverse type, all-caps bookcased in exclamation marks.

Page three was dedicated to the AWSA and formatted identically to the CSRI. The box above items read, "Statement" in Times Roman Bold and the box above the response option contained the anchors, "Disagree A Lot", "Disagree", "Agree" and "Agree A Lot." A tag at the bottom of the page instructed respondents to continue.

The fourth page started with "NEW SECTION • Instructions" at the top in 24-point Optane. The purpose of this page was to alert students that the response options ranged from one to five and offered examples for each possible response to a sample item.

Pages five and six were dedicated to the MRNS (Male Role Norms Scale). Pages seven and eight contained the physical prowess items. The Sexism scale informed pages nine and ten. Page 11 presented twelve items with 5-point response range from "Disagree A Lot" to "Agree A Lot" like the pages that preceded it. These items, however did not belong to a stereotype scale, but tested inferences about the astronaut stimulus and attitudes about the stimulus tape overall. Two items designed to measure the respondent's inference about the astronauts sex were presented first and read, "The astronaut on the video tape could have been a woman," and "The astronaut on the video tape could have been a man." Attitude items asked for agreement to, "I think the men on the videotape were like men in the real world", "I think this video tape was like normal TV" and so on.

Finally, page 12 assessed demographic information. Eleven items were presented including age, sex, siblings, grade, involvement in extracurricular activities, typical grades in school, favorite TV shows, amount of television viewing, and whether the "survey" was enjoyable. The bottom of the page thanked the subject for completing the survey and instructed, "STOP" bookcased in exclamation marks in reversed 14-point all-caps Helvetica.

## **Experimental Procedure**

A total of 482 males and females ages 10–11 and 15–16 were randomly assigned to one of three conditions in which the behavioral portrayals in vignettes of commercial television content deviated either slightly, medially or extremely. They were pre-tested for gender identity, shown the videotape for their condition then tested for their gender attitudes and feelings about the videotape and portrayals. Testing took place between May 24 and June 1, 1994. Letters of explanation about the general study topic and procedures were sent to parents at least two weeks in advance through one of two methods depending on the school. One elementary school and the high school sent home regular newsletters every other Friday. The remaining two elementary schools sent notices home with children. The content of this notice is presented in Appendix E.

Five male graduate students were trained in the experimental procedure. These students and the author served as experimenters in each condition such that no experimenter was in the same condition twice in the same grade to avoid treatment-by-experimenter interaction. Appendix F contains the two-page "Experimental Session Instructions" given each experimenter at least one day in advance of the procedure. Instructions were also reviewed with each group of experimenters the day before administration.

The procedure was designed to require 55 min for students in grade 10 and 1 hour for 5th graders, consistent with the length of time each class or subject met in schools where the testing was done. Each condition was assigned a color to be used throughout the testing. These colors corresponded to colorized 3 x 5 inch index cards which would be used to assign students to one of the three conditions: Slight deviation was indicated by blue, medial deviation by green and extreme by yellow. Materials for each condition were coordinated in copy-paper boxes in advance of data collection. Each was color-coded according to condition. Boxes contained the video tape for the condition and a backup "copy" tape in the event of breakage or damage to the original, sufficient measurement booklets, colored index cards and a photo-copied story from a grade-appropriate reader to be given students who chose not to participate or whose parents refused their participation. Pencils and folders with the imprimatur of the investigator's university were enclosed to be given to participants upon completion of the instrument. Additionally, a folder was enclosed with a pen and information to the teacher whose classroom in which the testing was to take place. This folder included a "thank you" note, background details about the study and a request for assistance in moving children to the room where their appointed condition would be administered.

Three classes were run simultaneously to accommodate concurrent administration of each condition. The experiment began with a trained graduate student entering the classroom where his test condition would be run. In his possession was the box containing materials needed for the experiment. The experimenter conferred with the classroom teacher, presented her/him with the folder and reviewed its contents pointing specifically to the request for assistance. The teacher was asked whether any children returned notices from parents requesting them not to participate. Overall, one student in grade 10 and five students in grade 5 were refused permission to participate by their parents.

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The experimenter then turned on the television set, lowered the volume (or muted the sound if the monitor provided this feature) and placed the stimulus tape in the video cassette recorder/player and pressed stop to assure the tape was not playing. He then addressed the class by introducing himself and reading the following text of a uniform introduction from the "Experimental Session Instructions" sheet.

We are doing a study on TV and attitudes about people in America. And we would like you to participate. Your opinions are important to our study. The study includes a survey and watching a short video tape and will take less than an hour. We are going to give you pencils to fill out the survey and a folder when you are done. I'm going to give you a card. Depending on the color of the card, you will stay here or go to one of the other [5/10]th grade classrooms. If you don't want to do the survey, you don't have to. Just let your teacher or me know, and we will give you something different to do. This is a survey, you will not be graded on it. Are there any questions?

The 3 x 5 inch index cards, which had been halved, were then distributed systematically, one to each child. Cards were pre-sorted into blue, green, yellow order. The experimenter instructed students that it was "very important" to keep the card that was given them and he requested that everyone hold up their cards after the distribution to visually check the distribution of colors.

Once the card distribution had been verified, he instructed students with the color of his experimental condition to remain in their seats. He then asked everyone with one of the two remaining colors to stand, "leave your seats now and line up single file in the hallway outside room [number]. That is [teacher's name]'s room." Once all these students had left the room, the experimenter repeated the request for students holding the only remaining color.

While students were moving between rooms, experimenters were instructed to cue their video tapes to beyond color bars and set the sound of the monitor to a tone that accompanied the color bars. Children in the hallway outside the experimenter's room were then instructed, "quietly come in and take a seat and we will start the survey." The experimenter verified that everyone held the same color then proceeded to distribute pencils and instruments to each child while instructing, "do not open the survey until told to do so." Once all materials were distributed, the experimenter directed, "open to the first page," and continued by reading the contents of the instruction and example pages. After prompting for any questions (there were none), the experimenter stated, "begin the survey now, work quickly because there are a lot of questions and stop after finishing page 2."

Experimenters were instructed to watch carefully to make certain students did not begin working on page three. Once everyone had stopped working on the first two pages, the experimenter asked students to turn over their booklets and view the video tape. The tape was played for 4 min 30 sec and stopped. The television monitor was turned off and students were instructed to turn over their booklets and continue working quickly from page 3, raise their hands if they had a question and to close the booklet and turn it over when finished. When 10 minutes of remaining time was available, the experimenter announced the fact. As most students completed the instrument, the experimenter began to collect them and distribute folders. When all students were done, remaining instruments were collected and folders distributed.

Students were thanked verbally for completing the study and asked if they had questions and these were answered as honestly and simply as possible. If questions were not forthcoming a brief and simplified explanation, in the experimenter's words, detailed the study and explained why some students changed rooms. Video tape, instruments, remaining cards, pencils and folders were replaced into the box, the experimenter thanked the classroom teacher and left the room. In each instance, students were scheduled for a



lunch, class change or recess period and it was not necessary for the experimenter to return students to their original rooms.

## Data Analysis

Analyses were completed with SPSS for the Macintosh, version 4.0, on a Macintosh PowerBook 180. Procedures included (1) initial inspection tools such as frequency analyses and descriptive statistics, then (2) selection processes including median splits, correlations, exploratory factor analyses, reliabilities, and crosstabulations, and finally (3) hypothesis tests using t-tests and one-way Anovas.

## Frequencies and Descriptives

Data were cleaned initially using frequency analyses to check for out-of-bound values which were subsequently corrected. Across 482 cases with 135 variables per case, 11 items (.02%) were entered incorrectly, suggesting clean data. Each item was examined for distribution. Cases by grade, condition and sex were examined for distribution within conditions. This procedure revealed a minor bias favoring assignment of subjects to the slight deviation condition caused by the placement order of colorized index cards. Table 11 shows the bias which is unfortunately accentuated by gender. Females were assigned more often to the extreme condition than other conditions while males were assigned more often to the slight condition than other conditions.

#### First Case Selection

Male and female children completed the experimental procedure together to ease administration and eliminate potential negative effects of singling out males as study participants. Yet the present study is only interested in analysis of data for male participants. For this reason, the first of two case elimination procedures required selecting only males (n = 238) for remaining analyses. Of these, 132 were from grade five ( $\bar{x} = 10.75$  yrs) and 106 from grade ten ( $\bar{x} = 15.32$  yrs).

		Gr		
Sex	Group	5	10	Total
Male	Slight	53	43	96
	Medial	49	33	82
	Extreme	30	30	60
	Males Total	132	106	238
Female	Slight	48	23	71
	Medial	47	32	79
	Extreme	63	31	94
	Females Total	158	86	244
-	Total	290	192	482

Table 11: Study Participants by Condition, Gender & Grade

# **Data Transformation**

Several items required recoding and reverse-coding for proper treatment in their respective scales and for group comparisons. These transformations were completed using a simple recode procedure. Items with an asterisk (\*) in Appendix D were reverse coded according to the direction of their wording and instructions by the respective scales' authors.

Scale variables were formed either by computing the mean or sum of individual constitutive items depending on requirements set out by the scales' authors. Missing values were not computed "listwise" for scales constructed using means. In other words, a case having a missing value for one or more of the items used in the computation of the scale variable was computed using those constitutive variables which remained available from the scale. All scales and their subscales were computed and their characteristics examined to check for violations of assumptions in t-test and anova procedures.
Reliability analyses using Chronbach's alpha, a measure of internal consistency, were completed for items informing scales. These reliabilities are reported in Table 12. Presented are reliability coefficients for items forming both the major or primary scales and those informing subscales as originally called for by scale authors. The number of respondents informing this test is shown in the fourth column. Also shown, in column six, are reliabilities for the scale items reported for the original scale development study, where available. It is important to note that the reliability coefficients reported here are based on a sample of males only, while only the MRNS and AWSA report reliability coefficients based on male respondents only. Also note that the MRNS and Sexism scales formerly were used only with adults and were adapted for this study.

However, an examination of reliabilities using both male and female respondents in this study revealed only marginally better reliabilities (from .01 to .03). All reliabilities appeared to be well within the moderate to good range of internal consistency, particularly given that some had relatively few items. As the equation for Chronbach's alpha depends on both test length and correlations among items, it is easy to get a large reliability coefficient when the number of items is larger (Norusis, 1990). The CSRI and AWSA scales used in the present study achieved the same or better reliabilities compared with those reported for previous use with children and adolescents. Comparatively, the MRNS and Sexism scales, formerly used only with adults, did produce slightly lower reliabilities.

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Scale	Subscale	N Items	N Sample	Current Alpha	Past Alpha
CSRI / Feminine		10	222	.84	.84*
CSRI / Masculine		10	217	.79	.75•
Physical Prowess	•••••••••••••••••••••••••••••••••••••••	15	224	.92	
	Ideal PP	7		.91	
	Comparative PP	5		.79	
MRNS		26	197	.85	_b
	Status Norms	11		.73	.81 <sup>b</sup>
	Toughness Norms	8		.68	.74 <sup>b</sup>
	Antifem. Norms	7		.73	.76 <sup>b</sup>
AWSA	*****	12	225	.79	.78°
Sexism	•••••••••••••••••••••••••••••••••••••••	20	201	.88	.94 <sup>d</sup>
	Division of Labor	14		.86	.93ª
	External Labor	6		.71	.85 <sup>d</sup>
	Internal Labor	8		.84	.88 <sup>d</sup>
	Sex Differences	6		.63	.73ª

 Table 12: Past & Present Scale Reliabilities

<sup>a</sup>(Boldizar, 1991). N = 145 children (71 females and 74 males) in grades 3 through 6.

<sup>b</sup>(Thompson & Pleck, 1986). N = 400 college males. No alpha reported for full scale.

<sup>c</sup>(Galambos et al., 1985). N = 371 males in grades 6 through 12.

d(Rombough & Ventimiglia, 1981). N = 154 adults (56% females and 44% males).

Strong 1: Strong 2: Strong 3: Strong 4: Aglie 1: Aglie 1: Aglie 3: Aglie 5:	Variable	* P ≤ .05,	Endure 5	Endure 4	Endure 3	Endure 2	Endure 1	Muscle 5	Muscle 4	Muscle 3	Muscle 2	Muscle 1	Agile 5	Agile 4	Agile 3	Agile 2	Agile 1	Strong 5	Strong 4	Strong 3	Strong 1 Strong 2	
Being able Guys shoul Being phys A husband The weaken Men meed 1 It is O.K. f Men can re Men can re Men meed 1 Reverse-		** P S	.38**	.44**	.37**	00	.53**	:34**	.48**	.42**	.64**	.74**	.49**	.37**	.39**	.23**	.74**	.38**	.02	.32**	1.00	S1
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	16		.45	.35**	.41**	.00	.39**	.28	.44	.24	.40	.42**	.41**	1.00								A4
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Table 13: Correlation Coefficients among Physical Prowess Items

#### **Physical Prowess Measures**

The same items of the physical prowess measure which produced an optimum reliability score in the pretest emerged as the most reliable in the hypothesis test. Table 12 shows that 15 items informed physical prowess. With the original 20 items, the reliability coefficient was alpha = 0.90. Through an iterative process of removing individual items using the computed "alpha with item deleted", five items were removed. This improved overall reliability to alpha = 0.92.

Further understanding about the interrelationships among items used in the physical prowess scale may be gained from the correlation matrix shown in Table 13. This table shows all 20 items intercorrelated. The five items removed for hypothesis testing are indicated by italics. Original item text is displayed at the base of the table and is grouped according to an a priori categorization scheme.

The 15 physical prowess items were submitted to factor tests using principal components factor analysis with varimax rotation. This was done in an attempt to observe a factor structure that suggested subscale items. Table 14 presents the factor loadings resulting from this analysis. Two clear factors emerged. The first included seven items (alpha = 0.91) that described ideal male characteristics inclusive of all four categories developed on face validity to represent strength, agility, muscularity and endurance. These items contained wording that was neither negative nor comparative with women. The items loading at least .65 on this factor loaded below .35 on the second factor. The second factor included five items (alpha = 0.79) that more often compared men with women. No item loaded lower than .64 on this factor while loading no higher than .28 on the first. Three items did not load on either factor clearly. These, like items in the first factor, were neither comparative nor negatively worded. The first factor seems to reflect the best overall representation of male physical prowess attitudes. Items in this factor are highly correlated and highly internally consistent.

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Variable	Ideal Traits	Comparative Traits		
Strong 1	.80	.24		
Strong 2	.80	.23		
Agile 1	.81	.25		
Muscle 1	.78	.33		
Muscle 2	.76	.34		
Muscle 3	.65	.18		
Endure 1	.65	.29		
Strong 5	.28	.66		
Agile 3	.20	.73		
Agile 4	.20	.75		
Endure 3	.25	.65		
Endure 5	.24	.64		
Agile 5	.55	.45		
Muscle 4	.44	.53		
Endure 4	.53	.42		

 Table 14: Physical Prowess Factor Structure

From this analysis, it was decided that the use of the physical prowess scale to be used in hypothesis testing would be a two-dimensional one with three components. The first would be an overall physical prowess statistic using all 15 items which produced the highest reliability coefficient (alpha = 0.92), the second to be based on the first factor which was subsequently labeled "ideal male traits" and the third derived from the second factor to be identified as "comparative male traits."

# **Content Attitude Measures**

Twelve items informed the assessment of attitudes toward the video tapes' contents and a subset of these was to be set aside for a manipulation check. To determine which of these items best served each purpose, that is manipulation check and content attitudes, three analyses were performed. First, correlation coefficients were computed on all items. Second, an exploratory factor analysis was performed using the principal components method with varimax rotation. Third, reliabilities were computed for all items and for subsets or factors produced by the factor analyses.

Clear differences emerged between items that correlated highly with other items and those that had poor or little correlation with others. Table 15 presents a correlation matrix with coefficients below the diagonal. Overall, most items related positively to the others with only a few items showing negative association. The item least often associated with others was the third, which asked whether the video tape was surprising. It was related to five other items. Second least associated item was that which asked whether the boys were comfortable watching the video.

A principal components factor analysis with varimax rotation was used to determine the initial factor structure of these items. Four clear factors emerged from the factor analysis procedure as shown in Table 16.

	1	2	3	4	5	6	7	8	9	10	11	12
1. MenReal	1.0											
2. Like	.17*	1.0										
3. Surprise	09	12	1.0									
4. Interest	.16*	.60**	.33**	1.0								
5. MenTv	.04	.12	.12	.08	1.0							
6. Enjoy	.19**	.74**	.23**	.76**	.13	1.0						
7. Comfort	.10	.28**	.06	.32**	.22**	.34	1.0					
8. Remember	.17*	.37**	.22**	.39**	02	.41**	.11	1.0				
9. OKmale	.19**	.25**	.27**	.35**	.18**	.31**	.48**	.09	1.0			
10. OKfemale	: .20**	.25**	.22**	.29**	.14*	.30**	.40**	.06	.78**	1.0		
11. Normal	.52**	.23**	.09	.17**	.00	.18**	.19**	.17**	.38**	.38**	1.0	
12. LikeTV	.15*	.30**	.11	.25**	.31**	.28**	.27**	.09	.33**	.32**	.27*	* 1.0
* P ≤ .05, **	P ≤ .01	l										

 Table 15: Correlation Coefficients for Content Items

	Item Key										
Variable	Item	Variable	Item								
1. MenReal:	I think the men on the video tape were like men in the real world.	7. Comfort:	I was comfortable watching the video tape.								
2. Like:	I liked watching the video tape.	8. Remember:	I will remember this tape for a long time.								
3. Surprise:	The video tape surprised me. <sup>†</sup>	9. OKmale:	I think this video tape is O.K. for males to watch.								
4. Interest:	I was interested in the video tape.	10. OKfemale:	I think this video tape is O.K. for females to watch.								
5. MenTV:	I think the men on the video tape were like men on TV.	11. Normal:	I think the behaviors of the men on this video tape were normal.								
6. Enjoy:	I enjoyed watching the video tape. T Reverse-coded before analysis	12. LikeTV:	I think this video tape was like normal TV.								

\_\_\_\_\_

Variable	Affect	Suitability	Deviation	Realness
Like	.77	.07	.13	.33
Interest	.82	.27	.00	.06
Enjoy	.84	.21	.08	.23
Remember	.66	08	.22	12
OKmale	.13	.87	.17	.16
OKfemale	.06	.86	.22	.18
MenReal	.13	.06	.85	02
Normal	.13	.26	.82	.05
MenTV	.03	.17	16	.65
LikeTV	.21	.16	.18	.69
Surprise	41	43	.17	.40
Comfort	.18	.53	.04	.43

**Table 16: Factor Loadings for Content Items** 

The first factor which was labeled, "Affect" included four items (alpha = 0.82) reflecting how much the boys liked and enjoyed the tape and how interested and memorable they said it was. The items, "I liked watching the video tape" (loading = 0.77), "I was interested in the video tape" (loading = 0.82), "I enjoyed watching the video tape" (loading = 0.84) and "I will remember this tape for a long time" (loading = 0.66) were grouped on this first factor. The second factor was labeled "Content Suitability" and contained the two items (alpha = 0.89) "I think this video tape is O.K. for females to watch" (loading = 0.86) and "I think this video tape is O.K. for males to watch" (loading = 0.87). Factor three consisted of two items (alpha = 0.71) which seemed to assess how deviant the portrayals were from normative expectations: "I think the men on the video tape were like men in the real world" (loading = 0.85) and "I think the behaviors of the men on this video tape were normal" (loading = 0.82). The final factor included two items that reflected the overall "realness" of the portrayals (alpha = 0.47). Items

comprising this factor were, "I think the men on the video tape were like men on TV" (loading = 0.65) and "I think this video tape was like normal TV" (loading = 0.69). Note that two items, "The video tape surprised me" and "I was comfortable watching the video tape failed to load on one factor. No item loading on one factor did so below 0.65 nor loaded on any other factor above 0.35. By removing the item asking whether they were surprised by the video, the factor loadings improved and the "comfort" item loaded on the second factor, "Suitability," at 0.65.

Content attitude items were entered into a reliability analysis in different combinations using Chronbach's alpha. These configurations were dictated by the factor analysis. With 219 males, the 12 items produce an internal consistency statistic of alpha = 0.73; for the ten clearly loading on a given factor in the factor analysis, alpha = 0.79. As such, neither of these appears to inform a unidimensional measure. The affect measure that appears to assess attitudes toward the video tape content is reliable at alpha = 0.82, but removing the "Remember" item would boost this to alpha = 0.87. This item correlated poorly with the total compared with the other three. The measure of suitability to view for males and females was highly consistent with both items having means of 4 out of 5 indicating the boys did not feel either sex should be prohibited from watching the portrayals. With the "Comfort" item added as suggested in the second factor analysis mentioned above, the reliability for this measure drops to alpha = 0.79. The fourth factor (Realness), which presumably measures how realistic the video tapes appeared, was not improved by adding the comfort item which cross-loaded.

These findings suggested removal of the variable "Remember" from the affect measure to improve internal consistency, elimination of the variables "MenTV" and "LikeTV" comprising the fourth factor since these were not highly internally consistent and deletion of the "Comfort" and "Surprise" items on the grounds that they did not load on one factor and did not add to the reliability of the content measures. Although it is a questionable variable, the "Realness" factor will be retained with caution as one part of the general assessment of the manipulation.

Subsequently, to measure attitudes toward the video tapes for hypotheses 2 and 4, a three-item measure of affect was constructed with reliability (alpha = 0.87). Three variables were constructed to check the manipulation. The first was devised based on the second factor inclusive of the two items assessing suitability reported above. The second was constructed according to the third factor, as reported earlier, informed by the two items measuring the deviation of the portrayals. The third was constructed using the fourth factor as reported above, but was removed from further analysis here. The seven remaining items were once more analyzed using a principal components factor analysis with varimax rotation to produce the clear factor solution shown in Table 17.

Variable	Affect	Suitability	Deviation
Like	.86	.08	.14
Interest	.86	.19	.04
Enjoy	.91	.17	.10
OKmale	.20	.92	.12
OKfemale	.14	.92	.17
MenReal	.10	.02	.90
Normal	.11	.28	.82

 Table 17:
 Final Content Assessment Factor Solution

### Second Case Selection

With the calculation of masculine and feminine scale score, it was possible to establish gender identity for each male participant in the study. Consistent with Bem's recommendation for establishing identity (Bem, 1974; 1979), a double median split was performed. The median was computed for the masculine scores, then for the feminine scores. This was done separately for 5th- and 10th-grade males with the justification being that one would expect different medians at different ages since middle childhood and late childhood are distinctly different developmental stages (Boldizar, 1991; Stericker & Kurdek, 1982). To treat them equally might confound the independent variables development and gender identity in this study. Table 18 shows the medians at which each subgroup's scale scores were split.

	Grade				
Scale	5	10			
Masculine	3.10	2.85			
Feminine	2.80	2.60			

 Table 18: Median Split Values for Gender Identity

Cases above the median on the masculine scale were deemed "high masculine" those below the median were labeled "low masculine." Similarly, cases above the median on the feminine scale were "high feminine" males and those below the median were identified as "low feminine" males. By then crosstabulating these categories, a "gender identity score" label was assigned for each subject. The frequency of each category for all boys is displayed in Table 19.

	Masculine							Masculine		
Feminine	Low	High	Total							
Low	80	46	126							
High	50	62	112							
Total	130	108	238							

 Table 19: Gender Identity Category Frequencies

All male children completed the experimental procedure by taking the gender identity pretest and gender stereotyping posttest as a way of easing administration. However, only males who are identified as masculine or androgynous were of interest for comparison in the present study. For this reason, the second of two case elimination procedures required selecting only males who were identified as androgynous (n = 62) or masculine (n = 46) for hypothesis tests. Androgynous males were similar in age to masculine males: 5th graders were nearly 11 years old ( $\bar{x} = 10.75$  yrs, androgynous;  $\bar{x} = 10.83$  yrs, masculine) while 10th graders reported being just over 15 years old ( $\bar{x} = 15.47$  yrs, androgynous;  $\bar{x} = 15.19$  yrs, masculine.

Table 20 presents the breakdown of frequencies for each cell, with sex-type, age and stimulus condition cross-breaks. There were 30 androgynous males in grade 5 compared with 32 in grade 10. Masculine males numbered 25 in grade 5 and 21 in grade 10. Thus, in all there were 55 subjects from grade 5 and 53 from grade 10. Forty-five subjects remained in the slight condition, 37 in the medial condition and 26 in the extreme condition after the final selection of appropriate subjects.

1.1 :0

		G	rade	
Sex-Type	Group	5	10	- Total
Androgynous	Slight	13	16	29
	Medial	12	9	21
	Extreme	5	7	12
	Andro. Total	30	32	62
Masculine	Slight	11	5	16
	Medial	8	8	16
	Extreme	6	8	14
	Masc. Total	25	21	46
	Total	55	53	108

Table 20: Condition, Sex-type and Grade for Hypothesis Test Males

# T-tests

Comparing means of androgynous and masculine males on attitudes toward content (H2) required a T-test. Recall that the second hypothesis predicted that androgynous males would report more favorable attitudes toward content than masculine males. This was also the case for a parallel comparison among 5th and 10th grade males (H4). The fourth hypothesis predicted that 5th grade males would report more favorable attitudes toward content than 10th grade males.

# **ANOVAs**

One-way Anovas were computed to test hypotheses one and three. Recall that the first group of hypotheses predicted that gender stereotypes of androgynous males would be positively related to the magnitude of content deviation; for masculine males, gender stereotypes would be inversely related to the content deviations. To test these propositions, Anovas were first computed for androgynous males and then for masculine males for each measure of gender attitudes at each deviation level  $(1 \times 3)$ . The same analysis was used for testing the third hypotheses which predicted that gender role attitudes of males in

middle-childhood will be positively related to the magnitude of content deviations while adolescent or late-childhood males would report gender attitudes which are inversely related to the magnitude of content deviation.

#### **Manipulation Check Results**

Three measures were used to check the effectiveness of the experimental manipulations. The first, measured how realistic the stimulus tape was compared with other television content. Realness, which is being used reservedly as discussed above, was constructed of two items. Higher scores suggested more realistic content with the potential range of 4 spanning 1 to 5. As Table 21 reveals, boys in each condition found the content to be fairly normal with all scores above the midpoint. There were no significant differences among conditions, suggesting little differential effect of the content. The scores declined slightly as intended extremity increased, however.

ConditionGroupSlightMedialExtremeF (df)F prob.All Boys3.723.653.46.49 (2,103)ns

Table 21: Mean Realness Score by Condition

Note: Higher score indicates greater realness.

The second measure designed to serve as a manipulation check was constructed of two items asking the boys if the men in the ads were engaged in normal real-world behaviors and whether they were like men in real life. Results are shown in Table 22. Lower scores indicated more perceived deviance with the possible values ranging from 1 to 5. As with the realness measure, this configuration did not produce results consistent with the expected influence of the stimulus tapes according to the pretest procedure. The conditions were not statistically different and did not follow the expected order; slight and medial conditions were reversed from the expected direction.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
All Boys	3.53	3.67	3.15	1.70 (2,104)	ns

Table 22: Mean Deviance Score by Condition

Note: Lower score indicates greater deviance.

A final check on the effect of the manipulations was constructed of two items asking the relative appropriateness of the materials for female and male viewing. Results appear in Table 23. A lower score would indicate that the content was inappropriate and therefore viewed to deviate from expectations. To the subjects of this study, nothing appeared to be sacred as the scores were all in the upper range suggesting approval for anyone to view.

 Table 23:
 Mean Suitability Score by Condition

Group	Slight	Medial	Extreme	F (df)	F prob.
All Boys	4.20	4.03	4.13	.30 (2,103)	ns

Note: Higher score indicates greater suitability.

Given the apparent ineffectiveness of the stimulus materials, the findings of the hypothesis tests must be examined with extreme caution as differences among groups may not have been due to the stimulus materials. Yet, the manipulation check measures themselves may be faulty and require scrutiny. In either case, alternative comparisons (e.g., between slight and extreme groups only) could be instructive where the finer and less distinctly different trio of deviation conditions have failed. Examination of the scores on all the manipulation check measures reveals an overall trend for the slight condition to be judged as less deviant than the extreme condition, as would be expected.

# Summary of Methodology

A total of 482 male and female children in grades five and ten participated in the experimental manipulation in which they were randomly assigned to one of three behavioral content deviation conditions during late May and early June, 1994. Only masculine and androgynous males (n = 108) were of interest for the test of hypotheses in the present study. Stimulus materials were based on external sources (e.g., television programming rather than laboratory produced vignettes) and measurement items were obtained both from pre-existing scales reported in the gender identity and stereotyping literature and from items constructed specifically for this study. Both stimulus materials and the measurement instrument were pretested with children the same ages as those who participated in the actual hypothesis tests. Statistical procedures used to examine the data and formulate them into test variables included frequency and descriptive analyses, correlations, factor analyses, reliabilities, t-tests and Anovas.

#### **Operational Hypotheses**

As stated in the first conceptual hypothesis on page 31, one might expect that as nontraditional portrayals become more discrepant from normative expectations, androgynous males will increasingly embrace the counter-stereotyped content. Conversely, masculine males would be expected to become increasingly resistant to these progressively discrepant messages. The following operational counterparts to  $H_1$  are forwarded for the measures outlined earlier in this chapter.

# **Content Deviation by Gender Identity**

- H<sub>1a</sub>: The greater the magnitude of content deviation, the larger the impact on male role norm attitudes of androgynous males and the smaller the impact on male role norm attitudes of masculine males.
- H<sub>1b</sub>: The greater the magnitude of content deviation, the larger the impact on **physical prowess** attitudes of androgynous males and the smaller the impact on physical prowess attitudes of masculine males.
- H<sub>1c</sub>: The greater the magnitude of content deviation, the larger the impact on sexist attitudes of androgynous males and the smaller the impact on sexist attitudes of masculine males.
- H<sub>1d</sub>: The greater the magnitude of content deviation, the larger the impact on **attitudes** toward women of androgynous males and the smaller the impact on attitudes toward women of masculine males.
- H<sub>1e</sub>: The greater the magnitude of content deviation, the larger the impact on **traditional inferences** of androgynous males and the smaller the impact on traditional inferences of masculine males.

The second hypothesis, which was stated conceptually on page 31, now can be operationally stated to reflect the key components of the variable assessing content attitudes as determined above. Thus, hypothesis 2 is stated operationally:

H<sub>2</sub>: Androgynous males will report more favorable liking, interest, and enjoyment attitudes toward counter-stereotyped content than masculine males.

# **Content Deviation by Development**

Given the evidence that middle-childhood males are less traditional than late-

childhood males, it is likely that age also interacts with television content to produce differential attitudes about gender as stated in  $H_3$  on page 36. While middle-childhood males should show decreased traditional attitudes as the extremity of counter-stereotyped portrayals increases, late childhood (adolescent) males should show increased traditional

attitudes in the measures outlined above as a function of the same increases in content

extremity.

- H<sub>3a</sub>: The greater the magnitude of content deviation, the larger the impact on male role norm attitudes of 5th grade males and the smaller the impact on male role norm attitudes of 10th grade males.
- H<sub>3b</sub>: The greater the magnitude of content deviation, the larger the impact on **physical prowess** attitudes of 5th grade males and the smaller the impact on physical prowess attitudes of 10th grade males.
- $H_{3c}$ : The greater the magnitude of content deviation, the larger the impact on sexist attitudes of 5th grade males and the smaller the impact on sexist attitudes of 10th grade males.
- H<sub>3d</sub>: The greater the magnitude of content deviation, the larger the impact on **attitudes** toward women of 5th grade males and the smaller the impact on attitudes toward women of 10th grade males.
- H<sub>3e</sub>: The greater the magnitude of content deviation, the larger the impact on **traditional inferences** of 5th grade males and the smaller the impact on traditional inferences of 10th grade males.

The fourth hypothesis, which is stated conceptually on page 36, can be stated

operationally in terms of the key components of the content attitude variable. Thus,

hypothesis 4 is stated operationally:

H<sub>4</sub>: 5th grade males will report more liking, interest, and enjoyment attitudes toward counter-stereotyped content than 10th grade males.

### **CHAPTER 3: RESULTS**

This chapter presents results for the hypothesis tests and is divided into three parts. First, the relationships among measures are reported. Second, results of hypothesis tests are presented. Third, the chapter reviews and summarizes the findings.

### **Inter-item correlations**

It is necessary and instructive to examine the relationships between gender identity, the measured independent variable, and gender attitudes, inferencing and content attitudes, the dependent variables, before reviewing results of the hypothesis tests. Moreover, the relationships between gender attitude measures should be explored to better understand how they relate to one another and why it was useful to employ four measures of gender attitudes. Table 24 presents the intercorrelations among key study variables. Four distinct groupings are represented. First are the two gender identity scales (feminine and masculine). Next are the primary and subordinate scales beginning with the Attitudes toward Women Scale for Adolescents (AWSA) and ending with the "Compared" Physical Prowess subscale. Third is the inference scale designed to test the inference hypothesis. Lastly, is the content variable, including the subscale "attitudes."

Consistent with predictions by others (cf., Archer, 1989), while the gender stereotype measures are highly intercorrelated, the gender identity scales (masculine and feminine) consistently relate less well to each other and to gender stereotype measures. This presents evidence that the pretest measures were constructs quite distinct from posttest measures. In other words, the pretest measured gender identity which is a separate construct from gender attitudes which informed the posttest. Indeed, as others have noted (cf., Deaux, 1985) both gender identity scales (masculine and feminine) are relatively weakly associated (r = .19,  $p \le .01$ ). Each of the scales is examined in turn for its internal relationships and association with other scales or measures.

The Feminine scale of the Children's Sex-Role Inventory (CSRI)<sup>7</sup> is positively correlated with the Attitudes toward Women Scale for Adolescents (AWSA) and with favorable attitudes toward the nontraditional content of the stimulus tapes. Because the AWSA and the content variables feature coding that suggest higher scores indicate less traditional values, the positive direction is expected. It's not surprising that the feminine scale and attitude scale are related given their content. For example, feeling nurturant, liking children and being openly emotional would be self-described traits from the CSRI consistent with portrayals of men in the stimulus videos who were shown engaged in active fathering. Perhaps also, having more egalitarian attitudes toward females would be consistent with more nontraditional (feminine) views of the self.

Negatively associated with the CSRI-feminine scale were the Sexism scale, two of its subscales and the antifemininity subscale of the Male Role Norms Scale (MRNS). Higher scores on these scales indicate more traditional values. While it is not entirely clear why these scales are associated, one might hypothesize that these contain male/female comparative items that would be inconsistent with self-described feminine traits among the male subjects. For example, the sex differences Sexism subscale addresses comparative traits of other males and females. The antifemininity subscale of the MRNS contains items that refer to men in traditionally female jobs and engaged in emotional (traditionally feminine) behavior—both of these were nontraditional behaviors shown in the stimulus tapes.

<sup>&</sup>lt;sup>7</sup> Note that Table 24 does not list the CSRI, but both of its key scales, Feminine and Masculine, which are used together to obtain the gender identity of the child.

	18	17. (	16. ]	5.	14.]	13.1	น	П.	10.	9. 1	<b>%</b>	7. 1	6 I	<u>5</u> . I	4.	3. /	21	1. 1	
	Aminde	Content	lufacia	Compared	dealman	Prowess	Antifern	Tough	Status	MRNS	Seculifis	inemal	External	DivLabor	òcrism	awsa	Masculine	eminine	
• p ≤ .0	.14"	.22"	.01	टा'-	05	07	16"	09	.01	09	20**	05	15*	10	14"	.18"	.19""	1.00	1
G	.09	.13	.13	.12	.21	.20**	.05	.20	.13*	.15*	02	.14"	.03	.10	.07	03	1.00	*******	2
5 d	.16	.24**	33**	58**	47"	57**	54**	47**	40**	56**	53**	58**	59**	66**	68**	1.00		******	ω
.01	21"	25"	.41**	.71'''	.50	.64"	.50	.46**	.45**	.56"	.73**	.89"	.85**	.97**	1.00				4
	20**	22"	.37**	. 70**	.52"	. <b>6</b> 5"	.51"	.48**	.48	. 59"	.56"	.92"	.85"	1.00					S
	21"	27"	. 40**	.56**	. 38"	. 50 <b>"</b>	. 47**	. 38"	.35**	. 48**	. 53**	. 59**	1.00						6
	15*	15"	.29""	.67**	.52**	.65**	.44**	.46**	.49**	.56**	.48**	1.00							7
	18"	26*	.37**	.50**	.30	.43	.33**	.27**	.21"	.32**	1.00								∞
	21"	20**	.16"	.59**	.63"	.68"	.82**	.86**	.82**	1.00									9
	11	08	.08	.42**	.51"	.52"	. 45**	.55"	1.00										10
	14"	18"	.18"	.57**	. 63"	. 67**	. 63**	1.00											Ξ
	28**	26**	.16*	.50	.44	.52**	1.00												12
	06	13"	.28**	.85	.93"	1.00													13
	07	10	. 18**	. 63**	1.00														14
	05	17"	. 33"	1.00															15
	09	09	1.00																16
	.79"	1.00																	17
	1.00																		18

Table 24: Intercorrelations Among Key Indices

The CSRI-masculine scale was associated positively and most strongly with the MRNS and the Physical Prowess Scale (PPS). Strongest associations were with the toughness norms subscale of the MRNS, the overall PPS and the idealman subscale of the PPS. This is not surprising given the agency or "doing things" and "control" nature of the items in both the CSRI-masculine scale and these attitude scales. Many items of the toughness norms subscale refer to taking charge, being assertive and aggressiveness while the items informing the idealman subscale focus on the physical characteristics necessary to behave assertively and aggressively with success.

The AWSA scale interestingly taps many of the characteristics of the other stereotype scales—it relates significantly to all of them. Although the presentation in Table 24 suggests that AWSA is negatively related to the other scales, this is only the case because of the way it is scored. Traditional attitudes receive lower scores. As the traditionality increases with the AWSA, so it increases with all other stereotype scales in this study—as expected. Moreover, nontraditional attitudes toward women are positively related to favorable evaluation of stimulus tape content.

The Sexism scale and its related subscales also relate well to other attitude scales and the inference measure with no relationship falling below the  $p \le .01$  level of significance. Sexism and its subscales also relate highly but negatively with favorable attitudes toward stimulus tape content; the more traditional the subject's sexist attitudes are, the less favorable the subject is toward the stimulus tape contents. The scale shows strong internal consistency with the larger measure of sexism substantially reflecting subscales. No subscale relates below r = .73 with the major scale. No subscale correlates with any other subscale below r = .48.

The MRNS and its subscales are significantly related to all other gender attitudes at the  $p \le .01$  level of significance. Compared with the AWSA and Sexism scales,

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however, the MRNS does not relate as strongly with the inference test—perhaps as a function of the MRNS's focus on male norms without comparative referents to females. Further, the status subscale does not correlate with the measures of attitudes toward stimulus content; although, the major scale is significantly related to content attitudes at  $p \le .01$ . Internally, the scales all relate well with all significant at  $p \le .01$  and none correlating below r = .45. The major scale correlates at or above r = .82 with all subscales.

Physical prowess measures are significantly related to all other gender attitudes and the inference test at  $p \le .01$ . This set of attitudes, however, does not relate well to the attitudes toward stimulus tape content. Indeed, the PPS does not relate to the three-item measure, "Attitude," used to assess content favorability. This may be explained by the nature of the PPS and the content of the stimulus tapes. The PPS is focused on physical and observable characteristics of physical ability whereas the stimulus tapes did not present material salient for body shape, physical ability and so on. The strength of the PPS scales internally is characteristic of the other gender attitudes scales used here. The two subscales are related at r = .63 and the subscales relate to the major scale at r = .85 or better.

Finally, the two items reflecting attitudes toward the stimulus materials are correlated with each other at r = .79. Generally, these measures are negatively associated with the gender attitude measures; as traditionality of the gender stereotype increases, favorability of the nontraditional content decreases.

In sum, Table 24 illustrates that the CSRI, used to establish gender identity, is sporadically related to the collection of measures designed to assess gender attitudes. Comparatively, all the gender attitude scales (AWSA, Sexism, MRNS and PPS) are highly related with each other. Further, while inferences about gender are related to gender attitudes, they do not relate to gender identity scales.

#### Hypothesis Tests Results

Results for the hypothesis tests are reported below. The order of reporting is consistent with the order of predictions presented conceptually in Chapter 1 and operationally in Chapter 2. First, the tests of differences between androgynous and masculine males on a variety of stereotyping measures are presented. These are followed by a test of relative attitudes toward content of the stimulus tapes between each gender identity. Third, tests of differences among the experimental groups and between middlechildhood and adolescent males on the stereotyping measures are presented. Boys are then compared by age for their attitudes toward the stimulus tapes.

Anova tables for tests of hypotheses one and three present specific mean comparisons for mean or sum scores by males in slight, medial and extreme conditions on the reported scales. Each table contains the value for the F statistic and the degrees of freedom along with a column indicating whether the test reached significance. Degrees of freedom are expressed in "between groups"/"within groups" terms (cf., Norusis, 1990). Hypotheses two and four are presented with tables comparing mean scores for attitudes toward the videotaped content for sex-types (H2) and ages (H4). Also contained in these tables are the values for the t statistic and degrees of freedom as well as whether the test reached significance. Significance levels were set at  $p \le .05$  for all tests.

## Test Results for Hypothesis 1

The first collection of results tables presented below reflects the test of H1 which predicted, on a conceptual level, that gender stereotypes of androgynous males would be positively related to the magnitude of content deviation from traditional gender role portrayals and that gender stereotypes of masculine males would be inversely related to the magnitude of content deviation.

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The test of this prediction was operationalized separately for androgynous and masculine gender identities comparing responses to four stereotyping measures tapping male role norm attitudes (H1a), physical prowess attitudes (H1b), sexist attitudes (H1c) and attitudes toward women (H1d). Additional results are reported below for the inferences made by androgynous compared with masculine males for the ambiguous person on the stimulus tapes (H1e).

### **Results for H1a: Male Role Norms**

Hypothesis 1a predicted that, among androgynous males, those in the extreme deviation content condition would report the least traditional male role norm attitudes while those in the slight deviation condition would report the most traditional male role norm attitudes; among masculine males, it was predicted that those in the extreme deviation content condition would report the most traditional male role norm attitudes while those in the slight deviation content condition would report the least traditional male role norm attitudes.

Results of the test for androgynous males are shown in Table 25a and for masculine males in Table 25b. Scores represent sums for the male role norms scale which included 26 items. Thus, Tables 25a and 25b present the summed comparisons for measures of male role norms among androgynous and masculine males in each of the three deviation content conditions. Higher scores indicate traditional attitudes.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
Androgynous	86.60	92.51	90.39	.93 (2,59)	ns

Table 25a: Mean MRNS Score for Androgynous Males by Condition

Note: Higher score indicates traditional attitudes.

Table 25a indicates no difference among conditions for androgynous males on the male role norms scale.

Table 25b:	Mean	MRNS	Score f	or N	<b>Aasculine</b>	Males	by	Condition
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		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
Masculine	92.55	82.90	90.67	2.12 (2,43)	ns

No difference was produced by the stimulus conditions for masculine males as demonstrated by the results in Table 25b. Taken together, results in Tables 25a and 25b are inconsistent with H1a producing failure to reject the null.

#### **Results for H1b: Physical Prowess Attitudes**

Hypothesis 1b predicted that, among androgynous males, those in the extreme deviation content condition would report the least traditional physical prowess attitudes while those in the slight deviation content condition would report the most traditional physical prowess attitudes; among masculine males, it was predicted that those in the extreme deviation condition would report the most traditional physical prowess attitudes while those in the slight deviation condition would report the least traditional physical prowess attitudes.

Results of the test for androgynous males are shown in Table 26a and for masculine males in Table 26b. Scores are represented as mean sums for the physical prowess scale which included 15 items. Thus, Table 26a presents the summed comparisons for measures of physical prowess attitudes among androgynous males. Table 26b presents parallel values for masculine males. Higher scores indicate traditional attitudes.

Table 26a: Mean PPA Score for Androgynous Males by Condition

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
Androgynous	45.00	54.19	52.08	3.35 (2,59)	.04

Note: Higher score indicates traditional attitudes.

A significant difference was found among androgynous males in the three treatment conditions. However, absolute values are not as predicted by H1b. Instead of those in the extreme condition presenting the least traditional attitudes, slight condition males the most traditional attitudes and medial condition males between these, the slight deviation condition males reported the least traditional attitudes, the medial condition males the most traditional and the extreme condition males between these.

		Condition			F prob.	
Group	Slight	Medial	Extreme	F (df)		
Masculine	50.69	47.46	49.57	.29 (2,42)	ns	

 Table 26b:
 Mean PPA Score for Masculine Males by Condition

No difference was found among masculine males' scores on the physical prowess scale. Combined, results in Tables 26a and 26b are inconsistent with H1b and we, therefore, fail to reject the null.

# **Results for H1c:** Sexist Attitudes

Hypothesis 1c predicted that, among androgynous males, those in the extreme deviation content condition would report the least sexist attitudes while those in the slight deviation content condition would report the most sexist attitudes; among masculine males, it was postulated that those in the extreme deviation content condition would report the most sexist attitudes while those in the slight deviation content condition would report the least sexist attitudes.

Test results for androgynous and masculine males are presented in Tables 27a and 27b, respectively. Scores represent sums of the 20 items informing the sexism scale. Thus, these tables present comparisons for the mean summed measures of sexist attitudes among androgynous and masculine males in each of the three deviation content conditions. Higher scores indicate traditional attitudes.

Group	Slight	Medial	Extreme	F (df)	F prob.
Androgynous	53.10	59.65	56.41	1.47 (2,59)	ns

Table 27a: Mean Sexism Score for Androgynous Males by Condition

Note: Higher score indicates traditional attitudes.

No difference was observed in Table 27a among groups of androgynous males.

 Table 27b:
 Mean Sexism Score for Masculine Males by Condition

		Condition				
Group	Slight	Medial Extreme		F (df)	F prob.	
Masculine	56.76	52.73	54.45	.41 (2,42)	ns	

No difference was produced for masculine males by the stimulus conditions as shown in Table 27b. These results are inconsistent with H1c producing failure to reject the null.

## **Results for H1d: Attitudes toward Women**

Hypothesis 1d anticipated that, among androgynous males, those in the extreme deviation content condition would report the least traditional attitudes toward women while those in the slight deviation content condition would report the most traditional attitudes toward women; among masculine males, it was expected that those in the extreme deviation content condition would report the most traditional attitudes toward women while those in the slight deviation content condition would report the least traditional attitudes toward women. Table 28a presents results for androgynous males while Table 28b shows findings for masculine males. Note that with this scale, a lower score indicates traditional attitudes. Scores represent the mean value based on 12 items in the scale for each condition. These tables present mean comparisons for measures of attitudes toward women among androgynous, then masculine males in each of three deviation content conditions.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
Androgynous	2.98	2.80	3.16	1.74 (2,59)	ns

Table 28a: Mean AWSA Score for Androgynous Males by Condition

Note: Lower score indicates traditional attitudes.

Table 28a indicates no difference among conditions for androgynous males on the attitudes toward women scale.

Table 28b: Mean AWSA Score for Masculine Males by Condition

		Condition			
Group	Slight Medial Extreme			F (df)	F prob.
Masculine	2.74	3.13	2.87	1.93 (2,42)	ns

No difference in attitudes toward women was produced by the stimulus conditions among masculine males as demonstrated by the results in Table 28b. Taken together, results in Tables 28a and 28b are inconsistent with H1d leading to failure to reject the null.

# **Results for H1e: Inferences**

Hypothesis 1e presumed that, among androgynous males, those in the extreme deviation content condition would make a traditional inference about an ambiguous role portrayal least often while those in the slight deviation content condition would make a traditional inference most often; among masculine males, the hypothesis predicted that those in the extreme deviation content condition would make a traditional inference about an ambiguous role portrayal most often while those in the slight deviation content condition would make a traditional inference least often.

Table 29a shows the mean inference scores for androgynous males in each experimental group. A lower score indicates less difference between subjects' assessments of the potential for the ambiguous stimulus person to be female compared with male. Thus, higher scores indicate traditional inferences. Table 29b shows the mean inference scores for masculine males in each group.

Table 29a: Mean Inference Score for Androgynous Males by Condition

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
Androgynous	.14	1.19	.50	5.43 (2,59)	.01

Note: Higher score indicates traditional attitudes.

The inference measure produced significant differences among the three deviation conditions. Androgynous males in the medial condition were more likely to make a traditional inference than those in the slight and extreme groups. The slight deviation condition produced the least traditional inference. Extreme deviation subjects were between slight and medial subjects in their inference. Because H1e predicted that a less

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traditional inference mean would be reported progressively from slight to extreme conditions and the findings are not consistent with this prediction, this test fails to reject the null.

		Condition			
Group	Slight Medial Extreme		Extreme	F (df)	F prob.
Masculine	.88	.40	.29	1.01 (2,42)	ns

 Table 29b:
 Mean Inference Score for Masculine Males by Condition

Among masculine males, the test for differences among conditions on the inference measure did not produce significant differences. The outcome of this test concludes with failure to reject the null.

### Summary of Results for H1

The collection of 10 tables reflecting tests of H1a to H1e represent the outcome of assessing the first hypothesis predicting different stereotyping outcomes as a function of gender identity and content deviation condition. Only two of the ten tests produced significantly different results for attitude differences among the three stimulus groups. The order of values for these differences was inconsistent with that specified in the hypotheses. The conclusion for this set of tests is that H1 is without support in this investigation producing failure to reject the null.

# Test Results for Hypothesis 2

The second hypothesis predicted that androgynous males would report more favorable attitudes toward stimulus tape content than masculine males. The content variable was informed by the mean of three measures. Higher scores in Table 30 reflect more positive attitudes.

Gender Identity	Mean	Mean t-value (df)	
Androgynous	2.98	1.59 (104)	.06
Masculine	2.61		

Table 30: Mean Content Attitude Scores by Gender Identity

Note: Higher score indicates more favorable attitudes.

Although absolute values in Table 30 suggest an outcome consistent with the prediction for H2, the test did not achieve significance at the 0.05 level but achieved  $p \le .06$ . As predicted, androgynous males more favorably evaluated the stimulus tapes than did masculine males—but only in absolute terms. On this basis, we fail to reject the null for H2.

### Test Results for Hypothesis 3

The next collection of tables reflects results for the test of H3 which predicted, on a conceptual level, that gender stereotypes of younger (middle-childhood) males would be positively related to the magnitude of content deviation from traditional gender role portrayals and that gender stereotypes of older (adolescent) males would be inversely related to the magnitude of content deviation.

The test of this prediction was operationalized separately for each age group using 5th and 10th grade males comparing responses to the same four stereotyping measures used for the first set of hypotheses. These measured male role norm attitudes (H3a), physical prowess attitudes (H3b), sexist attitudes (H3c) and attitudes toward women (H3d). Another

measure of gender attitudes included the inferences made by younger compared with older males for the ambiguous person on the stimulus tapes (H3e).

# **Results for H3a: Male Role Norms**

Hypothesis 3a predicted that, among 5th grade males, those in the extreme deviation content condition would report the least traditional male role norm attitudes while those in the slight deviation content condition would report the most traditional male role norm attitudes; among 10th grade males, it was predicted that those in the extreme deviation content condition would report the most traditional male role norm attitudes while those in the slight deviation content condition would report the least traditional male role norm attitudes.

Results of the test for 5th grade males are shown in Table 31a and for 10th grade Tables in Table 31b. Scores represent sums for the male role norms scale which included 26 items. Thus, Tables 31a and 31b present the summed comparisons for measures of Table role norms for 5th grade and 10th grade males among each of the three deviation Content conditions. Higher scores indicate traditional attitudes.

Group	Slight	Medial	Extreme	F (df)	F prob.
5th Grade	90.56	88.87	93.38	.28 (2,52)	ns

**Table 31a:** Mean MRNS Score for 5th Grade Males by Condition

Note: Higher score indicates traditional attitudes.

Table 31a indicates no difference among conditions for 5th grade males on the male norms scale.
Condition						
	Group	Slight	Medial	Extreme	F (df)	F prob.
	10th Grade	86.61	87.73	88.45	.08 (2,50)	ns

Table 31b: Mean MRNS Score for 10th Grade Males by Condition

Table 31b shows no difference among stimulus conditions for 10th grade males. Based on these results, there is failure to reject the null for hypothesis 3a.

### **Results for H3b:** Physical Prowess Attitudes

Hypothesis 3b expected that, among 5th grade males, those in the extreme deviation content condition would report the least traditional physical prowess attitudes while those in the slight deviation condition would report the most traditional physical prowess attitudes; among 10th grade males, it proposed that those in the extreme deviation content condition would report the most traditional physical prowess attitudes while those in the slight condition would report the least traditional physical prowess attitudes.

Results of the test for 5th grade males are shown in Table 32a and for 10th grade males in Table 32b. Scores are represented as mean sums for the physical prowess scale which included 15 items. Table 32a presents the summed comparisons for measures of phy sical prowess attitudes among 5th grade males. Table 32b presents summed comparisons for measures of physical prowess attitudes among 10th grade males. Higher scorres indicate traditional attitudes.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
5th Grade	49.04	55.91	56.09	1.76 (2,52)	ns

Table 32a: Mean PPA Score for 5th Grade Males by Condition

Note: Higher score indicates traditional attitudes.

No significant difference was found among scores of physical prowess attitudes for **5th** grade males in the three content deviation conditions.

<b>Ta</b> ble 32b:	Mean PPA S	Score for 10	th Grade 1	Males by	Condition
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		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
10th Grade	44.71	45.82	46.80	.17 (2,50)	ns

The second table showing results for the test of H3b reveals no significant differences among 10th grade males in the slight, medial and extreme conditions. The Combination of these results leads to failure to reject the null of H3b.

## **Results for H3c:** Sexist Attitudes

Hypothesis 3c posited that, among 5th grade males, those in the extreme deviation Content condition would report the least sexist attitudes while those in the slight deviation Content condition would issue the most sexist attitudes; among 10th grade males, it Proposed that those in the extreme deviation content condition would report the most sexist attitudes while those in the slight deviation content condition would issue the least sexist attitudes. Test results for 5th and 10th grade males are presented in Tables 33a and 33b, respectively. Scores represent sums of the 20 items informing the sexism scale. Thus, these tables present comparisons for the mean summed measures of sexist attitudes among 5th grade and 10th grade males in each of the three deviation content conditions. Higher scores indicate more traditional attitudes.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
5th Grade	53.08	60.01	56.45	1.31 (2,51)	ns

Table 33a: Mean Sexism Score for 5th Grade Males by Condition

**Note:** Higher score indicates traditional attitudes.

No difference was seen in Table 33a among groups of 5th grade males.

<b>Lable 33b:</b> Mean Sexis	m Score for	10th Grad	e Males b	y Condition
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Group	Slight	Medial	Extreme	F (df)	F prob.
10th Grade	55.90	53.15	54.55	.25 (2,50)	ns

No difference was produced for 10th grade males by the stimulus conditions as **shown** in Table 33b. These results are inconsistent with H3c producing failure to reject the **null**.

### **Results for H3d: Attitudes toward Women**

This hypothesis predicted that, among 5th grade males, those in the extreme deviation content condition would provide the least traditional attitudes toward women while those in the slight deviation content condition would report the most traditional attitudes toward women; among 10th grade males, H3d held that those in the extreme deviation content condition would report the most traditional attitudes toward women while those in the slight deviation content condition would report the least traditional attitudes toward women.

Table 34a presents results for 5th grade males while Table 34b shows findings for 1 Oth grade males. These tables, present mean comparisons for measures of attitudes toward women among 5th grade, then 10th grade males in each of three deviation content conditions. Scores represent the mean value based on 12 items in the scale for each condition. Note again that with this scale, a lower score indicates traditional attitudes.

		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
5th Grade	2.93	2.89	2.99	.09 (2,52)	ns

**Table 34a:** Mean AWSA Score for 5th Grade Males by Condition

Note: Lower score indicates traditional attitudes.

No difference among conditions was found for 5th grade males on the attitude toward **WOnnen** scale, as reported in Table 34a.

Group	Slight	Medial	Extreme	F (df)	F prob.
10th Grade	2.86	3.00	3.02	.72 (2,49)	ns

Table 34b: Mean AWSA Score for 10th Grade Males by Condition

No difference in attitudes toward women was produced among the stimulus conditions for 10th grade males as demonstrated by the results in Table 34b. Taken together, results in Tables 34a and 34b are inconsistent with H3d and we therefore fail to reject the null.

### **Results for H3e: Inferences**

Hypothesis 3e expected that, among 5th grade males, those in the extreme deviation Content condition would make a traditional inference about an ambiguous role portrayal least often while those in the slight deviation content condition would make a traditional inference most often; among 10th grade males, H3e predicted that those in the extreme deviation content condition would make a traditional inference about an ambiguous role Portrayal most often while those in the slight deviation content condition would make a traditional inference least often.

Table 35a shows the mean inference scores for 5th grade males and Table 35b shows the inference scores for 10th grade males in each experimental group. A lower score indicates less difference between subjects' assessments of the potential for the ambiguous stimulus person to be female compared with male. Thus, higher scores indicate traditional inferences.

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		Condition	-		
Group	Slight Medial Extreme		Extreme	F (df)	F prob.
5th Grade	.46	.95	.00	2.12 (2,51)	ns

Table 35a: Mean Inference Score for 5th Grade Males by Condition

Note: Higher score indicates traditional attitudes.

Table 35a shows that no significant difference was found among the slight, medial and extreme deviation conditions for 5th grade males.

Table 35b: N	<b>Mean</b>	Inference	Score 1	for 1	lOth	Grade	Males	by	Condition
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		Condition			
Group	Slight	Medial	Extreme	F (df)	F prob.
10th Grade	.33	.76	.67	.75 (2,50)	ns

For 10th grade males, no difference was found among content deviation conditions as reported in Table 35b. Thus, there is failure to reject the null for H3e.

### Summary of Results for H3

The collection of 10 tables reflecting tests of H3a to H3e represent the outcome of assessing the third hypothesis predicting different stereotyping outcomes as a function of **child** development and content deviation condition. None of the tests produced **significantly** different results for attitude differences among the three stimulus groups. The **conc**lusion of this set of tests is that H3 is without support in this investigation creating **failure** to reject the null.

#### Test Results for Hypothesis 4

The fourth and final hypothesis expected that 5th grade males would report more favorable attitudes toward stimulus tape content than 10th grade males. The content variable was informed by the mean of three measures. Higher scores in Table 36 reflect **more positive attitudes**.

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 Group
 Mean
 t-value (df)
 prob.

 5th Grade
 3.13
 2.74 (104)
 .01

2.52

**Table 36:** Mean Content Attitude Score by Grade

**Note:** Higher score indicates more favorable attitudes.

10th Grade

A difference was found between 5th grade and 10th grade attitudes toward stimulus tape content as shown in Table 36. Males in the 5th grade were more likely ( $p \le .01$ ) to report favorable attitudes toward the stimulus tapes than were males in the 10th grade. The null is rejected for H4.

# Summary of Results

Of the four conceptual hypotheses, only one was supported by the tests reported here. Although, the null of second hypothesis was not rejected with caution as the absolute values of the means for attitudes toward content were as expected and the significance level was  $p \le .06$ . However, the key hypotheses predicting an interaction between counterstereotyping portrayals, sex-type and age were rejected. Nevertheless, a number of important findings emerge from this chapter. The concerns and possible explanations for the outcomes here, and the value of the present analysis are explored in Chapter 4 as part of the summary and discussion.

### **CHAPTER 4: SUMMARY AND DISCUSSION**

This chapter discusses the results of analyses reported in the previous chapter and it reflects on critical issues related to the study overall. The chapter reviews the purpose of the study and the literature review that led to its goals and design. Important limitations are highlighted followed by alternative analyses. Implications of the findings are considered along with suggestions for future research. Then, final conclusions are drawn for this study.

Research cited in Chapter 1 suggests both that television affects viewers and viewers interpret, or have an effect upon reception of, television. Clearly, both causal models may be operating simultaneously when children observe gender portrayals on television. Television presents particularistic messages, mostly about traditional gender roles, behaviors and traits. Yet, certain qualities resident within the child prior to viewing, such as gender identity and level of development, may affect message retrieval.

One way to observe the interactive effects of both television and pre-existing **Orientations on children's gender stereotypes is to test whether variations of gendered TV Content and different classes of gender identity and developmental levels produce differential outcomes.** This was attempted here. As Durkin has noted, "...there is a clear **need** for research relating affective responses to television content to viewers' self-construct **and** gender identity" (p. 206).

The purpose of this study was to help meet the need indicated by Durkin to determine the interactive effects of counter-stereotyped portrayals, gender identity and development on male children's gender stereotypes.

### The Literature Revisited

Past gender effects investigations have been concerned with the development of young females' gender stereotypes as these affected their aspirations (in the context of limited role models or in particular messages aimed at girls as exemplified in Tan's (1979) research). Other research has been concerned with the effects of television (like memory effects) mediated by schemas of young male and female children (cf., Drabman et al., 1981). Moreover, sex comparisons have been made (e.g., TV's effects on boys versus girls).

But the attention on male youth and the interaction of gender identity, age and television content has not been investigated concomitantly. A clear need has developed for more experimental work in television effects on gender beliefs. Additionally, male children need to be studied, if not because they have not received the same amount of attention as fermale children, then because this is generally an at-risk audience. The present study SOUGht to observe effects of gender portrayals on male children's gender stereotypes.

Past research in this area has been limited not only by a particular audience focus, but also by the stimulus materials used to study gender effects of television. Rather than testing grades of gender role portrayals, the stimulus materials have been an either/or Proposition in that children either were exposed to counter-stereotyped content or were exposed to traditionally stereotyped content. In other words, experiments sought to compare the effects of traditional and nontraditional content. Moreover, this content has been more focused on female-only or mixed sex content while ignoring the male-only Portrayals. The project reported here attempted to build on past research by examining the effects of more subtle gradations of nontraditional stimulus materials focused primarily on male characters.

Previous investigations also have been limited in the measurement tools used to assess gender effects of television. In part, this is a function of subject ages and cognitive inability to respond to the sort of paper-and-pencil measures commonly needed to assess attitudes. Perhaps this has also been the result of a general focus on more general effects inclusive of thoughts, attitudes and behaviors resulting from exposure to gender-salient content. Certainly no attempt has been made to use a collection of established attitude scales to determine whether gender portrayals differentially influence different dimensions of gender attitudes. Here, however, an effort was made to include multiple measures of gender attitudes by using an existing scale for children (e.g., AWSA) or modifying existing adult scales for use with children (e.g., MRNS and Sexism) while attempting to develop another scale to tap an untested dimension of gender attitudes (PPA).

Finally, two variables have been found to be influential in affecting children's attitudinal responses to gender portrayals on television: Age and sex-type. While the literature is consistent in its finding that child developmental factors, measured by stages or different ages, affect responses to and effects from television, much of the literature has focused on sex of the child rather than sex-type to examine the influence of gender on television viewing outcomes.

Drawing from the literature, this study investigated the differential effects of three levels of nontraditional gender portrayals of male characters on male children from two sextypes and two age groups representing different developmental classes. Not parsing out these factors may have caused an "averaging out" effect in past gender stereotyping effects research (Durkin, 1985c, p. 206).

### Limitations

Three potential problems were inherent in this study from the outset. First, finding stimulus materials from broadcast and cable television fare was difficult. Because television is relatively homogeneous in its presentation of gender, one can expect to find material portraying males with behavior that deviates from normative expectations only very rarely. With this problem in mind, the search for stimulus materials made it necessary to record as much television content as possible on videotape followed by viewing of each tape to search for candidate material. The problem was realized when hours of videotape produced only minutes of potentially useful content.

The second difficulty with the project was that effects caused by the TV stimulus, while clearly indicated in the literature, were expected to be small and transitory. Yet, had they emerged, these small and transitory effects would have responded to the hypotheses. To the extent that the treatment conditions were different, they failed to produce differences in manipulation check measures and most attitude measures across the three groups.

Yet another limitation of the study was the built-in ecological validity problems associated with laboratory experimental designs. Viewing edited and segmented vignettes of television content with a group of 25 peers is highly artificial; most children watch television alone or with a family member. Nevertheless, the experimental approach Provides more control over variables of interest and isolates them from rival explanations that might limit conclusions derived from the data.

Using a fourth stimulus condition, call it "traditional portrayals," may have protected this study against the failure of nontraditional gradations to produce differences by demonstrating differences between generally traditional and nontraditional content. Certainly, inclusion of this condition would have been consistent with past research efforts.

In fact, it was not included primarily because contrasts between traditional and nontraditional content have been well established.

#### **Stimulus Limitations**

Why did the stimulus conditions fail? Three possible explanations are offered: Inadequate pretesting, poor manipulation check measures or flawed assignment results.

The stimulus pretesting procedure may have been insufficient for two reasons. First, sample sizes were small for stimulus pretests. Unequal numbers and different judges were shown different stimuli; for example, there were fewer grade 10 students who judged the tapes and different grade 5 students assessed different collections of vignettes. Clearly, larger samples or more samples may have better differentiated vignettes. Second, the stimulus materials were judged on the level of single vignettes rather than collections of scenes as were ultimately used in hypothesis tests. Perhaps pretesting would have been **rnore** prudent if a two-stage procedure had been used in which individual vignettes were **rated** and placed into collections and then the assemblages (intended test tapes) were judged **as a** whole. It is probable that insufficient pretesting was the greatest limitation of the **pre** sent study, however other explanations are plausible.

A credible alternative argument is that the pretesting procedure worked and stimulus conditions were distinct as labeled (i.e., slight, medial and extreme) but the differences were not great enough to produce variance on the manipulation check measures. It is a persistent problem for experimentalists in the effects tradition to find stimulus materials robust enough to produce differences among treatment groups. The present study likely is not excepted from this recurring problem.

Alternatively, perhaps the stimulus tapes were in fact sufficiently unique as intended, but the manipulation check measures were faulty. As outlined in Chapter 2, a factor analysis of content assessment items produced four distinct factors, three of which appeared to represent manipulation checks as intended from the instrument design; the measures were labeled, "deviation" "realness" and "suitability." None of the measures produced significant differences among deviation conditions and only the realness measure produced evaluations that, although not significant, were in the expected degrees for the conditions (i.e., basically real for the slight condition, less so for the medial condition and not real for the extreme condition). The inconsistency in position (or consistent lack of significance) among the different variables for ranking conditions provides reason to suspect that the variables are not valid even though each contains internally consistent measures.

It could very well be the case that this experiment inadvertently achieved three unique and incomparable groups through random assignment and that unknown characteristics of the groups produced an interaction with what would otherwise have been accurately pretested and adequately measured deviation conditions. One of the dangers of randomization is the inability for one to conclude with certainty that each experimental condition included parallel samples. However, given the fact that students in each grade were tested in each condition with nine different samples (e.g., three 5th grade samples and three 10th grade samples independently were further divided into three groups), this explanation for the failure of the stimulus conditions seems, at the outset, the least plausible.

Early in the data analysis, an examination of the demographic variables for the groups **Suggested relative equivalency across conditions for the subjects in this study on most measures.** For example, the mean age among the groups was not significantly different ( $\mathbf{F} = 0.35$ , df = 2,105, p = .71); the mean number of siblings was not different among **the** groups ( $\mathbf{F} = 1.2$ , df = 2,103, p = .31); grade-point averages were not different ( $\mathbf{F} = 0.61$ , df = 2,79, p = .55); and amount of television viewing on school days did **not** differ ( $\mathbf{F} = 1.8$ , df = 2, p = .17); however the amount of television viewing on the

weekends did differ substantially, (F = 8.23, df = 2,103,  $p \le .001$ ). Given the potentially strong relationship this variable might have had with the stimulus materials, further exploration is justified here.

Medial deviation content condition subjects reported  $\bar{x} = 3.8$  hours of television viewing on a typical Saturday or Sunday compared with  $\bar{x} = 3$  hours for slight condition subjects and  $\bar{x} = 2.1$  hours for extreme deviation condition subjects. The mean for all subjects was  $\bar{x} = 3.1$  hours. Weekday viewing followed the same pattern as weekend viewing among the groups, however the difference did not reach significance; medial deviation content condition subjects reported average weekday viewing of  $\bar{x} = 2.5$  hours compared with  $\bar{x} = 2.3$  hours for slight deviation subjects and  $\bar{x} = 1.8$  hours for extreme subjects and overall mean of  $\bar{x} = 2.3$  hours.

Table 37 shows differences among the treatment groups in their mean daily television viewing. This was calculated by multiplying average weekday viewing by five, multiplying average weekend viewing by two and adding weekday and weekend values then dividing the sum by seven. The heaviest viewers were subjects in the medial deviation condition with a mean of  $\bar{x} = 2.9$  hours daily; slight deviation condition subjects watched **a** mean of  $\bar{x} = 2.5$  hours daily and those in the extreme deviation condition watched 1.9 hours each day (F = 4.54, df = 2,102, p ≤ .013).

Subjects	Slight	Medial	Extreme	F (df)	F prob.
All	2.5	2.9	1.9	4.54 (2,102)	.013

**Table 37:** Mean Hours of Daily TV Viewing by Condition

It is interesting to note that the medial condition group is the same group that held the most traditional attitudes, in absolute terms, among the three groups on most of the scales reported in Chapter 3. This group also reported the lowest deviance score among the three conditions for the manipulation check.

It was decided that covariate analyses would be inappropriate, though, for reporting hypothesis tests in the present study based on the criteria for a covariate as established by Keppel (1982, pp. 492, 513). First, the proposed covariate of daily television viewing was measured following the treatment rather than before. It is possible that the treatments affected response to this variable. Unless this possibility can be ruled out, it is inappropriate to use the variable in a covariate analysis. Second, the covariate must display a high linear correlation with the dependent variable of interest. Daily TV viewing was significantly related to only one variable in a regression analysis, the Sexism Scale  $(R = .22, F = 5.07, p \le .03)$ . Given the lack of linear association with other key variables, use of the covariate also seemed unwarranted. Third, there should be homogeneity among treatment differences. Examination across all variables suggests there **is** none.

Thus, as expected, a series of analyses of covariance (Ancova) on all key measures **produced** lower values for F compared with Anovas without the television viewing **variable**; of the 25 primary analyses, only two were better than those without the control **and** only in absolute terms as neither of these was significant.

On the basis of these observations, it seems unlikely that the children's television Viewing histories were a contributing factor to the lack of differences among treatment groups and the uniqueness of the "medial" subjects. Rather, one might hypothesize that if a covariate is to blame, it is some higher-order factor—and it was not measured.

In sum, the stimulus conditions did not produce differences on manipulation check measures indicating a problem with the ability of the stimulus materials to affect different groups of males in the anticipated ways. Unfortunately, ineffectiveness of the stimulus conditions in this study makes discussion of the results difficult.

## **Anticipated Outcomes**

The theoretical argument of this study predicted that varying levels of counterstereotyped television portrayals would differentially affect male children depending on their gender identity and their level of child development. In essence, it was implied that not all boys would report increasingly nontraditional gender attitudes as behavioral content deviation increased, because nontraditional television content is not expected to moderate boys' gender stereotypes regardless of individual characteristics. In other words, if content plays directly on stereotypes, then adolescent and masculine boys in the extreme deviation condition should indicate stereotypes similar to those of middle-age and androgynous boys and that all subjects in the extreme deviation condition should hold less traditional views compared with those of boys in the slight deviation condition.

This outcome was not predicted. Rather, the literature suggested that some of the content would affect some of the boys depending on the relationship between the content and the boys. Predictions were made based on the literature which suggested that as boys move from middle- to late-childhood, they would resist stronger counter-stereotyped messages but accept weaker ones regardless of other individual characteristics. It was also anticipated that masculine males would, regardless of age, resist stronger counter-stereotyped content and be more influenced by weaker content. Conversely, younger males and androgynous males would be more influenced by the stronger content than the weaker material. Unfortunately, the levels of deviation necessary to produce these outcomes is not indicated in the literature.

This raises the possibility of a different result—that adolescent and masculine males, regardless of the stimulus condition, simply will not show differences in their gender stereotypes. In this situation, regardless of the content stream to which the teenage and masculine males are exposed, they hold steadfast to their traditional stereotypes. Two factors would produce this potential outcome.

First, because it is unclear what content characteristics will produce change in the stereotypes of these males, the content used in this study would not produce the change. If the content conditions are too similar either in the extreme or in the norm, they will produce little attitude difference in the different groups. In other words, if upon re-examining Figure 1 on page 29, we discover that the content conditions are close enough in message quality so as to be at the far left of the Latitude of Acceptance or at the far right of the Latitude of Rejection, Social Judgment Theory would predict no change in attitude and no difference related to content among the treatment groups. Second, it could be the case that gender attitudes are "fixed" or the latitudes are sufficiently narrow for these males such that other underlying changes would be required for attitude moderation to occur in response to the content.

So what do the tables in the previous chapters tell us? First, they suggest that the counter-stereotyping portrayals were not as nontraditional as they should have been. All other things being equal, males in this study indicated that the content was basically normal. Indeed, the evaluations of content for the manipulation check provided means of  $\bar{x} = 3.63$  for Realness from a range of 1 to 5 with a higher score indicating realistic content,  $\bar{x} = 3.48$  for Deviance with a higher score indicating normality (the variable name is a misnomer) and  $\bar{x} = 4.13$  for Suitability with a higher score indicating fairly suitable material. The assessment by these variables is that the content, overall, is more traditional than nontraditional (although, importantly, not entirely traditional).

Results in Chapter 3 give an indication that, as predicted, there is a main effect for age and sex-type on general attitudes toward content. Regardless of condition, younger males were more positive toward the counter-stereotyped portrayals than older males. The same finding was observed in absolute terms, if just short of statistical significance  $(p \le .06)$  for androgynous compared with masculine males. An examination of the means is telling, however. The evaluations, with response options from 1 to 5, center around the value 3. The mean for the entire sample was  $\bar{x} = 2.8$ , reflecting the general view that the content was neither positive nor negative. One would predict more negative attitudes when the content is less traditional than the current stimulus materials appeared. Nevertheless, the main effect hypothesis related to influence of age on content evaluation holds up with the main effect hypothesis predicting an influence of sex-type falling just short of significance. These outcomes give some credence to the argument that television is mediated by individual characteristics because these influence evaluations of televised content.

Results reported in Chapter 3 cannot respond to the first and third hypotheses because the stimulus conditions did not perform as expected. Looking across the results for the first and third hypotheses, the problem is clear with contradictions across the three conditions. In most cases, the medial condition subjects reported attitudes which could not be accounted for in the hypotheses; depending on the age or identity grouping, they were either higher than or lower than the slight and extreme groups rather than reporting attitudes between them as would have been predicted. In the few instances when the absolute values were presented as predicted, the results were nonsignificant.

As a result of the inability of the present tests to produce a clear indication about the interaction of age, sex-type and content deviations, post-hoc considerations of the analyses and findings are indicated. These should help evaluate the differences among the stimulus conditions and determine whether a clearer understanding of the effects caused by the

hypothesized interactions of the three independent variables can be provided from this investigation.

### **Alternative Analyses**

A reexamination of Tables 21 and 22 showing the manipulation check data suggests that the medial condition was judged in realness to be similar to the slight condition and to be less deviant than the slight condition. However, the suitability measure shown in Table 23, in the medial condition is the least suitable of the three conditions—according to its subjects. Table 38 summarizes these results. Note that lower scores indicate lower suitability, less realness and greater deviance (lower normality). For every variable, the slight deviation condition should have the highest score while the extreme condition should have the lowest score with the medial condition scores falling between these.

		Condition			
Variable	Slight	Medial	Extreme	F (df)	F prob.
Realness	3.72	3.65	3.46	0.49 (2,103)	ns
Deviance	3.53	3.67	3.15	1.70 (2,104)	ns
Suitability	4.20	4.03	4.13	0.30 (2,103)	ns

Table 38: Manipulation Check Scores by Condition for All Boys

Note: Higher score indicates greater realness, less deviance and greater suitability.

Table 38 illustrates that in absolute terms the slight and extreme conditions were consistently anchored at the expected locations—with the slight condition essentially realistic, normal and suitable and the extreme condition to be less real, more deviant and less suitable—although not judged to be different: Realness, t = 1.08,  $p \le .15$ ; Deviance, t = 1.33,  $p \le .10$ ; Suitability, t = 0.28,  $p \le .39$ . Thus, while the slight and

extreme conditions were not judged by their subjects to be dissimilar, they were consistently evaluated in the expected direction on the three manipulation check variables. Because of these findings, it may prove illustrative to re-examine the hypothesis tests using only slight and extreme conditions.

## Paired Comparisons

Table 39 contains a summary of the t-tests using pooled variance estimates for each hypothesis and variable for three paired conditions: Slight/Extreme, Slight/Medial and Medial/Extreme. Pooled variance estimates are appropriate for the present tests because there is no reason to believe that the paired groups being tested would have different variances in the population as a function of their condition (Norusis, 1990). In most comparisons for the present analysis, the pooled variance estimate resulted in a more conservative significance level. Also note that the probabilities reported are based on a one-tailed test because the hypotheses specify direction.

The first column of Table 39 contains the hypothesis being tested and which group (where relevant) is selected for comparison (e.g., androgynous versus masculine). To the right of the first column are three groups of three columns each. Each group represents the conditions being compared (e.g., Slight versus Extreme). Within each pairing, the first column shows the value of the t-statistic and the degrees of freedom. The second shows the significance level of the test or, if not significant "ns," and the third shows whether the score was in the expected direction as predicted by the hypotheses. Scale means for each group were reported earlier in Tables 25a through 36 in Chapter 3. Manipulation check results are shown at the bottom of the table for each paired condition comparison to help identify comparisons and trends.

In calculating the value of t, the "extreme" deviation condition score was subtracted from the "slight" deviation score. Higher scores indicate more traditional attitudes on the MRNS, PPA, Sexism and Inference measures while lower scores do so for the AWSA. Under this arrangement, it was expected that the value of the t-statistic would be positive for androgynous and 5th grade boys and negative for masculine and 10th grade boys on MRNS, PPA, Sexism, and the Inference measures; the AWSA was expected to produce the reverse due to its scoring procedure.

The first two-condition comparison in Table 39 shows again the weakness, but not nonexistent effect of the stimulus conditions. In every case for H1, the difference between slight and extreme groups was not significant and in all but one instance the direction of absolute values was opposite that predicted by the hypothesis leading to failure to reject the null for H1. The same outcome was found for H2 and H3. This comparison did, however, indicate rejection of the null for H4, consistent with the three group comparison reported in Chapter 3. From this analysis, one might conclude that H1 and H3 are in error and that androgynous and 5th grade males will not be increasingly affected by message extremity while masculine and older males, upon seeing a more extreme portrayal, will soften their gender stereotypes. However, none of the manipulation check measures reached significance. Thus, little credibility can be given findings for H1 and H3 which depend on the content effects. Findings related to H2 and H4 are independent from the different content conditions.

Differences between the slight and medial groups provide no more insight. Again examining Table 39, one observes that, depending on the manipulation check variable, subjects rated the medial condition differently (only in absolute terms) in relation to the slight condition. T-tests of the manipulation check variables between the two conditions shown in the center three columns at the base of the table reveal no difference: Realness (t = 0.27, df = 78, p = .40); Deviance (t = -0.57, df = 79, p = .29); and Suitability (t = 0.76, df = 78, p = .23). Further, the directions are as expected for the Realness and Suitability measures but reversed for the Deviance check.

Examining the second set of columns, the null is rejected for H4 demonstrating the consistency of this prediction, younger boys are less critical of the counter-stereotyped content than older boys. Again there is failure to reject the null for H2.

For gender identity (H1) this pairing produced a consistent reversal of findings relevant to hypotheses and four significant differences as well. Masculine males in the medial condition reported less traditional male role norm attitudes than masculine males in the slight condition (t = 1.81, df = 30,  $p \le .04$ ) which is the opposite of the finding predicted by H1a. Androgynous males in the medial condition reported more traditional physical prowess attitudes than those in the slight condition in contrast with the prediction of H1b (t = -2.43, df = 48,  $p \le .01$ ). On the Attitudes toward Women Scale, masculine males in the medial condition reported less traditional views than those in the slight condition, again counter to prediction (t = -1.74, df = 30,  $p \le .05$ ). Androgynous males were more likely in the medial condition to make a traditional inference about the ambiguous stimulus person in contrast to the prediction of H1e (t = -3.32, df = 48,  $p \le .001$ ). With these data, there is failure to reject the null for H1, suggesting that the hypothesis may be in error predicting that masculine males will be more likely to be influenced by slight rather than medial deviation portrayals. Instead, perhaps increasing non-traditionality can be quite influential in moderating masculine males' gender stereotypes.

The data for age, testing H3, show non-significant differences in respect to the hypotheses, and mixed directions of the relationship between absolute values for slight and medial conditions. However, it is important to keep in mind that none of the manipulation check variables reached significance and the deviance measure, arguably the most crucial measure of the manipulation check from the point of view of face validity, hinted that the slight condition was more extreme than the medial condition.

Hypothesis	Slight – Extreme		Slight – Medial			Medial – Extreme			
Tested	t (df)	Sig.	Dir. <sup>1</sup>	t (df)	Sig.	Dir. <sup>1</sup>	t (df)	Sig.	Dir. <sup>1</sup>
H1a: Andro	-0.67 (39)	ns	0	-1.29 (48)	ns	0	0.45 (31)	ns	E
H1a: Masc	0.36 (28)	ns	0	1.81 (30)	.04	0	-1.73 (28)	.05	Ε
H1b: Andro	-1.61 (39)	ns	0	-2.43 (48)	.01	0	0.45 (31)	ns	Ε
H1b: Masc	0.24 (28)	ns	0	0.77 (30)	ns	0	-0.48 (28)	ns	Ε
H1c: Andro	-0.73 (39)	ns	0	-1.67 (48)	ns	0	0.68 (31)	ns	Ε
H1c: Masc	0.51 (28)	ns	0	0.81 (29)	ns	0	-0.42 (27)	ns	Ε
H1d: Andro	-0.95 (39)	ns	Е	1.13 (48)	ns	0	-1.94 (31)	.04	Ε
H1d: Masc	-0.52 (27)	ns	0	-1.74 (30)	.05	0	1.73 (27)	.05	E
H1e: Andro	-1.28 (39)	ns	0	-3.32 (48)	.001	0	1.35 (31)	ns	Ε
H1e: Masc	1.28 (28)	ns	0	0.94 (29)	ns	0	0.34 (27)	ns	0
H2	1.66 (68)	ns	E	1.50 (78)	ns	Е	0.53 (60)	ns	E
H3a: 5th	-0.45 (33)	ns	0	0.32 (42)	ns	Е	-0.94 (29)	ns	0
H3a: 10th	-0.39 (34)	ns	Е	-0.24 (36)	ns	Е	-0.15 (30)	ns	Ε
H3b: 5th	-1.42 (33)	ns	0	-1.62 (42)	ns	0	-0.04 (29)	ns	0
H3b: 10th	-0.54 (34)	ns	E	-0.32 (36)	ns	Е	-0.26 (30)	ns	Ε
H3c: 5th	-0.69 (33)	ns	0	-1.50 (41)	ns	0	0.73 (29)	ns	Ε
H3c: 10th	0.32 (34)	ns	0	0.70 (36)	ns	0	-0.34 (30)	ns	Ε
H3d: 5th	-0.23 (33)	ns	Ε	0.22 (42)	ns	0	-0.48 (29)	ns	Ε
H3d: 10th	-0.99 (33)	ns	0	-0.94 (36)	ns	0	-0.09 (29)	ns	0
H3e: 5th	1.09 (33)	ns	Е	-1.15 (41)	ns	0	2.24 (29)	.02	Ε
H3e: 10th	-1.05 (34)	ns	Е	-1.15 (36)	ns	Е	0.21 (30)	ns	0
H4	2.28 (68)	.02	Е	2.24 (78)	.02	Е	2.13 (60)	.02	E
Realness	1.08 (68)	ns	Е	0.27 (78)	ns	Е	0.65 (60)	ns	E
Deviance	1.33 (69)	ns	Е	-0.57 (79)	ns	0	1.77 (60)	.05	Ε
Suitability	0.28 (68)	ns	Е	0.76 (78)	ns	Е	-0.40 (60)	ns	0
<sup>1</sup> Direction of finding (Absolute Values), E=expected, O=opposite									

 Table 39:
 Comparisons
 Across
 Paired
 Conditions

To determine whether this trend of reversed absolute values is reproducible with medial and extreme conditions, attention turns now to the third set of columns in Table 39 which compares the medial and extreme conditions.

The manipulation check data at the bottom of the table illustrate that the medial and extreme conditions were anchored at the expected locations—with the medial condition more real and less deviant while the extreme condition was judged less real and more deviant—and the deviance measure indicating that the two conditions were judged to be different (t = 1.77, df = 60, p  $\leq$  .05). The realness measure did not reach significance (t = 0.65, df = 60, p  $\leq$  .52). The suitability measure was reversed but not significant, (t = -0.40, df = 60, p  $\leq$  .35). Thus, the medial and extreme conditions were judged differently by their subjects—in the expected direction—on the deviance measure but not on the realness or suitability measures. This point is of critical importance in examining the results of the hypothesis tests for the medial and extreme conditions. This represents the first evidence of different content conditions against which tests of hypotheses one and three may be considered.

This analysis proves useful for a better understanding of age and gender identity effects on attitudes in response to television counter-stereotyped portrayals. The evidence related to H1 is clearer. Indeed, with the exception of masculine males' inferences about the ambiguous stimulus person, every comparison of attitudes between medial and extreme conditions provides absolute values in the expected direction. Among the significant differences was that masculine males provided more traditional male role norm attitudes in the extreme condition than in the medial condition (t = -1.73, df = 28, p  $\leq$  .05). Further, the AWSA variable provides significant differences in the expected direction both for androgynous and masculine males such that androgynous males were more traditional in their attitudes toward women in the medial condition and less traditional in the extreme condition (t = -1.94, df = 31, p  $\leq$  .04). Comparatively, as predicted, masculine males were less traditional in the medial condition and more traditional in the extreme condition  $(t = 1.73, df = 27, p \le .05)$ . This provides some indication that, given an effective stimulus condition contrast and a sensitive measure, the findings may be consistent with the first hypothesis. In any case, for H1d, the null is rejected.

No differences were observed between androgynous and masculine subjects in their attitudes toward the content, failing again to reject the null for the second hypothesis. Once again, however, the null is rejected for hypothesis four with 5th grade males reporting more favorable attitudes than 10th grade males (t = 2.13, df = 60, p  $\leq .02$ ).

Finally, the results for age differences between medial and extreme conditions fail to reject the null on the third hypothesis. Six of the ten tests resulted in an outcome in the predicted direction, and only one of the tests, the inference measure among 5th grade males, was significant (t = 2.24, df = 29,  $p \le .02$ )

A summary of the whole of Table 39 suggests first that the data are consistent with hypothesis four, which predicted that 5th grade males would be more positive than 10th grade males toward the nontraditional portrayals. Thus, younger males appear to be more favorable toward exposure to counter-stereotyped content. Content favorability did not differ by sex-type, though, as predicted in H2. With every paired comparison, the direction of the finding for H2 was as expected, but androgynous males did not produce responses that were more favorable to the content, in statistical terms, than masculine males.

The table also demonstrates the extreme complexity reflected in the different attitude measures and group pairings making conclusions tenuous because of weak stimulus conditions. While the first two paired comparisons (between slight and extreme and between slight and medial conditions) did not produce manipulation check outcomes that were significant, the third did. It was this pairing, importantly, that also produced the most consistent directions among tests and these were mostly as predicted.

In the end, this exercise suggests that, when the stimulus works as planned, there is a trend toward outcomes consistent with the hypotheses. However, a more sophisticated replication is necessary before conclusions can be drawn with any confidence. Certainly, had every test in the medial/extreme contrast produced outcomes in the direction predicted, and had more of the differences been significant, the relationships among the three independent variables would be clearer.

#### Main Effects of Development and Gender Identity

One question as yet unanswered by these analyses is whether age and sex-type are, on their own, substantial variables influencing gender stereotypes. In other words, are there main effects on the dependent variables by either of these independent variables on their own? As results of tests for hypothesis four indicate, age does determine attitudes toward television content. Table 40 provides an overview of t-tests comparing group means between androgynous and masculine gender identities. Table 41 shows parallel data comparing gender attitude means for grades 5 and 10 across all conditions. These tables address the possibility that development and gender identity are more powerful factors than television portrayals for determining gender stereotypes among young males.

Consistent with the general expectations of the hypotheses stated in Chapter 1, it would be expected that 5th grade males would have less stereotyped attitudes than 10th grade males. Additionally, androgynous males should be less stereotyped than masculine males.

However, two points of caution are indicated for considering these tables, one theoretical and the other methodological. First, the theoretical expectation established in the first chapter is that gender stereotypes are expected to be the product of an interaction among several variables. Thus, it is conceptually incorrect to expect main effects when interactions are indicated. Nevertheless, given the weakness of the stimulus materials, the gender stereotypes observed may be a function of the other two independent variables. Second, it would be incorrect to expect that, if on the one hand 5th graders hold increasingly moderated stereotypes and on the other hand 10th graders hold increasingly resistant stereotypes as a result of differences among stimulus conditions that, when lumped together a main effect might be observed for age. However, as the literature suggests, older males should start with more traditional attitudes than younger males from the outset such that 10th grade males should have a more traditional gender stereotype mean than the 5th grade males. The same relationship should exist for androgynous and masculine males if main effects model is operating.

Test	Scale	t-value (df)	1-tail prob.	Direction
Andro < Masc'	MRNS	0.25 (106)	ns	0
	PPA	0.10 (106)	ns	Ο
	Sexism	0.49 (105)	ns	Ο
	AWSA	0.34 (105)	ns	Ε
	Inference	0.13 (105)	ns	Ο

 Table 40: T-tests for Attitude Differences between Androgynous and Masculine

'Androgynous males less stereotyped than masculine males.

\*Direction of finding compared with expected direction.

Table 40 suggests no difference between androgynous and masculine males on the five dependent variables assessing gender attitudes. The values for t are small and the directions of the outcomes are reversed on all variables except the attitudes toward women scale. It would appear that gender identity, on its own, is not sufficient to produce differences in gender attitudes. This is consistent with the correlations between the gender identity measures and the attitude measures discussed in Chapter 3.

Test	Scale	t-value (df)	1-tail prob.	Direction
5th < 10th	MRNS	1.06 (106)	ns	0
	PPA	3.07 (106)	.002	Ο
	Sexism	0.62 (105)	ns	Ο
	AWSA	-0.18 (105)	ns	Ο
	Inference	-0.12 (105)	ns	Ε

 Table 41:
 T-tests for Attitude Differences between 5th and 10th Grades

Development represented in the form of grade level is not a sufficiently powerful independent variable to produce differences in gender attitudes. Table 41 demonstrates that only on the physical prowess variable was a difference observed between 5th and 10th grade males, and this was opposite from the direction expected.

## Summary

Two observations about these tables are offered. First, on examination of the third contrast in Table 39 (Medial and Extreme conditions), it is interesting that attitudes toward women (H1d) worked as expected in both directions when the stimulus materials focused on nontraditional male behavior<sup>8</sup>; one would expect that where attitudes are affected by male behavioral portrayals and gender identity, these attitudes would more specifically focus on male issues rather than on female issues. This seems to demonstrate a willingness to accept nontraditional attitudes for females but not for males. This is important because it is the traditional male stereotype that the literature indicates is in most need of change today.

Second, the unusual and strong reversal of physical prowess attitudes from the expectation, as shown in Table 41, suggests that something unique about this attitude dimension causes younger males to be more traditional than older males. Because the attitude reflects physical characteristics of the male, perhaps younger males have much

<sup>&</sup>lt;sup>8</sup> Indeed, a 2x2 Anova produced a significant interaction between gender identity and condition on the AWSA variable (F = 6.58 (1,58), p = .02).

more highly idealized views of adult male physical characteristics and capabilities than older males who have begun to experience, through their development, the limitations of their abilities. Adolescents would, perhaps, realize and discount television's focus on the ideal male.

The alternative analyses provide some credibility for the first and fourth hypotheses and justify future research on the interactive effects of televised gender portrayals, development and gender identity. The comparison between medial and extreme conditions was the only pairing to produce a significant difference on the manipulation check score and this comparison seemed to suggest some support for the direction of the first hypothesis, especially on the AWSA variable, and clearly indicated support for the fourth hypothesis that younger males would more readily favor the counter-stereotyped content than would older males.

But doubt is cast on the second and third hypotheses. In no case was support accorded the second hypothesis, that androgynous more than masculine males would respond favorably to the nontraditional content. The results of tests for the third hypothesis suggest that more work is required to understand how and if age interacts with nontraditional gender content to produce differential attitudes about gender.

## **Reconsidering the Theories**

What if the theories fail to account for the process at work determining gender attitude change? The literature review in Chapter 1 introduced a number of theoretical perspectives including message effects, schematic processing and gender identity, child development, social judgment and content characteristics that, it was argued, would predict differential effects of television's gender portrayals on young males' gender stereotypes. These will be reconsidered briefly.

First, can counter-stereotyped television portrayals contribute to nontraditional gender stereotypes? Stereotypes and the collection of attitudes that comprise them are more flexible than traits; and theories of attitude change—such as social judgment theory—suggest that attitudes are malleable with the right stimulus-receiver mix. However, given the volume of persuasive messages bombarding audiences of television (and other media) today, one might expect from this theoretical point of view that audience members and content interact often and that receivers are changing or modifying their attitudes on a continuous basis. Because attitude change is less frequent than exposure to every medium stimulus, these theories may overstate the malleability of attitudes. The results of this study may reflect the relative entrenchment of attitudes, particularly among young masculine and androgynous males.

Second, social judgment theory may provide an inadequate picture of the available latitudes for accepting or rejecting persuasive messages. Recall that this theory includes ego-involvement as a factor in determining the size of the latitude of rejection. Under extreme conditions, the latitude of rejection may be so large (and it may be so close to a narrow latitude of acceptance) that the space for attitude change is operationally nonexistent; under this condition the latitude of noncommitment (within which the most attitude change can occur) would be so narrow as to preclude the possibility of an optimal effect and, therefore, attitude change. Moreover, the theory does not account for other factors affecting region of rejection such as sex, gender identity and level of development. Social judgment theory may require special conditional caveats for different attitude domains and different demographic groupings.

Third, do cognitive schemas, such as gender identity, affect television processing? Little evidence exists to answer this question. Nevertheless, the research by Drabman and others (1981) indicates that schemas mediate television reception. While the evidence that masculinity is quite an inflexible gender identity, this has not been tested adequately in

relation to counter-stereotyped portrayals and may be true for some attitude objects (i.e., women on television) but not others (i.e., men on television). The findings in this study would suggest precisely this: Both masculine and androgynous groups of males were similar in attitude toward male gender issues represented by the MRNS, but quite different in attitude toward female gender issues represented by the AWSA.

Fourth, are the development theories adequate? Very little of the developmental literature addresses the development of stereotypes, per se. Piaget's theory of cognitive development (Piaget & Inhelder, 1969) does not address stereotyping directly and Kohlberg's theory of gender-role development (Kohlberg, 1966) is equally vague on the subject. Both theories better address learning of behavior than learning and change of cognitive structures. Although the literature is unequivocal on the point that younger children and older children are more rigid in their gender beliefs than middle-childhood youth, consistent data are not available to determine whether only a narrow band of middle childhood is generally flexible (say ages 9 and 10 only) or whether the band of flexibility is wider. Moreover, the extent of this elasticity in attitudes may not apply in the male only context. Male children have been found to be much more rigid than female children (Jeffery & Durkin, 1989), but have not before been singled out for analysis as they have here. Perhaps the more accurate prediction, particularly in light of results reported in Chapter 3, would be the no difference hypothesis that male children within the age range studied here are inflexible in their gender stereotypes, specifically, and will not be affected by counter-stereotyped portrayals.

Finally, perhaps vicarious, mediated behaviors are not, in themselves, sufficient stimuli to produce attitude change. Crying by a man may not alter a child's gender stereotype about men crying if other men laugh at and ridicule the crier; but the stereotype may well be altered if the crier is supported by other male characters or if the crying is in a family tragedy context. The argument that behaviors represent a particular form of content

that may produce attitude change may be quite insufficient to account for how content plays on the sensibilities of the perceiver.

In all, the theoretical propositions combined in the first chapter to account for how increasingly extreme counter-stereotyped portrayals might produce attitude change are ideas under construction. They are based on evidence that is incomplete and they require more detail, more conditional specification to precisely anticipate how televised counter-stereotyped material might affect boy's gender stereotypes.

## Implications

The results of this study serve two functions; the first is to inform policy and the second to suggest further research. If the political and social interests are served to introduce alternative views about the male gender and female-male gender relations by introducing counter-stereotyped models, roles and behaviors to male children, what do these findings suggest?

First, the consistent and strong support for the fourth hypothesis indicates that, in general, younger males are less critical of counter-stereotyped portrayals than older males and therefore intervention is likely to work better in middle childhood than in late childhood. On the one hand, reduced resistance would indicate more potential for the message to change attitudes consistent with social judgment theory; on the other hand, lack of support for the third hypothesis means we cannot determine what level of counter-stereotyped message extremity will operate optimally on young male children's stereotyped portrayals will both work effectively because of the general receptivity of the younger male audience, but will not work as well for older males—unless they are androgynous.

Results in relation to the first hypothesis suggest, albeit equivocally, that androgynous males will be affected by powerful counter-stereotyped messages about male behaviors. But these messages appear to foster moderated attitudes toward women and not toward men. The lack of an interactive effect of gender identity and counter-stereotyped portrayals on male role norms for androgynous males is important. The male stereotype either is too monolithic to be affected or these males are too threatened or uncertain about the worth of personally advocating nontraditional male roles and behaviors. Given that the overall mean sum for this scale was  $\bar{x} = 89$  with a *potential* range from 26 to 130 (midpoint = 78) and an *actual* range from 51 to 118, one can argue that these males remain basically traditional in their male role stereotypes and therefore the counter-stereotyped portrayals were *not* working against a basement effect (although the typical stereotype is not extremely traditional based on these measures).

From a policy standpoint, the clearest conclusion to be reached from this analysis, is that male youth have moderate to traditional gender attitudes and these can most easily be tempered further through exposure to counter-stereotyped messages in middle childhood. Late childhood, even if the youth is androgynous, may be too difficult a period for the male to change his stereotypes about gender—particularly related to male roles and norms.

The second ramification of this research is that more experiments are desperately needed. The problems in establishing adequate stimuli and working with samples of children are indeed difficult ones. Moreover, the problem at hand is complex and socially important. But these findings, and the findings of similar research, leave open the question that television is a force of socialization and attitude change for young people. Indeed, because we believe it is a force with many unknown quantities, television requires continuous study for understanding leading to utility maximization.

A replication of this study is indicated by the need to answer the interaction questions which guided it in the first place. Many modifications are recommended: Improved pretesting and pilot testing with different stimuli, more careful selection and

adequate pretests of subjects, development of more sensitive measures of gender stereotypes for use with children of varying ages and further conceptualization and measurement of potential covariates.

This study represents an advancement, I believe, in the conceptualization of television effects on gender stereotypes. The ideas are here, the right kind of measures are here and the theory is in place, what is needed now is refinement and sufficient power (Keppel, 1982) to parse out these intricate but important media effects.

Future research needs to focus on developing an understanding of specific reactions to different nontraditional characters, their roles and their behaviors along the lines of work on character identification by Sedney (1987) but which will more specifically help develop stimulus materials designed to work in the interaction model advanced in this study. There is a need for research on acceptability of gender messages at different levels by different gender identities and ages. Armed with a clear understanding of males' reactions to very specific aspects of nontraditional male characters' behaviors and contexts, stimulus materials may be created. This recommendation would require the manufacture of stimuli rather than the acquisition of them from available television fare. While ecological validity will suffer, perhaps the problem of weak stimuli that plagued the present effort will be avoided.

More strenuous pretesting of subjects may contribute more control and sensitivity in later research. When possible, subjects should be assessed on their gender attitudes, gender identity and their viewing behaviors and attitudes toward television content in advance of the treatment. Also, measurement of many relevant variables would be helpful in establishing other bases for gender attitudes. Other measures include home ecology variables such as siblings, parental mix, number of people living in house, types of chores and behaviors.

An increase in the sample size would help avoid the problem of reduction to small samples from the gender identity pretest. Larger samples would allow observation of the role of backgrounds including ethnic, racial, and community size as they covary (or fail to covary) with the antecedents of interest. To use a two-stage pretest/posttest design creates its own problems including loss of subjects. Yet, if possible, better subject identification, stratification and assignment to stimulus groups combined with larger samples would go a long way to advance knowledge about the interactions among television and other antecedents on stereotypes.

More ages need to be compared to determine whether developmental trends observed across many different studies can be replicated in one study using consistent stimuli and measures. In this study, perhaps 5th and 10th graders weren't distinct enough. Perhaps better contrast would have been achieved by using 4th graders. Having more ages would indicate which grades provide the best comparisons for the development variable.

Future work along the lines of this study should, where possible, add two additional conditions: A control group condition and a contrast group condition. The control group condition simply would include subjects that receive no stimulus or receive a neutral stimulus. The contrast group condition is an addition that would, in effect, replicate previous stereotyping effects research by including traditional behavior content. Comparisons of the three deviation groups to these would add substantial explanation to the model.

Another area for work is the refinement and development of germane attitude measures. It would be an important contribution and worthwhile effort to develop useful measures of gender stereotypes for use with children of different ages beginning with early-middle primary school age and ending with middle to late secondary school age. A relatively short, reliable, multiple factor measure to which children in the early grades can

respond would be useful in testing gender attitudes at different ages and in response to television content. Such a scale might include items relevant to males and females separately for gendered behaviors, roles, emotional traits, physical traits, chores, jobs, tools and toys. Most of the items used here produced middling scores. Perhaps this was a function of the stimulus conditions or maybe the boys in this study held fairly central stereotypes prior to exposure. Perhaps the scales are too dated and gender stereotypes have changed since their construction. In any case, perhaps these measures were not sensitive enough to pick up dissimilar attitudes resulting from the stimuli. Measures established for their responsiveness to contemporary children's attitude adjustment or change would contribute significantly to work in the media effects area generally and gender effects specifically.

## Conclusions

Although the interactivity model was not tested adequately due to the apparent inability of the stimulus conditions to produce different affective responses on the manipulation check measures, the present study assists in the conceptualization and development of experimental media effects research related to gender stereotypes. It does so by introducing the use of gender identity as an antecedent, multiple levels of counterstereotyped stimulus materials and multiple measures of gender stereotypes. Much work remains before clear understanding is achieved and justified policy approaches can be developed to attack the problem of gender stereotyping—by males—about males.

As a recent magazine article on boys and masculinity in crisis contended, young males are a population at risk and the feminist agenda has addressed only half of the gender equity question (Legge, 1995). Discussing the hottest new children's show and videogame combination in recent years, *Power Rangers*, the author reflected on the gender mix, emotional traits and behaviors of the characters:
This multi-media entertainment is classic "goodies vs. baddies" stuff with one concession to the politically correct modern world; it is non-sexist. Girls participate in the mortal combat but not as damsels in distress. We have deconstructed the feminine mystique but left masculinity largely intact. Jason, the star Ranger, is a man of few words who uses his hands and feet. Another macho man in emotional shut-down mode. ... We have been policing the portrayal of women for 20 years ... but little has been done to challenge rigid male stereotypes and this is being increasingly linked to concern about the education of boys and men. (p. 21)

As social and political attention moves from the equity search for girls and women toward the problems endemic to traditional masculine models for male socialization, research attention will need to turn toward the role of television in fostering and combating these problems. The focus of this research should be how to create television that can appeal to youth and reshape traditional gender stereotypes about men (and women) for prosocial growth and development of a troubled audience: The young male audience. APPENDICES

APPENDIX A

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### APPENDIX A

Channel or Network	6 a.m. to Noon	Noon to 6 p.m.	6 p.m. to Midnight	Overnight
CBS	V	V		$\checkmark$
	$\checkmark$	V	$\checkmark$	$\checkmark$
ABC	$\checkmark$	$\checkmark$		<b>V</b>
FOX	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
PBS	V	V	V	
CBET	<b>V</b>	<b>V</b>	V	
BET	V	$\checkmark$	V	
TBS	<b>V</b>	V	V	<ul> <li>✓</li> </ul>
WGN	<ul> <li>✓</li> </ul>	$\checkmark$	V	$\checkmark$
MIV	V	<b>V</b>	V	$\checkmark$
TNT	V	<b>V</b>	V	V
AMC	<b>V</b>	$\checkmark$	V	
CNN	V	V	V	
HNN				
USA	V	V	V	<b>V</b>
ESPN	V	<b>V</b>	V	
DISC	<b>V</b>	<b>V</b>	V	
BRAVO	<ul> <li>V</li> </ul>	<b>V</b>	V	
A&E	<b>V</b>	V	V	
Comedy Central	$\checkmark$	<b>V</b>	V	
Ē!	V	<b>V</b>	V	
Family Channel	V	<b>V</b>	<ul> <li>✓</li> </ul>	V
Nick	V	V		

# Networks and Times Sampled for Stimulus Materials

APPENDIX B

#### APPENDIX B

### **Descriptions of Pretest Portrayals**

Portrayal	Pretest Tape Num.	Mean Dev. Score	Valid n	Description
Garage	3	4.06	22	Automotive oil ad showing men working in a garage.
Women's Hospital	1	3.79	24	Ad for a women's hospital, wife is reassuring concerned husband on her impending surgery.
News Reporter	1,2	3.77	42	Segment from local news showing a reporter in a government building.
Steelworkers	1,2	3.70	43	From national news, a story about steelworkers showing men in foundry.
Father at Dentist	1	3.65	24	Crest ad showing father with son in dentist waiting room, no mother present.
Coach	1	3.57	24	From a sit-com, an emotional, sensitive and depressed coach self-disclosing to his wife.
Trucks	3	3.56	22	Mazda truck ad showing men driving light trucks through rugged terrain.
Hockey	1,2	3.52	43	Ad for Detroit Red Wings hockey game shows men in competition sport.
Detective	2	3.51	19	Scene from <i>Rockford Files</i> showing a detective on the telephone with police.
Reading Paper	3	3.49	22	Mortgage company ad, husband and wife discussing new home, wife is knowledgeable.
Driving	3	3.49	22	Men in car discussing insurance and investment with Paine Webber.
Cars	3	3.48	22	Ford ad shows man talking about engineering, technology and safety merits of car.

Portrayal	Pretest Tape Num.	Mean Dev. Score	Valid n	Description
McDonald's Dad	1	3.43	24	McDonald's ad showing father feeding toddler son. No mother present.
Navy	3	3.35	22	Ad for the U.S. Navy showing men in military roles and action behaviors.
Feeding Baby	3	3.33	22	Corn Pops ad, father feeding 1-year-old son, ends up eating cereal himself, mother at end.
Breakfast	3	3.31	22	Raisin Bran ad showing father and daughter having breakfast, no mother present.
Tea w/Daddy	1,2	3.27	42	Ad for Motrin, a father is in attic playroom with young daughter who is serving "tea."
Shampooing Baby	1,2	3.24	43	Johnson's Baby Shampoo ad with father only washing and nurturing baby.
Feeding Dog	3	3.22	22	Purina dog food commercial, man speaking authoritatively on dog's nutrition needs.
Dennis Byrd	1,2	3.15	43	From TV movie, a football player visits paralyzed teammate in hospital, cries.
Security	1,2	3.05	43	Ad for security company showing man regretting decision not to protect home.
Cooking	3	2.97	22	Frugal Gourmet showing how to prepare and cook a meal.
Laundry	3	2.94	22	Tide ad showing professional launderer. He speaks about experiences with the soap.
Men at Work & Play	2	2.92	19	Clairol for Men ad showing men who ostensibly color their hair in different roles.
Sad Man	2	2.91	19	Scene from a Mel Gibson movie in which the character is crying over the loss of his wife.
Holding Baby	3	2.91	22	Soap opera, older man holding infant while woman compliments him on nurturing skills.
Cowardice	1,2	2.85	43	Scene from <i>Rosanne</i> , Dan is embarrassed and shy discussing fantasies with Rosanne.
NYPD Blue Accident	1,2	2.84	43	Scene showing man crying after a freeway shooting accident killed his wife.

Portrayal	Pretest Tape Num.	Mean Dev. Score	Valid n	Description
Scared	3	2.84	22	MASH episode showing Major Burns running from officer, acting with cowardice.
Doing Dishes	1,2	2.83	43	Cascade ad showing husband doing dishes while wife watches TV.
Interview	2	2.82	19	Copier company ad showing vulnerable- looking man in big room being interviewed.
Husband	1,2	2.77	43	TV movie A Time to Heal scene, a husband sad and upset over wife's slow coma recovery.
Daddy at Breakfast	1,2	2.77	43	Father eating breakfast with children in Chex commercial, no mother present.
Dancing	3	2.74	22	Fleischman's margarine ad with father in back yard dancing with daughter, wife watching.
Packing	3	2.73	22	Young father in soap opera packing a suitcase hugging daughter, tells her they will be OK.
In Charge of Dinner	3	2.72	22	Soap Opera scene showing young man setting table & feeding father, brother & girlfriend.
Setting Table	3	2.70	22	Man sets table while listening to sports as wife and daughter return home, Corelle ad.
Spiders	3	2.67	22	Vernor's ad showing Evel Knievel and son, spider on Evel's shoulder, yells "get it off"
Reading Story	3	2.66	22	Northern tissue ad showing father reading bedtime story to daughter, no mother shown.
Kitchen Work	3	2.63	22	A Neighbours episode showing young man working in kitchen with mother watching.
Feelings	3	2.63	22	From TV moving A Time to Heal, father confesses sadness and loss to his daughter.
Stir-fry	3	2.61	22	Man prepares Tyson packaged stir-fry dinner as wife reads in living room.
Mexico	1	2.58	24	Scene from Get Smart set in Mexico, criminal is caught and shows cowardice.
Clark	3	2.55	22	Superman movie scene showing a sensitive and clumsy Clark Kent.

Portrayal	Pretest Tape Num.	Mean Dev. Score	Valid n	Description
Drug Prevention	3	2.52	22	PSA advocating drug-free youth showing young teen talking about demerits of alcohol.
Fainting	2	2.51	19	From movie, Vertigo, scene in which Stewart character faints and is caught by secretary.
Argument	2	2.50	18	Film scene showing a man being abused by alcoholic wife.
Wiring Money	1,2	2.09	43	From a Western Union ad, a man calls home while on business trip to ask wife for money.
Office Worker	1,2	2.05	43	From Murphy Brown, a male office worker is shown having a nervous breakdown.
Ballet	1,2	1.75	42	Scene from <i>Full House</i> in which Joey tries ballet to improve his hockey game.
Sylvester	1,2	1.74	43	Animated scene showing father cat showing fear of would-be mouse while son observes.

APPENDIX C

#### APPENDIX C

#### **Stimulus Pretest Booklet Sample**



	1					
Statements	Disagree A Lot	t	Neutral		Agree A Lot	
The characters in this TV example are like people in the real world.	1	2	3	4	3	
If you <b>diangree a lot</b> that the characters on t would circle a 1 like this:	he tape are like	e people	in the real	world, th	en you	
The characters in this TV example are like people in the real world.	O	2	3	4	5	
If you <b>agree a little, then</b> you would circle	a 4 like this:					
The characters in this TV example are like people in the real world .	1	2	3	Ċ	5	
If you disagree a little, then you would cir	cle a 2 like thi	is:				
The characters in this TV example are like people in the real world.	1	2	3	4	5	
If you aren't sure whether the characters on you do not agree or disagree, then you w	the tape are li ould circle a 3	ke people l like this	e in the real	l world o	r if	
ine characters in this is example are like people in the real world.	1	2	(1)	4	5	

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# TV Sample 1

Navy

Statements	Disagree A Lot		Neutral		Agree A Lot
lenjoyed this story.	1	2	3	4	5
The men in this scene are like men in the real world.	1	2	3	4	5
This TV sample surprised me.	1	2	3	4	5
The men in this scene are like mostother men on TV.	1	2	3	4	5
The behavior of the men in this scene was normal.	1	2	3	4	5
Men often fly planes, pilot boats and work in the military.	1	2	3	4	5

#### ! WAIT !

# TV Sample 2

Clark

Statements	Disagree A Lot		Neutral		Agree A Lot
lenjoyed this story.	1	2	3	4	5
The man in this scene is like men in the real world.	1	2	3	4	5
This TV sample surprised me.	1	2	3	4	5
The man in this scene is like most other men on TV.	1	2	3	4	5
The behavior of the man in this scene was normal.	1	2	3	4	5
Mostmen actshy.	1	2	3	4	5

! WAIT !

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APPENDIX D

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### APPENDIX D

#### Instrument

ln yo	troduction This is a survey about people in America. There are many questions on how u feel about men and women in the real world. Before you read the examples at show how to do this survey, there are some things you should know:
•	Do not write your name on this survey. We do not want to know who gave which answers.
•	This survey is voluntary. Voluntary means you do <b>not</b> have to answer questions you don't feel like answering and you do <b>not</b> have to do the survey if you don't want to. If you don't want to, let us know at any time, and we will give you something different to do.
•	Please be honest about your answers.
•	Work quickly and answer as many questions as you can. There are lots of questions on this survey.
•	This is not a test, there are no right or wrong answers—this is a survey about your opinions and ideas.
•	Do not talk during the survey.
•	Do not look on anybody's survey but your own.
•	Read the top of every page! Some of the statements only let you circle one number between 1 and 4 other statements let you circle one number between 1 and 5. There are some other kinds of questions that ask you to circle the best answer—like how old you are. Make sure you circle the best answer that describes you or is the way you feel.
•	Read the bottom of every page! Some pages tell you to begin or continue. Some pages tell you to stop. When you get to the bottom of the page that tells you to stop, stop working and turn your survey over. When everyone has finished the first section, we will watch a video tape.
•	If you do not understand a word or a question, you may skip the question or you may raise your hand and I will try to explain it to you.
	Look at the example on the next page and then begin the survey

The characters on TV are like 1 2 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	3	Ċ
If you disagree a lot, then you would circle a 1 like this:		$\cup$
The characters on TV are like 1 2 people in the real world.	<b>(3</b> )	4
If you disagree a little, then you would circle a 2 like this:		
The characters on TV are like 1 2	3	4

1 ± notat 2 ± a fitie 3 = mosti 4 ± very b	all two of me true of me true of me rue of me				
How true of you is this?	Not True	A Little True	Mostly True	Very True	
People like me.	1	2	3	4	
I care about what happens to others.	1	2	3	4	
I can control a lot of the kids in my class.	1	2	3	4	
I have many friends.	1	2	3	4	
When someone's feelings have been hurt, I try to make them feel better.	1	2	3	4	
When a decision has to be made, it's easy for me to take a stand.	1	2	3	4	
It's easy for me to fit into new places.	1	2	3	4	
I am a warm person.	1	2	3	4	
I'm a leader among my friends.	1	2	3	4	
Fm always loosing things.	1	2	3	4	
I am a kind and caring person.	1	2	3	4	
When I play games, I really like to win.	1	2	3	4	
I like to do things that other people do.	1	2	3	4	
I like babies and small children a lot.	1	2	3	4	
I am sure of my abilities.	1	2	3	4	

1 = not at 2 = a little 3 = mosth 4 = very b	all true of me true of me true of me true of me rue of me			
How true of you is this?	Not True	A Little True	Mostly True	Very True
I am a moody person.	1	2	3	4
I am a gentie person.	1	2	3	4
I stand up for what I believe in.	1	2	3	4
I like acting in front of other people.	1	2	3	4
I am a cheerful person.	1	2	3	4
I am good at sports.	1	2	3	4
I never know what I'm going to do from one minute to the next.	1	2	3	4
When I like someone, I do nice things for them to show them how I feel.	1	2	3	4
It's easy for me to tell people what I think, even when I know they will probably disagree with me.	1	2	3	4
I always do what I say I will do.	1	2	3	4
I like to do things that girls and women do.	1	2	3	4
I make a strong impression on most people I meet.	1	2	3	4
I feel bad when other people have something I don't have.	1	2	3	4
It makes me feel bad when someone else is feeling bad.	1.	2	3	4
I am good at taking charge of things.	1	2	3	4

Statement	Disagree A Lot	Disagree	Agree	Agree A Lot	
Swearing is worse for a girl than for a boy. *	1	2	3	4	
On a date, the boy shouldpay all expenses. *	1	2	3	4	
On the average, girls are as smart as boys.	1	2	3	4	
More support in a family should be given to sons than daughters to go to college. *	1	2	3	4	
It is all right for a girl to want to play rough sports like football.	1	2	3	4	
In general, the father should have more say than the mother in making family decisions. *	1	2	3	4	
It is all right for a girl to ask a boy out on a date.	1	2	3	4	
It is more important for boys than girls to do well in school. •	1	2	3	4	
If both husband and wife have jobs, the husband should do a share of the housework such as washing dishes and doing the laundry.	1	2	3	4	
Boys are better leaders than girls. *	1	2	3	4	
Girls should be more concerned with becoming good wives and mothers than wasting a professional or business career. •	1	2	3	4	
Girls should have the same freedoms as boys.	1	2	3	4	

f you agree a lot that characters in the book a ircle a 5 like this:	re like peop	le in the	real world	l <b>, then</b> yo	u would	
Statements	Disagre A Lot	e Disagro	Neutral	Agree	Agree A Lot	
The characters in this book are its people in the real world.	1	2	3	4	J.	
he characters in his book are te people in he real world. If you agree a little, then you would circle a 4 the characters in his book are te people in he real world. If you disagree a little, then you would circle	<ul> <li>4 like this:</li> <li>1</li> <li>e a 2 like th</li> </ul>	2 2	3	4	5	
he characters in this book are te people in the real workd.	1	T	3	4	5	
If you area't sure whether characters in the bo aot agree or disagree, then you would circle	ook are like a 3 like th	people in is:	n the real v	world or i	if you do	:
The characters in this book are its people in the cash world	1	2	T	4	5	

04-4	Disagree		Neutral		Agree
Statement	A Lot	isagr	gree Agree		A Lot
Success in his work has to be a man's most important goal in life.	1	2	3	4	5
When a man is feeling a little pain he should try not to let it show very much.	1	2	3	4	5
It bothers me when a man does something that I consider "womanly."	1	2	3	4	5
The best way for a young man to get the respect of other people is to get a job, take it scriously, and do it well.	1	2	3	4	5
Nobody respects a man who often talks about his worries, fears, and problems.	1	2	3	4	5
A man whose hobbies are cooking, sewing, and going to the ballet probably wouldn't appeal to me.	1	2	3	4	5
A man owes it to his family to work at the best-paying job he can get.	1	2	3	4	5
A good saying for a man would be "When the going gets tough, the tough get going."	1	2	3	4	5
A man should work overtime to make more money whenever he has the chance.	1	2	3	4	5
It is a bit embarrassing for a man to have a job that is usually done by a woman.	1	2	3	4	5
A man always deserves the respect of his wife and children.	1	2	3	4	5
I think a young man should try to become physically tough, even if he's not big.	1	2	3	4	5
It is important for a man to have the respect and admiration of everyone who knows him.	1	2	3	4	5
Fighting is sometimes the only way to get out of a bad situation.	1	2	3	4	5

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Statement	Disagre A Lot	e Disagro	Neutral e	Agree	Agree A Lot	
Unless he is really desperate, a man should not accept a job as a secretary.	1	2	3	4	5	
A man should never back down in the face of trouble.	1	2	3	4	5	
A real man enjoys a bit of danger now and then.	1	2	3	4	5	
If I heard about a man who was a hairdresser and a good cook, I might wonder how manly he was.	1	2	3	4	5	
I always like a man who's totally sure of himself.	1	2	3	4	5	
In some situations a man should be ready to use his fists, even if his wife or his girlfriend would object.	1	2	3	4	5	
I think it's very good for a boy to be taught to cook, sew, clean the house, and take care of younger children. •	1	2	3	4	5	
A man should always think everything out cooly and logically, and have wise reasons for everything he does.	1	2	3	4	5	
A man should always refuse to get into a fight, even if there seems to be no way to avoid it. *	1	2	3	4	5	
A man should always try to show he is confident even if he really doesn't feel confident inside.	1	2	3	4	5	
I might find it a little silly or emberrassing if a male friend of mine cried over a sad love scene in a movie.	1	2	3	4	5	
A man must stand on his own two feet and never depend on other people to help him do things,	1	2	3	4	5	

Statement	Disagree A Lot D	l isagree	Neutra	l Agree	Agree A Lot	
It is important for men to have strong muscles.	1	2	3	4	5	
Being able to lift heavy things is important for men.	1	2	3	4	5	
Men need to be able to move fast.	1	2	3	4	5	
Guys should be able to work for many, many hours without wearing out.	1	2	3	4	5	
If a guy is tired after a short time, it's O.K. for him to give up on something. *	1	2	3	4	5	
Having a lot of muscle is a very important part of being a man.	1	2	3	4	5	
Guys should be strong enough to move big pieces of furniture around.	1	2	3	4	5	
When they work outdoors, women have to rest more often than men.	1	2	3	4	5	
It is O.K. for men to be slow when they move around. •	1	2	3	4	5	
It is cool for a guy to have big muscles in his arms and legs.	1	2	3	4	5	
*=Revense Coded		••••••	•••••	•••••		

(Continued)

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#### Attitude Survey Page 8

Instructions for this page: Read each statement on the left then circle a number between 1 and 5 on the right for how much you disagree or agree with the statement.

Statement	Disagre A Lot	e 1	Neutra	ni A sura s	Agree A Lot	
	<u> </u>	Disagree		Agree		
Men can react to things faster than women.	1	2	3	4	5	
Being physically powerful is not important for men these days. •	1	2	3	4	5	
A man can do more tricks with roller blades than a woman.	1	2	3	4	5	
The ideal man has a body like a weight lifter.	1	2	3	4	5	
A busband and a wife should have the same amount of physical strength. *	1	2	3	4	5	
The average man should be able to ride a bicycle for several miles without getting tired.	1	2	3	4	5	
The weaker a guy is, the less of a man he is.	1	2	3	4	5	
Women like guys with lots of muscles.	1	2	3	4	5	
Men need to be quick and sure-footed.	1	2	3	4	5	
Staying awake for a very long time is manly.	1	2	3	4	5	
=Reverse Coded	×	••••••	•••••	•••••	••••••	

Statem en t	Disagre A Lot	e Disagr	Neutra ee	il Agree	Agree A Lot	
The job of plumber is equally suitable for men and women. *	1	2	3	4	5	
It is all right for the woman to have a career and the man to stay home with the children. $\bullet$	1	2	3	4	5	
Men make better engineers than women.	1	2	3	4	5	
Working women are too independent.	1	2	3	4	5	
Women should not be prevented from getting manual labor jobs. *	1	2	3	4	5	
Driving a truck is equally suitable for men and women. *	1	2	3	4	5	
It is more important for a wife to help her husband than to have a career herself.	1	2	3	4	5	
A woman should willingly take her husband's name in marriage.	1	2	3	4	5	
The husband should make the major decisions.	1	2	3	4	5	
The husband should handle the money.	1	2	3	4	5	
-Reverse Coded						1

#### Attitude Survey Page 10

#### Instructions for this page: Read each statement on the left then circle a number between 1 and 5 on the right for haw much you disagree or agree with the statement.

Statem en t	Disagre A Lot	e Disagr	Neutra	al Agree	Agree A Lot
A woman should wait until her children are out of school before she goes to work.	1	2	3	4	5
A woman's purpose in life should be to take care of her family.	1	2	3	4	5
Women should stay home and care for the children.	1	2	3	4	5
The major duty of the wife is to keep her husband and children happy.	1	2	3	4	5
Women should have the same sexual freedom as men. •	1	2	3	4	5
Men are more emotionally suited for politics than are women.	1	2	3	4	5
Young girls are entitled to as much independence as young boys. •	1	2	3	4	5
Men are better leaders than women.	1	2	3	4	5
Women are more envious than men.	1	2	3	4	5
	1	2	3	4	5

↓ CONTINUE ↓

Statement	Disagre A Lot	e Disagro	Neutral ee	Agree	Agree A Lot
he astronaut on the video taps ould have been a woman.	1	2	3	4	5
he astronaut on the video taps ould have been a man.	1	2	3	4	5
think the men on the video tape were like men in the real world.	1	2	3	4	5
liked watching the video tape.	1	2	3	4	5
be video tape surprised me. •	1	2	3	4	5
was interested in the video tape.	1	2	3	4	5
think the men on the video tape were like men on TV.	1	2	3	4	5
enjoyed watching the video tape.	1	2	3	4	5
was comfortable watching the video tape.	1	2	3	4	5
will remember this tape for a long time.	1	2	3	4	5
think this video tape is 0.K. for males to watch.	1	2	3	4	5
think this video tape is 0.K. for females to watch.	1	2	3	4	5
think the behaviors of the men n this video tape were normal.	1	2	3	4	5
think this video tape was like normal TV.	1	2	3	4	5

1.	How old are you?	10	11	12	13	14	15	16	17
2.	Are you male or female?		N	laie	Fe	male			
3.	How many siblings do you have?		Non	•	1	2	3	4	More
4.	What grade are you in?		4th	5th	68	h	9th	10th	11th
5.	Do you participate in school spo newspaper, clubs or other activit	<b>ts, bend</b> , y?		Yes	N	0			
6.	What grades do you usually get in school?		As	Ba	Cs	Ds	Eso	- Fis	
7.	Please write down the 3 TV shows you watch most. These could be your favorite TV shows. glysudort how how to got from, ds.Q.K.to guess.)			1) 2) 3)					
8.	On a typical school day, how much TV do you								
	watch?		NONE		1/2 hour		1 hour		1. V2hours
			2 hours	2	- 1/2 hours		3 hours		3- 1/2 hours
			4 hours	4	· ¥2 hours		5 hours		MORE
0.	On a typical school day, when do you most often watch TV?		Before Schoo	1	Rigt Sc	nt After shool	;	Betw Supper &	een Bedime
10.	On a lypical Saturday or Sunday, how much TV do you watch?		NONE		1/2 hour		1 hour		1. Y2hours
			2 hours	2	V2 hours		3 hours		3- V2hours
			4 hours	4	¥2 hours		5 hours		MORE
11.	Did you enjoy doing this survey?		Yes		Sort of		No		
	Thank yo	ou fo	r com	pleting	this	surv	ey!		

APPENDIX E

#### APPENDIX E

#### **Notice To Parents**

On school letterhead...

May 1, 1994

Dear Parent:

Holly Area Schools have been asked to participate in an MSU study of children's TV viewing and their attitudes about men and women in society. The study will take place in mid-May. Some 9th and 10th grade students at [School Name] will view a 5-minute video tape from regular network TV (ABC, PBS, Nickelodeon, etc.) and answer questions about their attitudes on a survey. The study will take less than an hour. Students will receive MSU pencils and a folder for participating.

Participation is voluntary and anonymous (if your child does not want to participate, she/he will not have to and her/his name will <u>not</u> be placed on the survey). If you wish your child <u>not</u> to participate, please return this page with your signature below. If you have questions about the study, please contact Jeff Brand at the Department of Telecommunication, Michigan State University (517) 336-2051.

Sincerely,

Principal

APPENDIX F

### APPENDIX F

# **Experimental Session Instructions**

The grad Tap Stuc	te instructions should be followed for operating the experimental session with 5th and 10th te classes. There are three experimental conditions for each test hour: Blue, Green, Yellow. as are color coded, surveys have the letter "B," "G" or "Y" on the cover to indicate condition. tents will be randomly assigned to each condition using Blue, Green and Yellow cards. We
	Your condition color is:
	Biue goos:
	Green goes:
	Yellow goes:,
1.	Take to your classroom: The video tape, a stack of surveys, a stack of colored cards, 5 boxes of pencils, 2 boxes of MSU folders, a folder with info & pen for the teacher. (I'll provide you with these before the session.)
2.	Upon entering classroom: Introduce yourself to the teacher, hand her/him the teacher's folder. Show her/him my letter on top, inside folder. Ask the teacher if any of the children's parents returned a note asking they not participate. Ask the teacher to instruct children to put away personal belongings where they will be safe. Also ask the teacher if she/he could help rotate the children from one class to another by guiding the children in the hallway to the appropriate room making sure children coming into her/his room have the correct color (your condition color). Turn TV on and insert video tape. Press stop to make sure tape doesn't start playing automatically.
3.	Address the class: Introduce yourself, your are from MSU and, " We are doing a study on TV and attitudes about people in America. And we would like you to participate. Your opinions are important to our study. The study includes a survey and watching a short video tape and will take (less than an hour). We are going to give you pencils to fill out the survey and a folder when you are done. I'm going to give you a card. Depending on the color of the card, you will stay here, or go to one of the other 5th grade classrooms. If you don't want to do the survey, you don't have to. Just let your teacher or me know, and we will give you something different to do. This is a survey, you will not be graded on it. Are there any questions?"
4.	Distribute cards systematically, giving one to each child, taking the cards from the top (starting with Blue).
5.	Instruct your color to remain in their seats. Instruct the next color to line up in the hall outside the door of the destination class (e.g., "O.K., everyone with a [color] card, leave your seats now and line up single file in the hallway outside room [number], that is [teacher's name]'s room."). When they have left the room, do the same for the remaining color.
6.	While the last group is leaving, cue the tape just to the end of the color bars.
7.	When both departing groups have left the room, instruct the children in the hall with your condition color to "quietly come in and take a seat and we will start the survey."
	1

# Experimental Session Instructions

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- 8. When everyone is seated, promptly distribute the survey and 2 pencils to each child. Instruct them, "do not open the survey until told to do so." When all pencils and surveys are distributed, tell them to "open to the first page." Read the instructions and the example on the next page. Ask if there are any questions. Instruct them, "begin the survey now, work quickly because there are a lot of questions and stop after finishing page 2."
- 9. As the students finish page two, make CERTAIN they stop work and turn over the survey. When all have completed page two. Ask them to watch the video tape. Each tape ends after 6 segments including the astronaut segment. After watching the video tape, instruct the students to turn over their surveys and continue working quickly from page 3, to raise their hands if they have any questions, and turn the survey over when the reach the end of the last page. You may want to tell them that if they finish early, they can feel free to draw on the back of the survey. Rewind the tape.
- 10. When most students complete the survey, begin collecting them, then give each student who has completed the survey an MSU folder.
- After 45 (40 @ HS) minutes, tell students who have not finished the survey that they have about 10 minutes left.
   After 55 (50 @ HS) minutes, tell students who have not finished to turn to page 12 and fill out the first two items (age and gender).
- 12. Collect remaining surveys. Distribute folders to those who did not yet receive one. Thank them for completing the survey. Ask them if they have any questions about the survey or the video tape. Answer questions. Instruct Mr(s). [teacher's name]'s students to return to her/his room and then instruct the next group of students to return to their teacher's room.
- 13. Collect surveys, remaining pencils, folders, video tape and color cards. Thank the teacher. Leave room.

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