Images of men and women reflected in magazine advertisements in 1962 and 1973

bу

Sally Miller Lapan

A Thesis Submitted to the

Graduate Faculty in Partial Fulfillment of

The Requirements for the Degree of

MASTER OF SCIENCE

Major: Family Environment

Approved:

Signatures have been redacted for privacy

Iowa State University
Ames, Iowa

TABLE OF CONTENTS

	Page
INTRODUCTION	1
THEORETICAL FRAMEWORK	2
The Interaction of the Family and Mass Media in the Socialization Process	2
Traditional Images of Men and Women	6
Traditional Images of Women Traditional Images of Men	6 7
The Images of Men and Women Reflected in the Mass Media	9
Magazine Fiction Comic Strips Television Soap Operas Television Commercials Magazine Advertisements	9 11 11 12 13
Summary and General Hypotheses	14
PROCEDURES	18
Selection and Definition of Variables	18
Year of Publication Sex Composition Product Advertised Roles Portrayed	18 19 19 22
Specific Hypotheses	24
Statement of Specific Hypotheses Discussion of Specific Hypotheses	25 25
Data Collection and Analysis Procedures	28
Definition of the Population Selection of the Sample of Advertisements Analysis of Advertisements Statistical Methods of Analysis	28 30 35 38
FINDINGS	41
Type of Product and Sex Composition of Ad	41

	Page
Relationship in 1962 and 1973 Change in Relationship between 1962 and 1973	41 44
The Roles Portrayed by Men and Women in Magazine Advertisements	48
Ads as Units of Analysis Adults as Units of Analysis	48 57
INTERPRETATIONS AND CONCLUSIONS	64
Interpretations of the Findings	64
Spheres of Interest Roles of Men and Women	64 66
Conclusion	68
Limitations	69
Recommendations for Further Research	70
REFERENCES	71
REFERENCE NOTE	73
ACKNOWLEDGMENTS	74
APPENDIX A: LISTS OF MAGAZINES USED IN SAMPLE	75
APPENDIX B: CODE SHEET	78
APPENDIX C: SUPPLEMENTARY TABLES	90

INTRODUCTION

During the early sixties a renewed effort to achieve equality for men and women began. Since then, many articles and books regarding the feminist movement and the negative effects of sex stereotyping on women have been published. Although most of the criticism has been directed toward the negative consequences of sex-role stereotyping on women, a few critics (Goldberg, 1973; Rueger, 1973; Farrell, 1974) have shown how men have also been affected by the stereotyped roles to which they have been pressured to conform.

One of the subsystems of society that has been singled out for criticism of sex stereotyping is the mass media. However, very little research has been conducted to identify the sex stereotypes that have actually been depicted in the mass media. Although this type of research is needed for all forms of the mass media, magazine advertisements were chosen as the primary focus of the investigation reported in this thesis. Specifically, the objectives of this study were (a) to offer a theoretical framework which is useful in explaining why there have been criticisms of the stereotypes portrayed in the mass media and why this type of criticism may or may not continue, (b) to improve the methodology used in previous analyses of the images of men and women reflected in magazine advertisements, (c) to find out whether these images have changed in response to criticisms made during the latest resurgence of the feminist movement, and (d) to discuss the implications of the finding that there have been very few changes in the images of men and women mirrored in magazine advertisements.

THEORETICAL FRAMEWORK

The Interaction of the Family and Mass Media in the Socialization Process

Since the early sixties there has been a resurgence of the feminist movement and efforts to achieve equality for men and women in nearly all aspects of American society (Sochen, 1973). Throughout this movement, many critics have reprehended the stereotyped images of men and women that typically have been reflected in advertising and other forms of the mass media. Criticisms of this type apparently can be explained using the structure-function framework.

Within the structure-function framework, the family is viewed as one of the many subsystems of society (Hill & Hansen, 1960). As the family carries out its functions and pursues its objectives, the family organization is involved in reciprocal interchanges with other subsystems (Briar, 1964). These reciprocal interchanges between the family and other subsystems of society are assumed "to balance out in the long run. When they do not balance, one expects change or indications of stress at some level--individual, familial, or societal" (McIntyre, 1966, p. 68).

One of the functions of the family subsystem is to socialize family members for the roles they have in the home and society in general.

During the early childhood of family members, parents are the principal socializing agents. However, throughout later childhood and adult life, individuals interact with other subsystems of society—including the mass media—and may be influenced by them (Kenkel, 1966).

The mass media subsystem directly participates in the socialization process by transmitting information about various aspects of individual, familial, and societal life. For example, DeFleur and DeFleur (1967) found that children learn much about society when they watch television. In their research, DeFleur and DeFleur asked children to rank three different sets of work roles--personal contact occupations, television occupations, and general culture occupations. Significant differences were found in the children's knowledge of these groups of occupations based on the age, sex, and social class of the children. As a result, the researchers concluded that "children, like adults, go to the television receiver primarily for entertainment rather than edification, but while being entertained they absorb much 'incidental' information about their society" (p. 778).

Other authors have concluded that the mass media are important vehicles for conveying social values in our society. For example,

Johns-Heine and Gerth (1949) concluded that magazine fiction becomes an important vehicle of social values because "the reader identifies himself with a particular hero model, the fictional hero, together with his status, his qualities and his achievements" (p. 105). Similarly, with regard to television soap operas, Katzman (1972) concluded that "the almost-realism of the characters and themes, the repetition due to slow pace, and the extremely large number of hours spent viewing soap operas indicate that these shows have great potential power. They can establish or reinforce a value system" (p. 212).

Johns-Heine and Gerth (1949), Kenkel (1966), and Katzman (1972) analyzed what may be called major elements in the mass media. However,

after completing a content analysis of a popular comic strip, Auster (1961) pointed out that "as the commonplace source of ideas and ideological viewpoints become recognized, the more innocuous forms of mass media may take on greater significance as communicators of particular points of view" (p. 247).

Research has also been conducted which supports the idea that components of the mass media subsystem are directly involved in the transmittance of acceptable sex role behavior which is one specific aspect of the socialization process. In a recent study by Aldous (1972), two groups of five-year-old children were interviewed. The first group of children lived with both of their parents. The second group of children lived only with their mothers; their fathers had been absent from the home for at least one year prior to the interviews. After asking each child to identify which sex performed certain activities, Aldous found no differences between the two groups of children in their perceptions of which activities men perform and which activities women perform. Children whose mothers were forced to perform activities that traditionally have been done by men were still aware that men usually perform those activities. Therefore, Aldous concluded that television, relatives, friends, and school teach children conventional sex role behavior regardless of whether there is a male model at home.

The results of the research reviewed above support the generalization that the mass media subsystem directly participates in the socialization process by transmitting information about sex role behavior and other aspects of individual, familial, and societal life. Therefore, it follows from the assumption concerning the reciprocal interchanges between the

subsystems of society that the information conveyed by the mass media should, in the long run, be congruent with the information the family transmits in the socialization process. If it is not and the two subsystems are, in fact, communicating different, even conflicting, information about role behavior and other aspects of societal life, one would expect change or indications of stress at some level.

Critics have typically argued that advertisers should change the images of men and women they reflect in their advertisements so that those images more accurately mirror the roles of men and women in American society. This argument is usually based on one of the following assumptions: (a) the images reflected in advertising were unrealistic in the first place or (b) the societal images of men and women are changing and advertisers have failed to keep pace with the changes in these images. In either case, the criticisms indicate that at least some members of society perceive an imbalance between the information about sex roles that is transmitted in advertising and the information conveyed by the family and other subsystems in society. Furthermore, the arguments of the critics indicate that until the images reflected by the subsystems involved in the socialization process become congruent, manifestations of stress, such as the criticisms that have been made against advertising, will continue.

Past research indicates that advertising and other forms of the mass media have reflected and thereby reinforced what may be called the traditional images of men and women in American society. Therefore, a discussion of these images and how they have been mirrored in the mass media is presented in the next two sections of this chapter.

Traditional Images of Men and Women

Traditional images of adults include those personality traits, spheres of interest and activities that, in the past, have differentiated men from women.

Traditional Images of Women

Many researchers have enumerated the traditional images or stereotypes of women. One group of researchers (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968) developed a stereotype questionnaire by asking college students to list behaviors, attitudes, and personality characteristics that distinguish women from men. According to the resulting classifications, women are dependent, easily influenced, submissive, passive, in need of security, not adventurous, inactive, and lacking in self-confidence. They tend to display their emotions, cry easily, express tender feelings, be aware of the feelings of others, allow their feelings to be easily hurt. and become excitable when confronted with minor crises. Since they have trouble separating feelings from ideas, they tend to be illogical and subjective in their thinking. Furthermore, women are neither competitive nor ambitious. Other researchers (Jacklin & Mischel, 1973; Roberts & Roberts, 1973; Yorburg, 1974) express similar views and add that traditional images of women indicate that they seek help from peers and authority figures, conform, express socially acceptable attitudes, are helpful as mediators, are receptive, and are nurturing.

From a traditional view, a woman's primary interests are marriage, child rearing, homemaking, and volunteer and community activities (Jacklin & Mischel, 1973; Pyke & Ricks, 1973; Roberts & Roberts, 1973; Yorburg, 1974). She has an appreciation for art and literature but has little interest and

ability in mathematics and science (Rosenkrantz et al., 1968). Furthermore, since her life revolves around her home and children, a woman has a very limited knowledge of the outside world and is not skilled in business (Rosenkrantz et al., 1968).

Several of the authors cited above (Pyke & Ricks, 1973; Roberts & Roberts, 1973; Rosenkrantz et al., 1968; Yorburg, 1974) also have drawn conclusions with regard to the activities that are traditionally performed by women. Since a woman is expected to subordinate her interests to those of her husband, she must accept a limited and restricted range of interests and activities. Traditionally, these activities involve being a hostess and companion for her husband, bearing and rearing children, performing domestic services such as cooking, and maintaining her physical attractiveness so that she will be a desirable companion for her husband.

Traditional Images of Men

Several authors (Balswick & Peek, 1971; Goldberg, 1973; Podell, 1966; Ricks & Pyke, 1973; Roberts & Roberts, 1973; Rosenkrantz et al., 1968; Rueger, 1973; Yachnes, Gershman, & Miller, 1973) have agreed that the traditional image of a man in this society is one of strength and independence. Being independent, the male stereotype is dominant, aggressive, competitive, achievement-oriented, active, ambitious, adventurous, self-confident, and able to readily accept leadership responsibilities. On the other hand, the traditional image of a man holds that he is not very tactful or easily influenced by others. Furthermore, according to Roberts and Roberts (1973), a man uses better judgment than a woman in making decisions when the stereotypes are compared. That is, the male stereotype is able to separate feelings from ideas, maintain his objectivity, and

arrive at a logical decision more easily than his female counterpart (Rosenkrantz et al., 1968; Yachnes et al., 1973). In brief, then, the traditional male image is one of the strong, silent type--a man who is untalkative, physically strong, tough, and even violent (Balswick & Peek, 1971; Rosenkrantz et al., 1968; Yachnes et al., 1973).

The traditional image shows men not only as physically stronger than women but also as emotionally more stable (Roberts & Roberts, 1973; Yachnes et al., 1973). They do not become excited in minor crises or have their feelings easily hurt (Rosenkrantz et al., 1968). Furthermore, several authors (Balswick & Peek, 1971; Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970; Goldberg, 1973; Roberts & Roberts, 1973; Yachnes, et al., 1973) have agreed that the male stereotype is unemotional or unable to express his emotions. In discussing the traditional male's inability to express emotions toward women, Balswick and Peek (1971) identified two ways of looking at this inability: (a) the male is unable to express emotions because he is void of emotional feelings toward women or (b) the male has been socialized to believe that expressing emotions is a sign of weakness (or femininity) and therefore something that must be avoided.

From the traditional viewpoint, a man's attractiveness depends on his earning capacity, the status of his profession, and the amount of power he has (Goldberg, 1973). Therefore, it is understandable that his major sphere of interest revolves around his work (Jacklin & Mischel, 1973; Podell, 1966; Rosenkrantz et al., 1968; Yachnes et al., 1973). Because of the emphasis on strength, physical exertion, and competition, the traditional male also tends to be interested in sports and outdoor activities (Goldberg, 1973; Jacklin & Mischel, 1973; Rueger, 1973). Thus,

the traditional image of a man holds that he is primarily interested in his occupation, sports, and outdoor activities while the female stereotype is interested in the home and children.

According to the traditional view, the man's role in the family is that of provider and protector (Balswick & Peek, 1971). Thus the traditional male seems to take an inactive role in rearing children and in other homemaking activities, except when his physical strength or authority is needed.

The Images of Men and Women Reflected in the Mass Media

How the images of men and women have been portrayed in the mass media has been the focus of several research studies (Courtney & Lockeretz, 1971; Dominick & Rauch, 1972; Flora, 1971; Johns-Heine & Gerth, 1949; Katzman, 1972; Saenger, 1955; Wagner & Banos, 1973). The forms of the mass media analyzed in these studies were magazine fiction, comic strips, television soap operas, television commercials, and magazine advertisements.

Magazine Fiction

In an early study, Johns-Heine and Gerth (1949) analyzed the social values that were present in magazine fiction between 1921 and 1940. According to these researchers, the traditional image of a woman as an emotionally dependent person was emphasized in women's magazine fiction where love was viewed as a major reward for a woman. In order to receive this reward, all a woman had to do was create a successful marriage and a happy home. In the process of magnifying woman's traditional role of dependency on the male for security, identification, and love, women's magazine fiction conveyed the attitude that men held a higher status than women.

In a more recent study of magazine fiction, Flora (1971) analyzed and compared the images of women in the magazine fiction in the United States and Latin America. Supporting the conclusions of Johns-Heine and Gerth (1949), Flora also found passivity and dependence to be desirable characteristics for females while the same characteristics were undesirable for men. In the middle-class magazine fiction of the United States, ineffectuality was more acceptable for females than for males. Similarly, out of all the groups of magazine fiction analyzed, middle-class magazine fiction in the United States was the least likely to show heroines working for pay.

According to Flora (1971), a recurring theme showed a proud, ambitious female learning that she can achieve happiness only by accepting the role of a passive helper to a proud, ambitious male. For example, almost all of the heroines who were socially mobile achieved higher status only through marriage rather than by their own efforts. Throughout the analysis the only area of female strength in United States magazine fiction was that of plot resolution where women were more likely than men to take the initiative in resolving a problem.

Although the behaviors of men were not the major focus of the study by Flora (1971), the researcher concluded that men were portrayed in magazine fiction as being effectual in handling their problems even if they were less likely than women to take the initiative in resolving a difficulty. Male dependence was rarely shown and, as stated above, this dependence was much less acceptable than female dependence. Men were expected to be proud, ambitious, and sometimes errant people who were able to offer women monetary, social, and psychological support. Thus, men seemed to be

limited in their responses to problem situations by being expected to show strength at all times.

Comic Strips

Comic strips were the subject of a study by Saenger (1955). Through content analysis he found that women were primarily concerned with romantic love and their social life while men were most interested in business. However, perhaps Saenger's most interesting findings were those in regard to the differences in the characteristics of married and single men.

According to Saenger (1955), single men in comic strips seemed to fit the traditional male stereotype by being adventurous, masterful, aggressive, logical, and more intelligent than their female companions. They tended to take the initiative in solving problems and usually succeeded in getting the results they wanted. However, unlike bachelors, married men in the comic strips were weaker, less able to cope with life's problems, more irrational, and less logical than their wives. Although husbands were active in trying to solve their problems and usually took the initiative to do so, they were less successful than their wives in achieving the desired outcomes.

The few single women who were shown in the comic strips analyzed by Saenger (1955) tended to be submissive, adaptable, and flexible. Married women, however, seemed dominant, aggressive toward their husbands, able to cope with life's problems, and more intelligent than their husbands. Thus, Saenger's analysis indicated that women portrayed in comic strips gained strength through marriage while men lost strength through this institution.

Television Soap Operas

The images portrayed by men and women in television soap operas were

studied by Katzman (1972). Supporting Saenger's (1955) findings, Katzman found that men and women have different areas of interest, as evidenced by their topics of conversation. Men on the television soap operas tended to discuss their professional relationships, business matters, and deviant behavior while women on the shows tended to discuss family and romantic relationships, health, domestic matters, and issues of small talk.

Katzman (1972) also found that the area of work was an important differentiator between men and women. The percent of women in the soap operas who worked for pay was about the same as in the general population. However, the majority of women were shown in their traditional roles of nurse, secretary, and housewife while fewer than five percent were shown as professionals. On the other hand, over half of the men in the soap operas were shown as professionals—doctors, lawyers, and businessmen. Television Commercials

Although a number of studies have been recently conducted to identify the roles of men and/or women in television commercials, most appear to be methodologically questionable or simply not available for review. Therefore, only the study reported by Dominick and Rauch (1972) will be discussed here.

Dominick and Rauch (1972) analyzed the images of women portrayed in 1971 television commercials. Through their analysis of the images portrayed by women, they indirectly analyzed the images of men in the same commercials. The findings of this study indicated that men, much more frequently than women, were portrayed as authority figures. In comparing the roles portrayed by men and women in commercials, the researchers found that the sex of the adult or adults shown in an advertisement was significantly associated with the product being advertised. Men were most often shown

in commercials for male cosmetics, cars, and automotive supplies while women were shown in commercials for female cosmetics and personal hygiene products. Similarly, Dominick and Rauch found differences in the interests and occupations of the men and women shown in the commercials they analyzed. Women were most frequently shown in a home setting and as housewives while men were shown in outdoor and business settings and in a wide range of occupations. The few women who were shown working were stewardesses, secretaries, cooks, or domestics.

Magazine Advertisements

Two groups of researchers (Courtney & Lockeretz, 1971; Wagner & Banos, 1973) analyzed the roles portrayed by men and women in magazine advertisements. In their research, Courtney and Lockeretz (1971) analyzed advertisements appearing in April 1970 issues of seven general readership magazines. In the advertisements selected, few women were shown in work roles. Furthermore, these women were limited to participation in only four occupations—entertainment, nonprofessional white collar, blue collar, and sales. On the other hand, men not only were shown more frequently in work roles but they also appeared in a much wider variety of occupations. After comparing the roles that were portrayed by men and women in the advertisements selected, Courtney and Lockeretz concluded that the magazines sampled did not present a full view of the variety of roles women actually portray in American society.

Analyzing magazine advertisements that were published 20 months later than those examined by Courtney and Lockeretz, Wagner and Banos (1973) conducted a study to find out if there had been any changes in the roles portrayed by women in the interim since 1970. Using the same methodology as

Courtney and Lockeretz, Wagner and Banos found that more women in magazine advertisements were shown in work roles than in the initial study and that they appeared to be portrayed in slightly more responsible positions. Similarly, the researchers found that there also had been an increase in the percent of women shown in decorative (inactive) roles. Although no other changes were found, the researchers concluded that "there has been a substantial improvement in emphasizing women's expanding role as a working member of society in a relatively short period of time" (p. 214).

Summary and General Hypotheses

The research reviewed above indicates that forms of the mass media including magazine fiction, comic strips, television soap operas, television commercials, and magazine advertisements have tended in the past to reflect and thereby reinforce the personality traits, spheres of interest, and activities that constitute the traditional images or stereotypes of men and women in American society. However, since the resurgence of the feminist movement in the early sixties, an almost continuous procession of critics have reprehended these images and argued that they should be changed so that they are more accurate reflections of the roles of men and women in society. Such criticisms apparently are manifestations of the stress that is a result of the imbalance between the images that are mirrored in the mass media and the images that are transmitted by the family and other subsystems involved in the socialization process. However, while the criticisms as indicants of stress have been abundant, there has been an almost complete absence of research which furnishes any evidence as to whether the images reflected in the mass media have changed or remained essentially the same during the past fifteen years.

There appears to be a need for such research as one step in the process of finding out whether the continued criticisms that have been made against the mass media are legitimate indicants of stress and imbalance between the subsystems involved in the socialization process. Ideally, research of this type would encompass all of the forms of the mass media. However, because of limited resources, the investigation reported in the following chapters of this thesis was confined to an examination of the images of men and women as they are portrayed in magazine advertisements, only one of the forms of the mass media to which the American public is exposed.

As stated in the preceding section, Courtney and Lockeretz (1971) completed a 1970 pilot study to identify the stereotypes of women that were mirrored in magazine advertisements published at that time. Less than two years later, Wagner and Banos (1973) conducted a follow-up analysis to find out if there had been any changes in the roles portrayed by women in the interim since 1970. However, both studies were based on relatively limited samples of advertisements and no formal hypotheses were tested in either study. Furthermore, neither study provided information about the images that were portrayed by men and women in magazine advertisements that appeared prior to the current trend toward equality of the sexes in American society. Therefore, the general objectives of the research reported in the following chapters of this thesis were to improve the methodology used in previous analyses of the images of men and women in magazine advertisements and to find out whether these images have changed in response to the criticisms made during the current movement to achieve equality for men and women.

One bench mark that may be used in analyzing the effects associated with this movement is 1963--the year the book by Betty Friedan, The Feminine Mystique, was published. This book has acquired special significance because of its wide popularity and notoriety in the resurgence of the feminist movement during the sixties. Although the content of the book was not necessarily well-documented or supported by other advocates of female or human liberation, the book was widely read and accepted while earlier attempts to stir the conscience of America were not. According to historian Sochen (1973), Friedan's book "was a popular success; within a year, 65,000 hardcover copies and 700,000 paperback copies had been sold. Although her solution to the woman's dilemma was not materially different from the one advocated by Mirra Komarovsky in 1953 or Pearl Buck, for that matter, in 1941, women seemed to be more receptive to this subject in 1963" (p. 239). Therefore, for the purposes of this study, 1963 was used as the division between the periods when traditional images of men and women were generally accepted and when they recently became seriously challenged.

It follows from the theory reviewed above that the images of men and women reflected in magazine advertisements should be congruent with those that are transmitted by the family and other subsystems involved in the socialization process. Research focusing on other forms of the mass media indicates that the magazine advertisements published prior to the latest resurgence of the feminist movement probably reflected what are called the traditional images of men and women. However, the continued criticism of the images mirrored in this medium during the past fifteen years indicates that traditional sex stereotypes are still

being portrayed in magazine advertisements and that they are not congruent with the images transmitted and accepted by other subsystems of society. Therefore, using 1963 as a bench mark, the following general hypotheses were used as the basis for this study:

- (1) Magazine advertisements which appeared prior to 1963 reflected traditional images of men and women in American society.
- (2) Advertisements in recently published magazines mirror the same traditional images of men and women that were reflected in magazine advertisements prior to 1963.

PROCEDURES

The overall objective of this study was to investigate whether magazine advertisements appearing prior to 1963 reflected traditional images of men and women while advertisements appearing in recently published magazines reflect changing images of men and women in American society. To achieve this objective, specific hypotheses were developed and tested using data collected from a sample of magazine advertisement. Therefore, this chapter describes (a) the specific variables that were selected and operationally defined, (b) the specific hypotheses that were developed in the process of selecting the variables used, (c) the procedures used in selecting samples of magazine advertisements and analyzing these ads, (d) the resulting samples, and (e) the statistical techniques used to test the hypotheses.

Selection and Definition of Variables

Before specific hypotheses could be developed and tested in this study, variables had to be selected and operationally defined. How these variables were chosen and subsequently defined is explained in this section.

Year of Publication

Although phrased somewhat differently, the overall objective of this study was to determine if advertisements in recently published magazines mirror the same traditional images of men and women that were reflected in magazine advertisements prior to 1963. Since it was not feasible to examine all magazine ads appearing in print before and after 1963, one year was chosen from each period.

The two years selected were 1962 and 1973. The year 1962 was selected because it represents the end of the period during which the traditional

images of men and women were effectively unchallenged. Data collection for this study was scheduled for the summer of 1974. Therefore, 1973 was chosen because it was the most recent period for which an entire year of magazine advertisements was available.

Sex Composition

Since the general objective of this study was to examine the images of men and women reflected in magazine advertisements, ads rather than the men or women in the ads were selected as the units of analysis. In order to permit analysis of each advertisement, the following three categories were used to describe the sex composition of ads used in the study. These categories were (a) male only, (b) female only, and (c) both. "Male only" was used to describe the sex composition of advertisements showing one or more men but no women. Similarly, "female only" was used to describe ads in which one or more women but no men appeared. When the third category was used at least one man and one woman appeared in the advertisement.

Product Advertised

One dimension that has been used to distinguish between the traditional images of men and women is their spheres of interests. In this study the products advertised were used as indicators of spheres of interests of the men and women pictured in the advertisements for these products. To simplify analysis, all products advertised were grouped into the following twelve mutually exclusive categories adapted from those used by Courtney and Lockeretz (1971).

<u>Personal products</u>. Personal products included all personal grooming products, beauty aids, medications, medical equipment, writing supplies, and personal care appliances. Examples of these are toothpaste, soap,

hand lotion, shaving cream, powder, deodorants, cleansing tissues, toilet tissue, shampoo, cream rinse, cologne, cosmetics, hair dryers, electric shavers, drugs, pens, and stationery.

Recreation products. Recreation products included products directly related to all leisure activities except travel. Examples of these products are movies, flowers, recreation equipment, small pleasure boats, cameras, film, stereos, radios, televisions, books, magazines, and newspapers for personal use.

Housekeeping supplies and services. Housekeeping supplies and services included equipment, services, and other products used for household cleaning tasks. Detergents, cleansers, wood polish, mops, paper towels, sponges, vacuum cleaners, and drycleaners are a few examples.

Home furnishings. Home furnishings included everything from silverware, dishes, and cooking utensils to linens, draperies, furniture, and home appliances such as refrigerators, freezers, and ranges. This category also included barbecue equipment, telephones for home use, and the services and equipment used in moving and storing household goods.

Home maintenance and repair products. Home maintenance and repair products included those used in the improvement and upkeep of a house and yard. Examples of products in this category are garden tools, lawn mowers, ladders, carpentry tools, electrical tools, paint, shingles, and siding.

Food products. Food products included all foods and beverages except alcoholic ones, food storage items such as freezer containers and food wrap, and pet food. Ads for beef and dairy products in general that are sponsored by organizations such as Iowa Beef Producers were also included in this group.

Tobacco and liquor products. Tobacco and liquor products included those commonly associated with the use or consumption of tobacco and liquor. Examples of items included in this category are cigarettes, tobacco, pipes, pipe accessories, alcoholic beverages, mixers, and bar accessories.

Clothing products. Clothing products included all kinds of wearing apparel, shoes, jewelry, and wigs.

Transportation products. Transportation products included not only automobiles, trucks, and other motor vehicles except small pleasure boats but also other products related to travel. Some of these products are luggage, travel accessories, trailers, vacations and tours, motels, hotels, railroads, and airlines.

Financial and personal business products. Financial and personal business products included those associated with the financial concerns of a family or an individual. Ads for life insurance, homeowner's insurance, other family-related insurances, banks, credit unions, loans, and the yellow pages are some examples.

Organizations and educational products. Organizations and educational products included "goodwill" messages sponsored by nonprofit, charitable, research, and military organizations; memberships in such organizations; and career and educational opportunities offered by colleges, trade schools, and correspondence courses of study.

Industrial products. Industrial products included products that are purchased by business in the process of producing other goods and services. Farm machinery and supplies, computers, telephones for business use, and business letterheads are a few examples of products in this category.

Roles Portrayed

The traditional images of men and women have shown the sexes in quite varied but separate roles in American society. Because roles have been used so frequently to differentiate between the traditional images of men and women, the role portrayed by each man or woman in a magazine advertisement was used as an indicant of the image of that person that the ad was reflecting.

For the purposes of this study the following seven adult roles were defined so that any man or woman shown in an ad could be classified into one category or another. Procedurally, this was a practical approach because any particular person appearing in a magazine advertisement usually would be depicted in only one role since a single photograph or drawing normally captures only one instant of time.

Female homemaker role. The female homemaker role was defined by the following activities and spheres of interest that traditionally have been associated with the woman in the family: (a) preparing, freezing, and canning food; (b) serving meals and snacks; (c) setting and clearing the dining table; (d) washing, drying, folding, and putting away clothes and linens; (e) scrubbing floors, dusting furniture, and other indoor cleaning tasks; (f) feeding and grooming pets; (g) child care activities such as feeding, bathing, and clothing children; (h) shopping for food, clothes, and other consumer goods except for cars and products related to outdoor home maintenance; (i) performing the "home nurse" function; (j) interacting with children; (k) participating in community activities such as the P.T.A. and Cub Scouts; (l) flower and vegetable gardening; (m) taking care of personal and family correspondence; (n) answering the telephone;

(o) supervising moves; (p) shopping for gifts; (q) making out guest and gift lists; (r) sewing; and (s) interior decorating.

Male homemaker role. The male homemaker role was defined by the following homemaking activities that traditionally have been performed by a man: (a) maintaining and repairing appliances, sports equipment, and the home structure; (b) shopping for sports equipment and equipment related to home maintenance and repair; (c) caring for the lawn; (d) indoor and outdoor housepainting; (e) carrying and loading heavy items such as luggage and furniture; (f) maintaining and repairing motor vehicles; (g) taking out the trash; (h) making decisions about large, expensive purchases and repairs; (i) providing financial security for the family through the purchase of insurance and planning the family's savings and investment programs; (j) maintaining household accounts and banking; and (k) mixing and serving alcoholic beverages.

Personal role. The personal role was defined as the active role in which a person is involved in the care of himself or herself. Operationally, this role was defined by activities such as using beauty aids, taking medicine, sleeping, and bathing.

Recreation role. The recreation role was defined by activities performed for pleasure or to re-create oneself. Operationally, this role was defined by the following activities: (a) reading books, magazines, and newspapers; (b) reading letters; (c) watching television; (d) watching or participating in athletic activities; (e) working on hobbies and crafts;

- (f) dining out; (g) greeting guests; (h) participating in parties;
- (i) talking with friends and relatives; (j) relaxing; (k) playing with pets;
- (1) walking pets; (m) dating; and (n) showing affection to others.

Work role. The work role was defined by the on-the-job activities performed by persons employed in private businesses, nonprofit organizations, and government agencies including the branches of the military service.

These activities encompassed coffee breaks and the representation of organizations at conferences and conventions associated with employment.

This role also included situations where a person was shown as an employee or proprietor although the person was not performing any of the activities associated with his/her employment. For example, a man who was labeled as a company president in a magazine advertisement was considered to be shown in relation to his work even though he was not shown at his job.

Decorative role. The decorative role was defined as an inactive role.

In this role, a person was simply shown with the product advertised. At most, a person in this role added glamour, beauty, or a testimonial to a product advertised. Typically, persons classified in the decorative role were models or people giving testimonials and not representing other roles.

Also, when it was not possible to discern the reason a person was shown in a motor vehicle as either the driver or a passenger, the person was classified as representing the decorative role.

Decorative family role. The decorative family role was defined to include situations in which a man and/or woman was shown with children but was otherwise in a decorative, inactive role. That is, this role was used in the special case when adults in a magazine advertisement were shown not doing anything other than being members of a family.

Specific Hypotheses

Given the operational definitions of variables presented above, specific hypotheses were developed.

Statement of Specific Hypotheses

Stated in null form, the specific hypotheses subjected to empirical testing in this study were as follows:

Hypothesis 1. The sex composition of magazine advertisements is not significantly associated with the type of product advertised in 1962 or 1973.

Hypothesis 2. Between 1962 and 1973 there was not a significant change in the sex composition of the advertisements for each type of product advertised.

Hypothesis 3. There was not a significant change in the roles portrayed by men or women between 1962 and 1973.

Discussion of Specific Hypotheses

Since observers have continued to criticize the advertising industry for its stereotyping of men and women, it was expected that the images of men and women in magazine advertisements in 1973 would not have changed significantly from the images reflected in magazine ads in 1962. In both years it was expected that the so-called traditional images of men and women would be mirrored in the magazine advertisements sampled.

According to the traditional images of the sexes in our society, men and women have different spheres of interest. Magazine advertisements may reflect the different spheres of interest by showing men in advertisements for products typically used or purchased by men and by showing women in ads for products usually used or purchased by women. Advertisements for products typically used by both men and women reflect these common spheres of interest by showing both sexes in the ads. Therefore, it was expected

that the first null hypothesis would be rejected for 1962 and 1973 magazine advertisements.

Traditionally, the spheres of interest of men have included business, mathematics, science, and the outside world in general. Therefore, it was expected that men, rather than women, would be shown most often in advertisements for products associated with these interests. Such products would logically include industrial products and products related to transportation, educational opportunities, and financial affairs including personal business.

Some products are of about equal interest and use to men and women. Such products logically include personal products, recreation products, tobacco and liquor products, and clothing. However, traditional images have essentially limited the interests of women to those revolving around their homes and families. Therefore, it was expected that women, rather than men, would be shown in magazine advertisements for products that are primarily used in the performance of homemaking activities. Such products would logically include food, home furnishings, and housekeeping supplies and services. In contrast, the traditional image of men's strength and uninvolvement in routine homemaking activities would indicate that men would only be shown in advertisements for products involved in home maintenance and repairs.

There is evidence that at least some products primarily used only by men or only by women are now being used by both sexes. At least two reasons for this were given in a report issued by the J. Walter Thompson Company (Note 1). In this report it was noted that there have been increases in (a) the number of single male homemakers living alone

or with roommates and (b) the number of household responsibilities that are shared by husbands and wives rather than being delegated to one sex or the other. For these reasons an increase in the proportion of advertisements for household-related products showing both men and women rather than one sex or the other could be expected. However, since stress in the form of criticism of advertisements has continued, it seems that there probably have not been sufficient changes in the images of men and women as indicated by the sex composition of ads for certain types of products to eliminate the criticism. Therefore, it was expected that the second null hypothesis might only be rejected for a few types of products.

As stated above, the third hypothesis tested in this study was that there was no change in the roles portrayed by men or women between 1962 and 1973. If advertisements which appeared prior to 1963 reflected the traditional images of men and women in society, it would be expected that magazine advertisements published in 1962 portrayed men in the traditional roles of male homemaker and worker. Alternatively, 1962 magazine ads probably portrayed women in female homemaker and decorative family roles.

If societal images mirror the changes in the roles that men and women actually fulfill in society and advertisements also respond to these changes, it would be expected that there would have been a shift in the roles portrayed by men and women in magazine ads. Specifically, it would be logical to find men shown less frequently in their traditional male roles and more frequently in traditional female roles. Similarly, it would be reasonable to expect to find women shown less frequently in traditional female roles.

Again, however, the continued criticism of ads indicates that the images of men and women in ads are not yet congruent with societal images. Therefore, it was expected that in only a few cases might the third null hypothesis be rejected for roles into which men and women have been stereotyped. It was expected that the third null hypothesis would not be rejected for (a) most of the roles traditionally fulfilled by either men or women and (b) the roles that traditionally have been shared by both sexes.

Data Collection and Analysis Procedures

The specific hypotheses developed in this study were tested using data collected from a sample of advertisements that appeared in magazines in 1962 and 1973. In this section the procedures used in selecting and analyzing advertisements are described.

Definition of the Population

Ideally, the population for this research would have been all American magazine advertisements that were published in 1962 and 1973. However, because of limited time and finances, this was not possible and the population had to be limited to one that could be practically sampled. Initially, the population was limited to the most widely circulated magazines on the assumption that advertisements appearing in these magazines would be read or seen to a greater extent than would advertisements in magazines with smaller circulations.

The Magazine Publishers Association (MPA) compiles a list of the 50 leading American magazines based on the average circulation per issue reported by the Audit Bureau of Circulations. Updated at six-month

For clarity, an issue is a single edition of a magazine. The word magazine refers to the set of issues published under one name.

intervals, the MPA lists include general and farm members of the Audit Bureau of Circulations. Because of the changes that occurred in the lists between 1962 and 1973, the MPA lists for both years were obtained and used in the sampling process (see Appendix A). After the 1962 and 1973 lists were acquired, the availability of each magazine at the Iowa State University Library was determined. Finally, then, the population for this study consisted of all eligible advertisements that were published in 1962 or 1973 issues of magazines (a) listed among the 50 magazines having the highest average circulation per issue according to the Magazine Publishers Association and (b) available at the Iowa State University Library as of July 1974.

Two sets of criteria were used to define the eligibility of advertisements included in the population. Both of these sets of criteria had to be met in order for an advertisement to be eligible.

The first set of criteria related to the size and placement of the magazine advertisements. These criteria were as follows: (a) an advertisement had to be one half of one column or larger in size; (b) an ad appearing in a "shopper section" such as the shopping guide at the end of each issue of Better Homes and Gardens was not eligible; (c) an advertisement that was continuous over two or more full and consecutive pages was considered to be one advertisement; however, two or more ads for the same product which appeared in the same issue but were separated by other printed material were considered to be separate ads; and (d) any eligible ad that appeared in more than one magazine was considered eligible each time it appeared.

The second set of criteria defined the content of an advertisement which was considered as eligible. These criteria were as follows: (a) an

ad had to contain at least one black and white or color photograph of at least one adult, that is, a person who appeared to be 18 years of age or older, whose sex was clearly discernible; (b) an ad had to contain at least one adult shown at least from the neck up although a back view was acceptable if the sex of the person was clearly discernible; (c) an ad had to contain at least one adult whose full figure was at least one and one-half inches high; (d) an ad had to contain at least one adult who was not just part of a crowd in which individuals were not clearly portrayed; (e) an ad had to contain at least one adult who was shown in a human capacity; that is, people dressed as bottles, spray cleaners and the like were not considered as adults.

Selection of the Sample of Advertisements

In brief, the population defined in this study was divided into two strata or sub-populations with one stratum consisting of advertisements published in 1962 and the other consisting of advertisements published in 1973. Two-stage sampling was then used within each stratum. Within each year magazines were randomly selected at the first stage. Advertisements were then selected with equal probabilities at the second stage. The resulting sample of 1,555 advertisements consisted of 741 advertisements from 1962 and 814 advertisements from 1973.

At the beginning of the sampling process, a desired sample size of 600 advertisements was established for each stratum or year. In order to obtain this minimum sample size, an estimate of the number of eligible ads in each sub-population was needed so that the percentage of ads necessary to achieve the desired sample size could be computed.

To estimate the number of eligible ads in the 1962 sub-population,

one issue from each magazine in this stratum was randomly selected and the number of eligible advertisements counted. That number was then multiplied by the annual number of issues to estimate the total number of eligible ads appearing in that magazine in 1962. This procedure was followed for each magazine on the 1962 MPA list that was available at the Iowa State University Library (see columns 1, 2, and 3 of Table 1). The estimated total number of eligible ads in each magazine in 1962 was summed for all magazines. The resulting figure was an estimate of the total number of eligible ads in the sub-population. The same procedure was then followed for 1973.

The desired sample size was divided by the estimated total number of eligible ads in each sub-population to compute the fraction of eligible ads needed to achieve the desired sample size. For 1962 one twelfth of all of the eligible ads was needed for the sample. After that, the procedure followed was to select one third of all the magazine issues and to analyze one fourth of the eligible ads in each issue. A similar procedure was followed for 1973 except that only one fifteenth of all the eligible ads was needed to achieve the desired sample size. Therefore, for 1973 one third of all the magazine issues was selected with one fifth of the eligible ads in these issues being analyzed.

For both 1962 and 1973 one third of all of the magazine issues was selected. To determine the specific number of issues chosen for each magazine, the following procedure was used. The magazines were listed and each issue was assigned a number (see column 4 of Table 1). For example, Reader's Digest was given numbers from 1 to 12 because it was the first magazine on the list and it had 12 issues per year. A random

Table 1

List of Magazines Used in Estimating the Number of Issues and Advertisements Used in the Sampling Procedure

			1962					1973			
		ŏ	Column ^a				U	Column	๗		
Magazine	-	2	3	7	5	1	2	က	4	52	
boader o Digest	17		204	1-12	7	25	12	300	1-12	4	
Neact 3 Difest National Geographic	<u>.</u> 56		312	- 1	4	'n	12	09	-2	4	
Time	25		1300	-7	17	12	52	624	25-76	17	
Newsweek	9	52	312	77-128	18	2	53		-12	18	
U.S. News & World Report	13		9/9	₹		10	52	520	00	17	
Ebonyb						52	12		182-193	4	
Look	25	56	650	181-206	6						
Lifec	20	51	1020	207-257	17						
Saturday Evening Post	15	94	069	258-303							
Retter Homes & Gardens	15	12	180	304-315	4	54	12	288	194-205	7	
McCall's	94	12	552	316-327		2 3	12			7	
Tadies' Home Journal	13	12	156			30	12		218-229	7	
Cood Housekeeping	17	12	204	340-351	4	17	12			4	
American Home	12	10	120	352-361	က	23	12	276	242-253	7	
Darents' Magazine	18	12	216		4	œ	12			4	
Cineoth						45	12		266-277	7	
umise & Carden ^b						19	12			4	
Diarbon	17	12	204	374-385	4	23	12		290-301	4	
rayboy positrob	i			•		34	12		302-313	4	
האליטיונים						37	12	777	•	4	
Reubook						87	12	1044	6	4	
Cosmoportican Sports Illustrated ^d						6	51	459	1	17	

4	4	4	7		4	4	4	
389-400	401-412	413-424	425-431		432-443		456-467	
468	372	144	14		288	300	288	9007
12	12	12	7		12	12	12	
39	31	12	7		24	25	77	
		4		4	4	4		
•		276 386-397 4		398-409	410-421	422-433		
		276		336	84	180		7672
		12		12	12	12		
		23		28	7	1.5		
Outdoor Life ^d	Field & Stream ^d	Farm Journal	Today's Education ^D	Successful Farming ^c	Popular Science	Popular Mechanics	Mechanix Illustratedd	

 a l = estimated number of ads per issue; 2 = number of issues per year; 3 = estimated number of ads per year; 4 = numbers assigned to each magazine; 5 = number of issues in sample.

 $^{f b}$ _{This magazine was not on the 1962 MPA list.}

^cThis magazine was not on the 1973 MPA list.

 d_{Thfs} magazine was not available at the Iowa State University Library.

number table was used to locate a number between one and three to use as the starting point for choosing the issues of the magazines. For 1962 the starting point was issue number two. Every third number was then taken for each year so that one third of all the issues would be sampled. For example, in the 1962 sub-population numbers 2, 5, 8, 11, 14, 17,..., 431 were systematically chosen. These numbers were compared with the series of numbers assigned to each magazine in order to learn the number of issues of each magazine that were to be sampled. For example, since the issues of Reader's Digest had been assigned numbers one through twelve and the numbers 2, 5, 8, and 11 had been chosen, advertisements from four issues of Reader's Digest were included in the sample (see column 5 of Table 1).

After the number of issues to be sampled was known for each magazine, the particular issues to be included in the sample had to be selected. For each magazine, a random number table was used to select numbers between one and twelve corresponding to the months of the year. For example, numbers 2, 3, 9, and 11 were selected for Reader's Digest, the first magazine on the 1962 list. As a result, advertisements from the February, March, September, and November issues of this magazine were chosen to be included in the sample.

For weekly magazines, a second random number between 1 and 31 was chosen to indicate a date of publication. The issue published closest to that date was used even if it meant changing the month of the issue. For example, in using the above procedure in selecting issues of <u>Time</u>, the number 3 was initially chosen indicating that advertisements from a March issue of this magazine would be included in the sample. When a number was randomly

selected between 1 and 31, 31 was chosen indicating that the issue of <u>Time</u> that was published closest to March 31, 1973, would be used in selecting advertisements for the sample. In this case, this was the April 2, 1973, issue of this magazine.

Once issues had been selected, a random number table was used to select the first eligible advertisement in each issue that was to be included in the sample. For the 1962 sub-population, a number between 1 and 4 was selected to indicate the first eligible advertisement in a particular issue. After that, every fourth eligible advertisement in the issue was also included in the sample. In the 1973 sub-population, a number between one and five was chosen to indicate the first eligible ad to be included in the sample. After that, every fifth eligible advertisement in the issue was also selected.

The sampling procedures described above resulted in a total sample of 1,555 ads. As shown in Table 2, the 1962 sub-sample consisted of 741 ads from 19 magazines and the 1973 sub-sample consisted of 814 ads from 26 magazines. Table 2 also summarizes the relative contribution of each magazine to the total number of ads analyzed in each year. The magazines used in each year differ because of changes in circulation and availability.

Analysis of Advertisements

After an advertisement was selected to be included in the sample, the ad was analyzed and the resulting data recorded. Although the variables of interest in the study were clearly defined, the analysis of each advertisement remained a somewhat subjective task. Therefore, three persons participated in the analysis of each advertisement in an effort to reduce the bias that might have occurred if only one person had analyzed the ads.

Table 2
Sources of Magazine Advertisements in the 1962 and 1973 Sample

	1	962	19	1973		
Magazine	N	%	N	%		
Reader's Digest	31	4.2	17	2.1		
National Geographic	12	1.6	6	.7		
Time	76	10.3	60	7.4		
Newsweek	71	9.6	66	8.1		
U.S. News & World Report	55	7.4	49,	6.0		
Ebony			55	6.8		
Look	68	9.2				
Life	89	12.0				
Saturday Evening Post	50	6.7				
Better Homes & Gardens	16	2.2	32	3.9		
McCall's	43	5.8	26	3.2		
Ladies' Home Journal	32	4.3	28	3.4		
Good Housekeeping	44	5.9	28	3.4		
American Home	.10	1.3	15	1.8		
Parents' Magazine	22	3.0	11	1.4		
Sunset			30	3.7		
House & Garden			16	2.0		
Playboy	31	4.2	32	3.9		
Esquire			34	4.2		
Redbook			35	4.3		
Cosmopolitan			65	8.0		
Sports Illustrated			79	9.7		
Outdoor Life			21	2.6		
Field & Stream			26	3.2		
Farm Journal	26	3.5	9	1.1		
Today's Education			2	. 2		
Successful Farming	20	2.7				
Popular Science	15	2.0	23	2.8		
Popular Mechanics	30	4.0	23	2.8		
Mechanix Illustrated			26	3.2		
	$\overline{741}$	100.0	814	100.0		

Two of the analysts were Cynthia Davenport, Instructor in English, and Barbara Magill, Instructor in Industrial Administration. This researcher served as the third analyst and trained the other two. Once the train.nb period had been completed and the ads to be used in the sample had been chosen, the analysts independently analyzed each advertisement and recorded the following information about each ad on a code sheet (see Appendix B):

(a) the year and date of publication, (b) the title and type of magazine in which the ad appeared, (c) the page on which the ad appeared, (d) the name and type of product advertised, (e) the number of adults in the ad, (f) the sex composition of the ad, (g) the presence or absence of children, and (h) the role portrayed by each adult in the ad.

In the process of analyzing the advertisements, each product was classified by the way in which the advertiser appeared to be portraying the product. For example, telephones shown in business settings were classified as industrial products while telephones shown in home settings were considered to be home furnishings.

The role of every adult in each eligible advertisement was analyzed except when (a) an adult was a member of a crowd of people and the individual was only being portrayed as a member of such a group; (b) an adult was not shown in a human capacity; or (c) an adult appeared in a picture, on a book cover, or on a record album within the advertisement. Each adult was classified in one and only one role. When possible, the role of each adult in an eligible ad was classified by examining only the photograph in the ad. If the role was not clearly evident from the photograph, the printed material accompanying the photograph was read to find out how the advertiser intended to portray the person. If the role

could not be interpreted by examining the photograph and reading the printed material, the role of the adult was classified as "not discernible." However, this category was used to classify only 80 (2.3 percent) of the 3,548 adult roles analyzed in the sample.

Periodically, the analysts compared their independent analyses to check for consistency and accuracy. When the data recorded by the three analysts were not initially identical, the discrepancies were discussed and resolved. Mistakes in recording information were corrected. When disagreements remained, the three analysts discussed their reasons for coding an advertisement in a particular way. Discussion continued until a concensus was reached. With respect to a few advertisements, there seemed to be two or more different and legitimate interpretations of the role a particular adult was portraying in an ad. In these few cases the role of the adult under question was coded as "not discernible."

Statistical Methods of Analysis

Since the data collected in this study were primarily of the nominal type, non-parametric methods were used to test the specific hypotheses.

Simple frequency distributions were constructed and chi-square analysis was used as a test of significant differences. When the direction of a relationship was needed, the gamma statistic was used.

The data collected in this study were initially analyzed to learn the characteristics of the sample of 1,555 advertisements. In this process, it was found that there was a significant difference in the types of products advertised each year. As shown in Table 3, the greatest percentage changes between 1962 and 1973 were (a) an increase in ads for tobacco and liquor and (b) a decrease in ads for industrial products. As a result, it became

Table 3

Distribution of Advertisements

by the Type of Product Advertised in 1962 and 1973

]	962	1	973
Type of Product	N	%	N	%
Personal products	116	15.6	142	17.4
Recreation products	47	6.3	64	7.9
Housekeeping supplies & services	13	1.8	21	2.6
Home furnishings	65	8.8	77	9.5
Home maintenance & repair products	6	.8	19	2.3
Food products	51	6.9	21	2.6
Tobacco and liquor products	96	13.0	170	20.9
Clothing products	58	7.8	66	8.1
Transportation products	85	11.5	98	12.0
Financial and personal business products	36	4.9	40	4.9
Organizations and educational products	22	3.0	55	6.8
Industrial products	146 741	$\frac{19.6}{100.0}$	$\frac{41}{814}$	$\frac{5.0}{100.0}$
	x ₁₁ =	= 119.553	<u>P</u> <.	001 •

necessary to control for the type of product being advertised in later statistical analyses. Otherwise, any changes in the roles portrayed by men or women between 1962 and 1973 would have been impossible to interpret clearly.

Since the sampling procedure used in this study resulted in a sample of magazine advertisements, advertisements, rather than the adults shown in the ads, were used as the units of analysis in testing all three specific hypotheses. However, the adults shown in the sample advertisements were also used as units of analysis in testing the third hypothesis so that the patterns of roles portrayed by each sex could be explored directly. Using each adult as a unit of analysis, the distribution of roles portrayed by men in 1962 advertisements was compared to the distribution of roles portrayed by men in 1973 advertisements to determine whether there had been a significant change in the relative participation of men in each role. The same approach was used in analyzing the roles portrayed by women in the sample advertisements. This procedure was justified on the basis that the sampling method used in this study was similar to a household survey in which households are sampled and each member of the household is interviewed as a separate unit.

FINDINGS

The general objective of this study was to identify and compare the images of men and women that were portrayed in magazine advertisements published in 1962 and 1973. To achieve this objective, three specific hypotheses were developed and tested using the data collected from a sample consisting of 741 advertisements published in 1962 and 814 advertisements published in 1973. The results of this analysis are presented in this chapter.

Type of Product and Sex Composition of Ad

Stated in null form, the first hypothesis tested was: The sex composition of magazine advertisements is not significantly associated with the type of product advertised in 1962 or 1973. To test this hypothesis, each sample advertisement was classified as showing (a) only one or more women, (b) only one or more men, or (c) at least one woman and at least one man in the advertisement. As stated in the preceding chapter these classifications were labeled (a) female only, (b) male only, and (c) both male and female. These categories were then used when chisquare analysis was applied to identify whether the sex composition of magazine advertisements was significantly associated with the type of product advertised in 1962 or 1973.

Relationship in 1962 and 1973

As shown in Tables 4 and 5, sex composition was found to be significantly associated with the type of product advertised in both 1962 and 1973. As a result, it was concluded that there was a relationship between the type of product advertised and the sex composition of advertisements. Therefore, the first null hypothesis was rejected for both years.

Table 4

Sex Composition of Advertisements for Each Type of Product in 1962

Sex Composition N Male only 20 Soth male 25	Personal	The same of the same	Translation tra	Tomo	•	Pood	1-6
	A 4	Kecreation	Housekeeping	Home from tob togg	Home repair &	Food	Tobacco
	produces	produces	supplies & services	Tatursuriks	products	produces	products
	%	% N	% N	% N	% N	% N	% N
	17.2	19 40.5	0	3 4.6	4 66.7	9 17.6	35 36.5
	21.6	16 34.0	4 30.8	25 38.5	. 0	11 21.6	47 49.0
Female only 71 116	$\frac{71}{116} \frac{61.2}{100.0}$	$\frac{12}{47} \frac{25.5}{100.0}$	$\frac{9}{13} \frac{69.2}{100.0}$	$\frac{37}{65} \frac{56.9}{100.0}$	$\frac{2}{6} \frac{33.3}{100.0}$	$\frac{31}{51} \frac{60.8}{100.0}$	$\frac{14}{96} \frac{14.5}{100.0}$
			e e e e e e	Type of Product	oduct		
CIO Pro	Clothing products	Transportation products	ion Financial personal business	& Organizations & educational products	ions Industrial onal products	il Total	11
Composition N	%	% N	% N	% N	% N	N	%
Male only 27	9.95	29 34.1	18 50.0	14 63.7	7 101 69.2	279	37.7
Both male 16 & female	27.6	43 50.6	15 : 41.7	3 13.6	6 28 19.2	233	31.4
Female only 15 58	25.8	$\frac{13}{85} \frac{15.3}{100.0}$	$\frac{3}{36} \frac{8.3}{100.0}$	$\frac{5}{22} \frac{22.7}{100.0}$	$\frac{7}{0} \qquad \frac{17}{146} \frac{11.6}{100.0}$	$\frac{229}{741} \frac{30.9}{100.0}$	6,0
*2;	$\frac{2}{x_{22}} = 236.516$.516 p <.001	101				

Table 5

Sex Composition of Advertisements for Each Type of Product in 1973

				Type of Product	oduct		
	Personal products	Recreation products	Housekeeping supplies &	Home furnishings	Home repair & maintenance	Food products	Tobacco & liquor
Sex Composition	% N	% N	services N %	% N	products N %	% N	products N %
Male only	21 14.8	32 50.0	0	12 15.5	15 78.9	4 19.0	50 29.4
Both male & female	35 24.6	15 23.4	1 4.8	36 46.8	4 21.1	6 28.6	97 57.1
Female only	86 60.6 142 100.0	$\frac{17}{64} \frac{26.6}{100.0}$	$\frac{20}{21} \frac{95.2}{100.0}$	$\frac{29}{77} \frac{37.7}{100.0}$	0 100.0	$\frac{11}{21} \frac{52.4}{100.0} \frac{1}{1}$	23 13.5 170 100.0
				Type of Product	oduct		
	Clothing products	Transportation products	ion Financial personal business	حه	ions Industrial onal products s	il Total	
Sex Composition	% N	% N	products N %		% N	% N	
Male only	18 27.3	39 39.8	27 67.5	37 67.3	3 31 75.6	286 35.1	-
Both male & female	15 22.7	45 45.9	9 22.5	13 23.6	8.6 4 9.8	280 34.4	7
Female only	$\frac{33}{66} \frac{50.0}{100.0}$	$\frac{14}{98} \frac{14.3}{100.0}$	4 10.0	$\frac{5}{55} \frac{9.1}{100.0}$	$\frac{1}{0}$ $\frac{6}{41}$ $\frac{14.6}{100.0}$	248 30.5 814 100.0	vio.
	$x_{22}^2 = 289.316$	۱ ۵	<.001				

Advertisements for a particular type of product were interpreted as being associated with one sex composition category if 40 percent of the ads were classified in that category. Applying this criterion to the data summarized in Tables 4 and 5, it was found in 1962 and 1973 that men alone were associated with ads for different types of products than women alone were. In both years men alone were associated with ads for (a) recreation products, (b) home maintenance and repair products, (c) financial and personal business products, (d) organizations and educational products, and (e) industrial products. However, in 1962 and 1973 women alone were associated with ads for (a) personal products, (b) housekeeping supplies and services, and (c) food products. Both men and women were associated with ads for (a) tobacco and liquor products and (b) transportation products in 1962 and 1973.

There were only three differences in the sex composition of ads between 1962 and 1973. First, men alone were associated with ads for clothing products in 1962 while women alone were associated with them in 1973. Second, women alone were associated with ads for home furnishings in 1962 while both men and women were associated with them in 1973. Third, men alone and both men and women were associated with ads for financial and personal business products in 1962 but only men alone were associated with them in 1973.

Change in Relationship between 1962 and 1973

Stated in null form, the second hypothesis tested was as follows:

Between 1962 and 1973 there was not a significant change in the sex

composition of the advertisements for each type of product. Chi-square

analysis was used to identify whether the sex composition of magazine ads

for products in each of the twelve categories was significantly associated with the year the ads were published. A summary of the results of these analyses is presented in Table 6.

The chi-square test of independence could not be applied to the data for four of the product categories in Table 6 because more than 20 percent of the cells in those frequency distributions had expected values less than five. The four product categories not analyzed were (a) housekeeping supplies and services, (b) home maintenance and repair products, (c) financial and personal business products, and (d) organizations and educational products. Of the remaining eight categories, only two showed a significant difference in the sex composition of the advertisements published in 1962 and those published in 1973.

As shown in Table 6, the sex composition of the ads for home furnishings was significantly associated with the year of publication. Between 1962 and 1973 there was an increase in the proportion of ads for home furnishings which showed men alone or both men and women while there was a decrease in the proportion of ads showing only women. Similarly, for clothing products the sex composition of the ads was significantly associated with the year of publication. Between 1962 and 1973 there was an increase in the proportion of advertisements showing only women and a decrease in the proportion of ads showing men alone or both men and women. Therefore, the second null hypothesis was rejected for advertisements for home furnishings and clothing products. On the other hand, the second null hypothesis was accepted for the other six categories tested. Thus, the conclusion drawn was that there was no change in the sex composition of the ads for these products between 1962 and 1973.

Table 6

Changes between 1962 and 1973 in the Sex Composition of Advertisements for Each Type of Product

				Direction	of Change
Type of Product x	value	P	Conclusion	Increase	Decrease
Personal products	.51	.77	Accept H		
Recreation products	1.64	.43	Accept H		
Housekeeping supplies & services ^a	-	-	-		
Home furnishings	7.39	.02	Reject H	Male only Both male & female	Female only
Home maintenance & repair products ^b	-	-	-		
Food products	.51	.77	Accept H		
Tobacco & liquor products	1.75	.42	Accept H		
Clothing products	8.10	.02	Reject H _o	Female only	Male only Both male & female
Transportation products	.63	.73	Accept H		
Financial & personal business products ^c	-	-	-		

Female only was so predominant that 66 percent of the cells in the table had expected values of less than five.

*Bale only was so predominant that 83 percent of the cells in the

Male only was so predominant that 83 percent of the cells in the table had expected values of less than five.

^CThere were so few ads with female only that 33 percent of the cells in the table had expected values less than five.

Table 6 (Continued)

				Direction	of Change
Type of Product	x^2 value	<u>P</u>	Conclusion	Increase	Decrease
Organizations & educational pro	ducts ^d -	_	-		

d_{There} were only 22 ads in 1962 and so many ads showing males only that 33 percent of the cells in the table had expected values less than five.

The Roles Portrayed by Men and Women in Magazine Advertisements

Stated in null form, the third hypothesis tested was as follows:

There was not a significant change in the roles portrayed by men or

women between 1962 and 1973. To test this hypothesis, two different

approaches were used. In both approaches the advertisements were divided

into the twelve product categories used throughout this study and each

group of advertisements analyzed separately. Also, in both approaches

the roles portrayed by men were analyzed separately from the roles

portrayed by women. The only difference between the two approaches was

the unit of analysis used. In the first approach, the 1,555 sample

magazine advertisements were used as the units of analysis. In the

second approach, the 3,548 men and women that were shown in the sample

advertisements were used as the units of analysis.

Ads as Units of Analysis

Tables 7 and 8 summarize the results of the approach using the sample advertisements as the units of analysis. Distributions like those shown in Table 9 were constructed for each product type to show (a) the number and percent of advertisements in which at least one man portrayed a particular role in 1962 and in 1973 and (b) the number and percent of advertisements in which no man was shown portraying that role. Since there were twelve product categories and seven defined roles, there was a total of 84 such tables for men. Similarly, 84 distributions like those shown in Table 10 were constructed for women.

Chi-square analysis was then used to find out if there was a significant difference between the advertisements appearing in 1962 and 1973. When 20 percent or more of the cells in a particular table had

Table 7

Changes between 1962 and 1973 in the Roles Portrayed

by Men in Advertisements for Each Type of Product

		x ₁ ²		
Type of Product ^a	Role	value	P	Conclusionb
Personal products	Personal	.16	.69	
	Recreation	2.71	.09	
	Work	2.69	.10	
	Decorative	1.25	. 26	
Recreation products	Recreation	.01	.92	
	Work	•75	.39	
Home furnishings	Recreation	.07	.79	
	Male homemaker	.00	.96	
	Work	. 56	•45	
	Decorative	2.55	.11	•
	Decorative family	1.48	.22	
Tobacco & liquor	Recreation	4.50	.03	Reject H _o
products	Work	1.37	. 24	· ·
	Decorative	.00	.95	
Clothing products	Recreation	1.57		
	Work	8.43	•	Reject H _o
	Decorative	• 50	.48	
Transportation	Recreation	.25	.62	
products	Male homemaker	6.32 ^c		Reject H _o
	Work	.48	•49	
	Decorative	.00	.9 5	
Financial & personal	Male homemaker	.00	.96	
business products	Female homemaker	•45	• 50	
	Work	.01	.93	
	Decorative	3.44	.06	

^aA product category and role were omitted when 25 percent or more of the cells in the 2 by 2 table had expected values less than five.

bunless otherwise noted, the null hypothesis was accepted.

c_{In this 2 by 2 table, one cell had an expected value of 4.6.}

Table 7 (Continued)

Type of Product ^a	Ro1e	×2 ×1 value	P	Conclusion ^b
Organizations & educational products	Work Decorative	.00 .02	.97 .89	
Industrial products	Work Decorative	.50 .47	.48 .49	

Table 8

Changes between 1962 and 1973 in the Roles Portrayed

by Women in Advertisements for Each Type of Product

		x ₁ ²		
Type of Product ^a	Role	value	P	Conclusion
Personal products	Personal	.90	.34	
	Recreation	7.18	<.01	Reject H
	Female homemaker	3.33	.07	O
	Work	.19	.67	
	Decorative	3.77	.05	
Recreation products	Recreation	4.09	.04	Reject H
	Female homemaker	.29	.59	G
	Work	8.03	<.01	Reject H
	Decorative	.27	.61	v
Housekeeping supplies	Female homemaker	.00	.95	
& services	Decorative	.01	.92	
Home furnishings	Personal	.19	.66	
5	Recreation	.18	.67	
	Female homemaker	16.71	<.01	Reject H
	Decorative	.02	.89	0
	Decorative family	.12	.73	
Food products	Female homemaker	1.45	.23	
Tobacco & liquor	Recreation	1.91	.17	
products	Decorative	.01	.94	
Clothing products	Recreation	.09	.77	
•	Decorative	.56	.45	
Transportation	Recreation	.10	.91	
products	Work	.95	.33	
-	Decorative	.03	.86	
	Decorative family	.01	.92	
Financial & personal business products	Female homemaker	.03	.87	

^aA product category and role were omitted when the role was not used or when 25 percent or more of the cells in the 2 by 2 table had expected values less than five.

bunless otherwise noted, the null hypothesis was accepted.

Table 8 (Continued)

Type of Product ^a	Role	2 ×1 value	<u>P</u>	Conclusion
Organizations & educational products	Work	.60	.44	
Industrial products	Female homemaker Work Decorative family	.06 1.83 .01	.81 .18 .92	

Table 9

Significant Changes between 1962 and 1973 in the Roles

Portrayed by Men in Advertisements for Certain Types of Products

	1	962		1	L973
	N	%		N	%
Tobacco ar	nd Liquor	Product	s		
Ads showing no men in recreation role	55	57.3		73	42.9
Ads showing at least one	41	42.7		97	57.1
man in recreation role	96	100.0		170	100.0
_	x ₁ ² =	4.50	<u>p</u> <.05	Reje	ect H _o
Cloth	ning Prod	ucts			
Ads showing no men in work role	44	75.9		63	95.5
Ads showing at least one	14	24.1		3	4.5
man in work role	58	100.0		66	100.0
	x ₁ ² =	8.43	<u>p</u> <.01	Re.	ject H _o
Transpor	rtation P	roducts			
Ads showing no men in male homemaker role	76	89.4		97	99.0
Ads showing at least one	9 ^a	10.6		1	1.0
man in male homemaker role	85	100.0		98	100.0
	$x_1^2 =$	6.32	p <.01	Re	ject H _o

^aThis cell has an expected value of 4.6; therefore, the results should interpreted with caution.

Table 10

Significant Changes between 1962 and 1973 in the Roles

Portrayed by Women in Advertisements for Certain Types of Products

	· · · · · · · · · · · · · · · · · · ·				
	1 N	962 %		N	L973 %
Pers	onal Pro	ducts			
Ads showing no women in recreation role	107	92.2	· · · · · · · · · · · · · · · · · · ·	113	79.6
Ads showing at least one	9	7.8		29	20.4
woman in recreation role	116	100.0		142	100.0
	$x_1^2 =$	7.18	<u>p</u> <.01	Reje	ect H
Recre	ation Pr	oducts			
Ads showing no women in recreation role	35	74.5		58	90.6
Ads showing at least one	12	25.5		6	9.4
woman in recreation role	47	100.0		64	100.0
	$x_1^2 = 6$	4.09	p <.05	Rej	ect H _o
Recre	ation Pr	oducts		······	
Ads showing no women in work role	47	100.0		52	81.3
Ads showing at least one	0	0.0		12	18.7
woman in work role	47	100.0		64	100.0
•	$x_1^2 =$	8.03	<u>P</u> <.01	Rej	ect H _o

Table 10 (Continued)

*	N	.962 %		1 N	.973 %
Home	e Furnish	nings			-
Ads showing no women in female homemaker role	28	43.1		60	77.9
Ads showing at least one woman in female homemaker	37	56.9		17	22.1
role	65	100.0		77	100.0
·	x ₁ ² =	16.71	<u>p</u> <.001	Reje	ect H _o

expected values of less than five, the results of the chi-square analysis were not recorded in Tables 7 and 8. The one exception was the case in which the chi-square value was significant at the .01 level and the expected value of the cell in question was 4.6 (see the third section of Table 9). Thus, 29 distributions were analyzed.

As shown in Table 7, only three of the 29 distributions subjected to chi-square analysis showed significant changes between 1962 and 1973 in the roles portrayed by men in advertisements. First, there was a significant increase between 1962 and 1973 in the percent of tobacco and liquor ads showing men in a recreation role. Second, there was a significant decrease in the percent of advertisements for clothing that showed men in a work role. Third, between the two years there was a significant decrease in the percent of ads for transportation products that showed men in the role of a male homemaker. The data for these three cases are presented in Table 9.

As shown in Table 8, only four of the 26 distributions subjected to chi-square analysis showed significant changes between 1962 and 1973 in the roles portrayed by women in advertisements. First, between 1962 and 1973 there was a significant increase in the percent of advertisements for personal products that showed women in a recreation role. Second, there was a significant decrease in the percent of ads for recreation products that showed women in a recreation role. Third, there was also a significant increase in the percent of recreation advertisements that showed women in a work role. Fourth, a significant decrease in the percent of home furnishing ads showing women in a female homemaker role occurred between 1962 and 1973. The data for these four cases are

presented in Table 10.

Adults as Units of Analysis

As stated above, the roles of adults portrayed in magazine advertisements in 1962 and 1973 were also analyzed using the men and women in these ads as the units of analysis. Distributions like those shown in Table 15 in Appendix C were constructed for each product type to show the number and percent of men in 1962 and in 1973 that were shown in each of the seven roles defined in this study. Distributions of the same type were constructed for women (see Table 16 in Appendix C). Within each distribution, roles were combined when necessary so that the expected frequencies were less than five in no more than 20 percent of the cells. However, for some products, the expected frequencies were less than five in more than 20 percent of the cells even after role categories were combined as much as possible. For men, these products were housekeeping supplies and services, home maintenance and repair products, and food products (see Table 15 in Appendix C). For women, these products were home maintenance and repair products and organizations and educational products (see Table 16 in Appendix C).

Chi-square analysis was used when possible to find out if there was a significant change from 1962 to 1973 in the distribution of major roles portrayed by each sex within each product category. The results of these analyses are summarized in Tables 11 and 12. As shown in Table 11, significant changes in the distributions of roles portrayed by men were found in ads for personal products, home furnishings, clothing products, transportation products, organizations and educational products, and industrial products. As shown in Table 12, there were significant changes

Table 11

Significance and Direction of Change between 1962 and 1973 in the Distribution of Roles Portrayed by Men in Advertisements for Different Types of Products

Type of Product	x value	d.f.	Level of significance	Direction of Change for Each Role $\frac{a}{1}$ $\frac{1}{2}$ $\frac{4}{3}$ $\frac{5}{4}$ $\frac{6}{5}$ $\frac{7}{6}$
Personal products	35.02	4	10° d >	+
Recreation products	4.37	ო	n.s.	
Housekeeping supplies & services ^b				
Home furnishings	15.43	9	< b • 05	•
Home maintenance & repair products ^b				
Food products				
Tobacco & liquor products	3.11	4	n.s.	
Clothing products	19.34	ю	< P . 001	+
Transportation products	10.27	7	< ₽ .05	
Financial & personal business products	6.27	7	n.s.	

	•
• 05	• 05
	50∙ व >
7	2
8.42	8.45
Organizations & educational products	Industrial products

 a_1 = Personal role; 2 = Recreation role; 3 = Female homemaker role; 4 = Male homemaker role; 5 = Work role; 6 = Decorative role; 7 = Decorative family role.

b Chi-square values were not calculated because more than 20 percent of the cells had expected values of less than five.

.

Table 12

Significance and Direction of Change between 1962 and 1973 in the Distribution of Roles Portrayed by Women in Advertisements for Different Types of Products

Type of Product	x value	d.f.	Level of significance	Direction of Change for Each Role $\frac{a}{1}$ $\frac{1}{2}$ $\frac{4}{3}$ $\frac{4}{4}$ $\frac{5}{6}$ $\frac{6}{7}$
Personal products	33.10	5	P <.001	1 +
Recreation products	18.10	4	ਣ <.01	+
Housekeeping supplies & services	10.74	2	10•> ਰ	
Home furnishings	33.77	5	ਣ <.001	•
Home maintenance $\delta_{\mathbf{b}}$ repair products				
Food products	9.94	2	ਿ < •01	1
Tobacco & liquor products	6.20	က	n.s.	
Clothing products	2.45	2	n.s.	
Transportation products	7.77	က	n. S.	
Financial & personal business products	2.70	7	n. s.	

educational products Organizations &

Industrial products

4.90

n.s.

 a_1 = Personal role; 2 = Recreation role; 3 = Female homemaker role; 4 = Male homemaker role; 5 = Work role; 6 = Decorative role; 7 = Decorative family role. b Chi-square values were not calculated because more than 20 percent of the cells had expected values of less than five. in the distributions of roles portrayed by women in advertisements for personal products, recreation products, housekeeping supplies and services, home furnishings, and food products.

For each product category in which a significant change in the distribution of roles portrayed was found, further analysis was performed. Tables were developed to show the number of men portraying a particular role in each year and the number of men not portraying that role in each year. Similar tables were developed for women. Chi-square analysis was then used to find out if there had been significant changes between 1962 and 1973 in the particular roles portrayed by men and women. of this analysis are summarized in the columns denoted one through seven in Tables 11 and 12. The positive and negative signs in these columns represent the roles in which significant differences between the years were found and the direction of the changes. A plus sign in a particular role column means an increase from 1962 to 1973 in the proportion of men or women portraying that role in ads for a particular type of product compared to the proportion portraying all other roles in ads for that type of product. Similarly, a minus sign in a particular role column represents a decrease from 1962 to 1973 in the proportion of men or women portraying that role compared to the proportion portraying all other roles in ads for that type of product.

As shown in Table 11, it is evident that there were significant decreases in the proportion of men shown in work roles in advertisements for personal products, clothing products, and industrial products.

There was also a significant decrease in the proportion of men shown in

decorative family roles in advertisements for home furnishings. However, there were significant increases in the proportion of men shown in decorative roles in ads for personal products and clothing products while there was a decrease in the proportion of men shown in decorative roles in advertisements for industrial products.

As shown in Table 12, there was a significant decrease in the proportion of women shown in personal roles in advertisements for personal products but an increase in the proportion of women in personal roles in ads for home furnishings. There were significant decreases in the proportion of women shown in recreation roles in ads for recreation products and food products but an increase in the proportion of women shown in recreation roles in ads for personal products. There were significant decreases in the proportion of women shown as female homemakers in ads for personal products and home furnishings. Finally, there was an increase in the proportion of women shown in work roles in advertisements for recreation products.

INTERPRETATIONS AND CONCLUSIONS

Stress in the form of criticism has been placed on the mass media for their portrayal of stereotyped images of men and women. Within the structure-function framework, such stress indicates that there is an imbalance between the images of men and women that at least some members of society perceive to be accurate reflections of society and the images of men and women that the mass media reflect. Change or continued stress can be expected until a balance is reached. The research reported in this thesis was undertaken to furnish evidence as to whether or not the images of men and women reflected in magazine advertisements, one form of the mass media, have changed since the first serious signs of stress appeared in 1963.

Interpretations of the Findings

Based on the findings of this thesis, it seems clear that the images of men and women reflected in magazine ads in 1973 were essentially the same as the images reflected in magazine ads in 1962. In addition, the images of men and women reflected in magazine advertisements in both years were congruent with the traditional images of men and women in society. Spheres of Interest

In this study, the types of products advertised were used as indicators of the spheres of interest of men and women pictured in the ads for these products. According to the traditional images of men and women in society, men and women are differentiated by their separate spheres of interest although they do share some common spheres of interest.

From the analysis of magazine ads in 1962, the types of products that were of interest to men and women were tobacco and liquor products.

transportation products, and financial and personal business products.

However, most of the product categories in magazine ads in 1962 showed different spheres of interest for men and women. Men alone were associated with ads for recreation products, home maintenance and repair products, financial and personal business products, organizations and educational products, industrial products, and clothing products. In contrast, women alone were associated with ads for personal products, housekeeping supplies and services, food products, and home furnishings.

According to the traditional images of men in American society, a man's interests revolve around his work, sports, outdoor activities, and the protection of his family. In contrast, the traditional interests of women involve marriage, child rearing, homemaking, and volunteer and community activities. In view of the findings, it seems that magazine ads in 1962 reflected what have been described as traditional images of men and women in American society. Since magazine ads in 1973 reflected the same images with only minor changes, it can be concluded that magazine ads in 1973 reflected essentially the same traditional spheres of interest for men and women as magazine ads in 1962 did.

One of the changes between 1962 and 1973 was in the sex composition of ads for clothing products. In 1962 men alone were associated with ads for clothing products while women alone were associated with ads in this category in 1973. However, this difference apparently can be explained by the fact that there was a greater proportion of ads for women's clothing in the 1973 sample although there was not a significant increase in the size of this product category as a whole. Therefore, it is logical that women were more closely associated with the ads in this category in 1973 than they were

in 1962.

In ads for home furnishings there was a significant trend toward equality of men and women. In 1962 women alone were associated with ads for home furnishings while in 1973 both men and women were associated with ads in this category.

Although not tested, there appeared to be a reverse of this trend in ads for financial and personal business products. In 1962, 50.0 percent of the ads for financial and personal business products showed men alone while 41.7 percent showed both men and women. However, in 1973, 67.5 percent of the ads in this category showed men alone and only 22.5 percent showed both men and women. Since these changes were in opposite directions, it was concluded that magazine advertisements published in 1973 depicted essentially the same spheres of interest for men and women as ads did in 1962.

Roles of Men and Women

Since the traditional images of men and women have shown the sexes in separate roles in American society, the role portrayed by each man or woman in a magazine ad was used as an indicant of the image of that person the ad was reflecting. Two different methods were used to test the hypothesis that there was no significant change in the roles portrayed by men or women in magazine ads between 1962 and 1973. In the first method, ads were used as the units of analysis. In the second method, adults were used as the units of analysis.

When ads were the units of analysis, very few changes between 1962 and 1973 were found in the proportion of ads showing men or women in specific roles. Of the 55 distributions subjected to chi-square analysis, only seven

significant changes were found. The few cases where significant changes were found represented (a) isolated changes in different roles in different product categories or (b) changes in opposite directions that seemed to cancel each other. As an example of the first case, there was a significant decrease in the proportion of ads for transportation products that showed men in the role of male homemaker and an increase in the proportion of tobacco and liquor ads showing men in a recreation role. In the second case, there was an increase in the proportion of ads for personal products that showed women in recreation roles but a decrease in the proportion of ads for recreation products that showed women in recreation roles. Given the paucity of meaningful changes, it was concluded that magazine ads in 1973 showed essentially the same roles for men and women that they showed in 1962.

When adults were the units of analysis, more significant changes were found. However, given that there were 168 possible role-product combinations and only 14 significant changes, it was concluded that the roles portrayed by men and women in magazine ads in 1962 were very similar to those portrayed in 1973.

The findings from the analysis of men's roles showed two trends. The first trend was toward a de-emphasis of men's work role as indicated by a decrease in the proportion of men shown in work roles in ads for personal products, clothing products, and industrial products. The second but lesser trend was toward emphasizing men in decorative roles as evidenced by an increase in the proportion of men shown in decorative roles in ads for personal products and clothing products.

The findings from the analysis of women's roles were less

consistent. The only discernible trend was toward lessening the emphasis on the woman's female homemaker role as evidenced by a decrease in the proportion of women shown in female homemaker roles in ads for personal products and home furnishings. The only other significant changes were either isolated cases of a role changing within only one product category or situations in which the portrayal of a role increased in one product category and decreased in one or two others.

As a result of these findings, it appears that between 1962 and 1973 there were very few changes (a) in the types of roles shown in magazine ads and (b) in the roles portrayed by men and women in magazine ads. Thus, the images of men and women as they were reflected in the roles portrayed by each sex changed very little between 1962 and 1973.

Conclusion

The conclusion that the images of men and women reflected in magazine advertisements in 1973 were essentially the same as those in 1962 can best be understood by viewing this conclusion in the context of the structure-function framework. It is expected that the images of men and women reflected in magazine ads should eventually be congruent with those that are transmitted by the family and other subsystems involved in the socialization process. Until a balance is achieved, change or indications of stress can be expected. Since 1963 one indication of stress has been the continued criticism of the stereotyped images of men and women portrayed in the mass media. Based on the findings reported in this thesis, such criticism is likely to continue until advertisers respond to the changing images of men and women in society by reflecting these images in magazine advertisements.

Limitations

The research described in this thesis had several limitations. In analyzing the images of men and women in magazine advertisements, only two dimensions of traditional sex images--spheres of interest and roles--were measured. The other major dimension of sex image--personality traits--could not be studied directly.

The sampling procedure also had some limitations. First, many magazines on the MPA lists were not available at the Iowa State University Library. Thus, the sample may not have been a true reflection of the ads in all magazines on the MPA lists. Second, some of the magazines on the MPA list publish regional issues. Therefore, the issues sampled from those magazines were limited to the ones published for the midwest region. Third, the MPA lists did not contain all the magazines that were published in the United States in 1962 and 1973. Therefore, the MPA lists may not have been representative of the population of all magazines published in the United States in those years. Fourth, a few issues that were chosen were missing from the library so that alternatives had to be selected. This limitation was probably not too severe because only two or three issues from the 300 sampled were missing. Fifth, the analysis of the roles of men and women in magazine advertisements may have been slightly biased because of the absence of a male analyst. By defining the roles clearly, this potential bias should have been minimized.

Recommendations for Further Research

Research is needed in the following areas: (a) improvement of the methods for analyzing sex images in the mass media, (b) analysis of the images of men and women reflected in other forms of the mass media, (c) further analysis of the actual roles and spheres of interest of men and women in society to use as a basis of comparison with the roles and spheres of interest of men and women that are reflected in the mass media, and (d) continuing research to ascertain whether the mass media respond to the changing images of men and women in society.

REFERENCES

- Aldous, J. Children's perception of adult role assignment: Father-absence, class, race and sex influences. <u>Journal of Marriage and</u> the Family, 1972, 34, 55-65.
- Auster, D. A content analysis of "Little Orphan Annie." In S. M. Lipset & N. J. Smelser (Eds.), Sociology, the progress of a decade. Englewood Cliffs, N.J.: Prentice-Hall, 1961.
- Balswick, J. O., & Peek, C. W. The inexpressive male: A tragedy of American society. Family Coordinator, 1971, 11, 363-368.
- Briar, S. The family as an organization: An approach to family diagnosis and treatment. Social Service Review, 1964, 38, 247-255.
- Broverman, I., Broverman, D., Clarkson, F., Rosenkrantz, P., & Vogel, S. Sex-role stereotyping and clinical judgments of mental health.

 Journal of Consulting and Clinical Psychology, 1970, 34, 1-7.
- Vourtney, A. E., & Lockeretz, S. W. A woman's place: An analysis of the roles portrayed by women in magazine advertisements. <u>Journal of Marketing Research</u>, 1971, 8, 92-95.
 - DeFleur, M., & DeFleur, L. The relative contribution of television as a learning source for children's occupational knowledge. American Sociological Review, 1967, 32, 777-789.
- Dominick, J. R., & Rauch, G. E. Image of women in network TV commercials. <u>Journal of Broadcasting</u>, 1972, 16, 259-265.
 - Farrell, W. The liberated man. New York: Random House, 1974.
 - Flora, C. B. The passive female: Her comparative image by class and culture in women's magazine fiction. <u>Journal of Marriage and the Family</u>, 1971, 33, 435-444.
 - Friedan, B. The feminine mystique. New York: Dell, 1963.
 - Goldberg, H. The psychological pressures on the American male. Human Behavior, April 1973, pp. 73-75.
 - Hill, R., & Hansen, D. The identification of conceptual frameworks utilized in family study. <u>Journal of Marriage and the Family</u>, 1960, 22, 299-311.
 - Jacklin, C., & Mischel, H. As the twig is bent--sex role stereotyping in early readers. School Psychologist Digest, 1973, 2 (3), 30-38.

- Johns-Heine, P., & Gerth, H. H. Values in mass periodical fiction, 1921-1940. <u>Public Opinion Quarterly</u>, 1949, 13, 105-113.
- Katzman, N. Television soap operas: What's been going on anyway? Public Opinion Quarterly, 1972, 36, 200-212.
- Kenkel, W. The family in perspective. New York: Appleton-Century-Crofts, 1966.
- McIntyre, J. The structural-functional approach to family study. In F. I. Nye & F. M. Berardo (Eds.), Emerging conceptual frameworks in family analysis. London: Macmillan, 1966.
- Podell, L. Sex and role conflict. <u>Journal of Marriage and the Family</u>, 1966, 28, 163-165.
- Pyke, S., & Ricks, F. The counselor and the female client. <u>School</u> Counselor, 1973, 20, 280-284.
- Ricks, F., & Pyke, S. Teacher perceptions and attitudes that foster or maintain sex role differences. Interchange, 1973, 4 (1), 26-33.
- Roberts, D., & Roberts, G. Techniques for confronting sex-role stereotypes. School Psychology Digest, 1973, 2 (3), 47-54.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. Sex-role stereotypes and self concepts in college students. <u>Journal of Consulting and Clinical Psychology</u>, 1968, 32, 287-295.
- Rueger, R. Seeking freedom from the male myth. <u>Human Behavior</u>, April 1973, pp. 75-77.
- Saenger, G. Male and female relations in the American comic strip. Public Opinion Quarterly, 1955, 19, 195-205.
- Sochen, J. Movers and shakers. New York: Quadrangle, 1973.
- Wagner, L. C., & Banos, J. B. Woman's place: A follow-up analysis of the roles portrayed by women in magazine advertisements. <u>Journal of Marketing Research</u>, 1973, 10, 213-214.
 - Yachnes, E., Gershman, H., & Miller, A. The myth of masculinity: A panel. American Journal of Psychoanalysis, 1973, 33, 56-57.
 - Yorburg, B. Sexual identity. New York: John Wiley & Sons, 1974.

REFERENCE NOTE

1. Romancing the male homemaker. New York: J. Walter Thompson Co., 1973.

ACKNOWLEDGMENTS

I want to express very special appreciation to Barbara Magill who was not only a consultant to my graduate committee but a very close friend as well.

I also appreciate the interest and the helpful suggestions of Ronald Powers, Jack Menne, and Earl Morris, who formed my graduate committee. Thanks also go to Cynthia Davenport who assisted in collecting the data.

I would like to express thanks of a different sort to R. B., the cat, who spent many hours on my thesis.

Very special thanks to my husband, Harvey, who provided a supportive atmosphere and many gourmet dinners.

APPENDIX A: LISTS OF MAGAZINES USED IN SAMPLE

Table 13

The 50 Leading^a Magazines during the Second Six Months of 1962

Rank	Magazine	Circulation	Rank	Magazine	Circulation
,- 1 c	Reader's Digest	13,908,115	26	Progressive Farmer	1,405,316
7 M	McCall s TV Guide	8,147,462	28 28	Figures Popular Mechanics	1,329,790
4	Look	7,200,805	53	EIks	1,325,878
5	Life	7,151,383	30	Successful Farming	1,322,721
9	Family Circle	7,106,099	31	U.S. News & World Report	1,273,668
7	Ladies' Home Journal	6,864,060	32	Scouting	1,269,779
∞	Saturday Evening Post	6,673,594	33	Field & Stream	1,265,460
6	Woman's Day	6,169,084	34	Popular Science Monthly	1,257,080
01	Better Homes & Gardens	6,101,478	35	House & Garden	1,251,268
11	Good Housekeeping	5,244,962	36	Argosy	1,244,215
12	Redbook	3,708,503	37	Mechanix Illustrated	1,222,417
13	American Home	3,576,930	38	Workbasket	1,211,245
14	National Geographic	3,087,485	39	Outdoor Life	1,192,947
. 15	Farm Journal	3,037,689	40	Sports Afield	1,186,675
16	Time	2,809,002	41	True Confessions	1,143,947
17	American Legion	2,688,706	42	Presbyterian Life	1,131,532
18	True	2,425,075	43	V.F.W. Magazine	1,123,327
19	Boys' Life	2,166,843	7 †	Seventeen	1,117,143
20	True Story	2,116,700	45	Glamour	1,116,231
21	Parents	1,889,408	9†	Columbia	1,081,229
22	Photoplay	1,616,608	47	Motion Picture	1,074,205
23	Newsweek	1,543,366	84	Farm & Ranch	1,025,361
57	Junior Scholastic	1,430,033	67	Sports Illustrated	1,022,986
25	Senior Scholastic Unit	1,408,161	20	House Beautiful	929,906
	-			•	

 a This is according to the Audit Bureau of Circulations and is based on average circulations per issue.

Table 14

The 50 Leading^a Magazines during the First Six Months of 1973

Rank	Magazine	Circulation	Rank	Magazine	Circulation
-	TV Guide	18,774,838	56	Cosmopolitan	1,804,304
7	Reader's Digest	18,591,067	27	Popular Science	1,770,380
ო	Woman's Day	8,234,693	78	True Story	1,760,841
7	Family Circle	8,187,718	53	Popular Mechanics	1,726,585
Ŋ	National Geographic	8,185,620	30	Glamour	1,700,416
9	Better Homes & Gardens	7,979,137	31	Mechanix Illustrated	1,646,525
7	McCall's	7,508,893	32	V.F.W. Magazine	1,581,549
œ	Ladies' Home Journal	7,026,838	33	Elks Magazine	1,543,228
<u>ه</u>	Playboy	6,669,911	34	Out	1,508,021
10	Good Housekeeping	5,747,368	35	Seventeen	1,447,806
11	Redbook	4,850,829	36	Sports Afield	1,432,807
12	Time	4,505,949	37	Scouting	1,423,726
13	American Home	3,448,564	38	Junior Scholastic	1,351,422
14	Penthouse	3,132,561	39	Grit	1,326,344
15	National Enquirer	2,901,547	40	Sport	1,326,084
16	Newsweek	2,878,831	41	Esquire	1,260,250
17	American Legion Magazine	2,632,684	42	Ebony	1,256,909
18	Boys' Life	2,303,894	43	Sunset	1,157,604
19	Sports Illustrated	2,267,626	4 4	Today's Education	1,133,055
20	Parents' Magazine	2,013,778	45	True	1,128,388
21	U.S. News & World Report	1,953,449	9†	Argosy	1,086,186
22	Farm Journal	1,886,157	47	House & Garden	1,077,999
23	The Workbasket	1,879,609	48	Progressive Farmer	1,037,746
54	Outdoor Life	1,850,154	65	Southern Living	1,027,687
25	Field & Stream	1,824,969	20	Family Health	1,001,837

⁸This is according to the Audit Bureau of Circulations and is based on average circulations per issue.

APPENDIX B: CODE SHEET

COCER: SML COMMENTS 79 210 W-8 2 1 2 3 4 5 6 7 x 221 YEAR AD 45- MAG. TYPE HONTH DAY YEAR PASES.

APPENDIX C: SUPPLEMENTARY TABLES

Table 15

Distribution of Roles Portrayed by Men in Magazine Advertisements

Classified by the Type of Product and Year of Publication

	1	1962		1973
Role	N	%	N	%
Pers	onal Pro	oducts		
Personal	8	12.1	7	6.3
Recreation	13	19.7	34	30.6
Work	24	36.4	7	6.3
Decorative	17	25.7	61	55.0
Roles 3, 4, & 7 combined	4 66	$\frac{6.1}{100.0}$	$\frac{2}{111}$	$\frac{1.8}{100.0}$
	x ₄ ² =	35.02	p <.001	Reject H
Recre	eation P	roducts		
Recreation	23	37.7	28	32.5
Work	23	37.7	36	41.9
Decorative	6	9.8	16	18.6
	9	14.8	6	7.0
Roles 1, 3, 4, & 7 combined				
Roles 1, 3, 4, & 7 combined	$\frac{9}{61}$	100.0	86	100.0
Roles 1, 3, 4, & 7 combined	$\frac{61}{x_3^2} =$		86 P >.05	100.0 Accept H

aRole: 1 = personal; 2 = recreation; 3 = female homemaker; 4 = male homemaker; 5 = work; 6 = decorative; 7 = decorative family.

Table 15 (Continued)

			····	
Role	N	1962 %	N	1973 %
Housekee	ping Supplie	es and Ser	vices	
Female homemaker	2	50.0	1	100.0
Male homemaker	$\frac{2}{4}$	$\frac{50.0}{100.0}$	$\frac{0}{1}$	$\frac{0}{100.0}$
·	Home Furn	ishings		
Personal	2	4.1	7	12.3
Recreation	5 8	10.2 16.3	9 4	15.8 7.0
Female homemaker Male homemaker	7	14.3	10	17.5
Work	10	20.4	13	22.8
Decorative	2	4.1	9	15.8
Decorative family	<u>15</u>	30.6	_5	8.8
	49	100.0	57	100.0
	x ₆ ²	= 15.43	<u>p</u> < .05	Reject Ho
Home	Maintenance	e and Repa	ir ^b	
Recreation	0	0	1	4.4
Male homemaker	4	80.0	13	56.5
Work	<u>1</u> 5	20.0	9	39.1
	5	100.0	23	100.0

b Chi-square analysis was not used because more than 20 percent of the expected frequencies were less than five.

Table 15 (Continued)

_		1962		1973
Role ^a	N	%	N	%
	Food			
Recreation Roles 1, 3, 4, 5, 6, & 7	18	62.1	0	0
combined	11 29	$\frac{37.9}{100.0}$	$\frac{12}{12}$	$\frac{100.0}{100.0}$
Toba	acco and	Liquor		
Recreation Female homemaker	76 6	55.9 4.4	142 7	59.2 2.9
Work	29	21.3	45	18.8
Decorative Roles 1, 4, 7 combined	19 6	14.0 4.4	41 5	17.1 2.0
	136	100.0	240	100.0
	*4 =	3.11	<u>P</u> > .05	Accept H
	Clothi	ng		
Recreation	17 20	27.0 31.7	13 3	23.2
Work Decorative	20 22	34.9	39	5.4 69.6
Roles 1, 3, 4, & 7 combined	<u>4</u> 63	$\frac{6.4}{100.0}$	1 56	1.8
	_			100.0
	$x_3^2 =$	19.34	P < .001	Reject H

Table 15 (Continued)

_	1	1962		1973
Role ^a	N	%	N	%
	Transporta	ition		
Recreation	63	41.2	57	36.1
Male homemaker	9	5.9	1	.6
Work	46	30.1	48	30.4
Decorative	29	18.9	45	28.5
Roles 1, 3, & 7 combined	$\frac{6}{153}$	$\frac{3.9}{100.0}$	7	4.4
•	153	100.0	158	100.0
	x ₄ =	10.27	<u>P</u> < .05	Reject H
Female homemaker	7	12.5 14.3		14.7 17.3
Male homemaker		50.0		
Work Decorative	28 3	5.3	13	
Roles 1, 2, & 7 combined	10	17.9	7	
	<u>10</u> 56	100.0	<u>.7</u> .75	100.0
	$x_4^2 =$	6.27 j	۰.05 ع	Accept H o
Organizations	and Educat	ional Pro	oducts	
	48	94.1	89	81.6
Work			1 7	11 0
Decorative	3	5.9	17	
Decorative Roles 1, 2, 3, 4, & 7		5.9 0	17	6.5
Work Decorative Roles 1, 2, 3, 4, & 7 combined	3		11	6.5
Decorative Roles 1, 2, 3, 4, & 7	3 0 51	0	11 117	

Table 15 (Continued)

	1	1962	1973	
Role ^a	N	%	N	%
I	ndustrial P	coducts		
Work	211	89.0	39	75.0
Decorative Roles 1, 2, 3, 4, & 7 combined	14 <u>12</u> 237	$\frac{5.9}{5.1}$ 100.0	5 <u>8</u> 52	$\begin{array}{r} 9.6 \\ \underline{15.4} \\ 100.0 \end{array}$
	$x_2^2 =$	8.45 <u>p</u>	< .05	Reject H _o

Table 16

Distribution of Roles Portrayed by Women in Magazine Advertisements

Classified by the Type of Product and Year of Publication

2]	L962	1	1973
Role ^a	N	%	N	%
Per	sonal Pro	oducts		
Personal	20	15.4	16	7.4
Recreation	17	13.1	61	28.2
Female homemaker	18	13.8	8	3.7
Work	11	8.5	8	3.7
Decorative	60	46.1	122	56.5
Roles 4 & 7 combined	<u>4</u>	3.1	1	
	130	100.0	216	100.0
	$x_5^2 =$	33.10	p < .001	Reject H _o
Recr	eation P	roducts		
Recreation	14	41.2	8	15.7
Female homemaker	6	17.6	9	17.6
Work	0	0	18	35.3
Decorative	11	32.4	11	21.6
Roles 1, 4, & 7 combined	$\frac{3}{34}$	8.8	<u>5</u> 51	9.8
	34	100.0	51	100.0
	$x_4^2 =$	18.10	<u>p</u> < .05	Reject Ho

a_{Role:} 1 = personal; 2 = recreation; 3 = female homemaker; 4 = male homemaker; 5 = work; 6 = decorative; 7 = decorative family.

Table 16 (Continued)

		1040		
Role ^a	N	1962 %	N	1973 %
Housekeepi	ng Suppli	es and Se	rvices	
Female homemaker	9	36.0	29	60.4
Decorative	6	24.0	15	31.3
Roles 1, 2, 4, 5, & 7 combined	10	/n n	/.	8.3
Companied	$\frac{10}{25}$	$\frac{40.0}{100.0}$	4 48	$\frac{0.5}{100.0}$
	_		P < .01	Reject H
Н	ome Furni	shings		
Personal	6	4.5	11	13.4
Recreation	16	12.0	11	13.4
Female homemaker	54	40.6	17	20.7
Decorative	46	34.6	21	25.6
Decorative family	. 11	8.3	9	11.0
Roles 4 & 5 combined	$\frac{0}{133}$	$\frac{0}{100.0}$	$\frac{13}{82}$	$\frac{15.9}{100.0}$
	$x_{5}^{2} =$	33.77 j	૯ < .001	Reject H _o
Home M	aintenanc	e and Repa	air ^b	
Personal	1	50.0	0	0
Recreation	0	0	1	20.0
Female homemaker	1	50.0	1	20.0
Male homemaker	$\frac{0}{2}$	0	<u>3</u>	60.0
	2	100.0	5	100.0

 $^{^{\}rm b}{\rm Chi}\mbox{-square}$ analysis was not used because more than 20 percent of the expected frequencies were less than five.

Table 16 (Continued)

Role ^a	N	1962 %	N	1973
	Food			
Recreation Female homemaker Roles 1, 4, 5, 6, & 7	21 15	42.0 30.0	1 12	4.8 57.1
combined	14 50	$\frac{28.0}{100.0}$	$\frac{8}{21}$	$\frac{38.1}{100.0}$
	$x_2^2 =$	9.94	<u>p</u> < .01	Reject H
Toba	cco and	Liquor		
Recreation	64	69.6	124 8	73.8
Female homemaker Decorative Roles 1, 4, 5, & 7 combined	11 15 2 92	11.9 16.3 2.2 100.0	26 10 168	4.8 15.5 5.9 100.0
				Accept H _o
	Clothi	ng		
Recreation Decorative	11 28	27.5 70.0	20 82	18.2 74.5
Roles 1, 3, 4, 5, & 7 combined	1 40	$\frac{2.5}{100.0}$	$\frac{8}{110}$	$\frac{7.3}{100.0}$
	$x_2^2 =$	2.45	<u>p</u> > .05	Accept H

Table 16 (Continued)

a		1962		1973
Role ^a	N	%	N	%
Tr	ransport	ation		
Recreation	47	54.0	45	43.3
Work	9	10.3	22	21.2
Decorative	17	19.6	28	26.9
Roles 1, 3, 4, & 7 combined	<u>14</u> 87	16.1	9 104	8.6
	87	100.0	104	100.0
	$x_3^2 =$	7.77 g	> .05	Accept H
Financial a	and Perso	onal Busin	less	
Female homemaker Work	6	24.0 28.0	12	46.2 19.2 34.6
Female homemaker Work	6	24.0		46.2 19.2 34.6 100.0
Financial a Female homemaker Work Roles 1, 2, 4, 6, & 7 combined	6 7 1 <u>12</u> 25	24.0 28.0 48.0 100.0	12 5 9 26	46.2 19.2 34.6 100.0
Female homemaker Work	6 7 1 <u>12</u> 25 x ₂ ² =	24.0 28.0 48.0 100.0	12 5 9 26	19.2 34.6 100.0
Female homemaker Work Roles 1, 2, 4, 6, & 7 combined	6 7 1 <u>12</u> 25 x ₂ ² =	24.0 28.0 48.0 100.0	12 5 9 26	19.2 34.6 100.0

Table 16 (Continued)

. a	1962		1973			
Role	N	. %	N	%		
I	ndustrial P	roducts				
Female homemaker	7	12.5	3	10.0		
Work Roles 1, 2, 4, 6, & 7	35	62.5	25	83.3		
combined	<u>14</u> 56	$\frac{25.0}{100.0}$	$\frac{2}{30}$	$\frac{6.7}{100.0}$		
	$x_2^2 =$	4.90 <u>p</u>	> .05	Accept H _o		