This is to certify that the

thesis entitled

A COMPARATIVE ANALYSIS:
SALARY VARIATIONS OF MEN AND WOMEN
IN THE RETAIL INDUSTRY

presented by

Kathryn Kris Carnahan

has been accepted towards fulfillment
of the requirements for

Master of Science degree in Merchandising Management

Brenda Sternquist

Major professor
Brenda Sternquist

Date February 11, 1988

A COMPARATIVE ANALYSIS: SALARY VARIATIONS OF MEN AND WOMEN IN THE RETAIL INDUSTRY

By

Kathryn Kris Carnahan

A THESIS

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

MASTER OF SCIENCE

Department of Human Environment and Design

1988

ABSTRACT

A COMPARATIVE ANALYSIS: SALARY VARIATIONS OF MEN AND WOMEN IN THE RETAIL INDUSTRY

By

Kathryn Kris Carnahan

This study involves an analysis of data related to employees of department, specialty, and discount stores. The purpose of this study was to determine whether sex or marital status affect the salary levels of retail employees, and if by con trolling variables such as age, level of education, hours worked, and the presence of children less than five years old, salary differences would be eliminated. The data used in this study was from the Current Population Survey, March 1982. Edu cation was significant in explaining the salary differential for the sample of salespeople only. Marital status was sig nificant for the sample of male salespeople only. Age and hours worked were also found to be significant in explaining the wage differentials for female salespeople, male sales man agers or department heads, and male salespeople. Hours worked was the only variable significant in explaining salary differ ences between married and single female buyers.

ACKNOWLEDGMENTS

I would like to express my sincere appreciation and graditude to my major professor, Brenda Sternquist for her valuable assistance and constant support through out my Masters program. I would also like to thank Dawn Pysarchik and Dr. Oberg for participating on my thesis committee.

In addition, I want to thank Carrie Part, Marianne Mahoney, and Sue Kern for their support and friendship which motivated me to finish this thesis. And finally, I want to thank Paul for his patience, love, and understanding over the course of my Masters program.

TABLE OF CONTENTS

LIST OF TABLES

APPENDIX - LIST OF TABLES

CHAPTER I

INTRODUCTION

For retailing in general, 63.5 percent of the 3 million employees are women (U.S. Bureau of the Census, 1983). Although the number of women has been increasing in the managerial ranks of retail organizations (43.8 percent in 1983 as opposed to 34 percent in 1976) the majority of this increase has been in entry level management positions (Gable, Gillespie, & Topol, 1984). These statistics are encouraging, however, it should be noted that women are just regaining the status they have been deprived of since 1949 when 43.2 percent of retail managerial and executive positions were held by women (Gerstenberg & Ellsworth, 1949).

First quarter, 1980, Current Population Survey (CPS) data, showed that women employed full time, earned 63 percent as much as men, whereas in the period from 1967-1978, women generally earned about 60 percent as much as men (Hedges & Mellor, 1979). The male-female earnings gap is slowly being reduced, however, attention must be focused on when and where this pay disparity occurs. This is especially true for an industry, such as retailing, where the majority of employees are female.

It is the purpose of this investigation to determine

where pay differentials occur in retailing. An attempt will also be made to identify factors which contribute to salary disparities between male and female, or married and single retail employees.

Statement of the Problem

The purpose of the current study is to go beyond the identification of the number of men and women in management positions, as has been done in previous studies (Gillespie 1977-78, Williams, Faltot, & Madaire 1983, and Gable, Gillespie, & Topol, 1984) and to investigate whether pay differentials are present in the retail industry. These previous studies focused on the differences in occupational levels between men and women, from the standpoint of a department store organization.

Previous studies (Gillespie, 1977-78; Williams et al, 1983; Gable et al, 1984) have focused on status, and number discrepancies between men and women that occur in various management levels of retailing, from buyer at the low end of the hierarchy, through the board of directors. The proposed study will focus on pay differentials that occur among the rank and file of retailing: salespeople, as well as management personnel, who occupy sales manager, department head and buyer positions.

The intent of this investigation is to study the issue of salary differentials of men and women from the perspective of individual retail employees. By examining marital status,

whether there are young children present in the home, as well as the age, level of education and hours worked by retail employees, factors which influence compensation may be isolated.

Justification

The earnings gap between male and female workers in the labor market is a primary indicator of employment discrimination (Blumrosen, 1979-80). Therefore, in recent years there have been a variety of proposed strategies which focus on the purpose of overcoming the ignorance, prejudice and stereotypes, from which discriminatory practices stem.

Various federal statutes, including the Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964, have been enacted with the goal of effectively limiting and possibly even eliminating discriminatory practices in the work force. Government agencies and programs such as the Equal Employment Opportunity Commission and Affirmative Action, have also been implemented in order to deal with the problems faced by women and other protected classes in the area of job related discrimination.

These actions have helped, however, there are still many cases of everyday inequality in the labor market, which need to be addressed and brought to the attention of the public as well as persons in policy setting positions. It is essential that investigations into employment trends and practices be conducted and reported so as to increase the general

understanding of where and how discrimination occurs. The identification of situational variables which explain wage differentials is the goal of this study.

Theoretical Framework

Human capital theory has been used extensively by researchers as a basis for assessing earnings differences between men and women. Human capital theorists attempt to explain earnings differentials between men and women by focusing on personal characteristics of workers. Human capital is the combination of skills and abilities possessed by individuals, making them eligible for employment in the labor market. Education, training and other types of job-related investments, can increase and develop those inherently possessed human capital skills, making investment desirable for those who intend to remain in the work force and reap the benefits.

Researchers suggest that the differentiation of roles within a family are sex linked, and women's traditional family roles will influence them to invest less in market oriented human capital (Mincer & Polachek, 1974). Human capital theory is based on the presumption that women have less attachment to the labor force and that due to societal expectations of a woman's role, her labor force attachment will be intermittent, at best.

An underlying assumption in human capital theory is that in the absence of discrimination, workers will be paid an

amount exactly equal to the value of their economic contribution (productivity) to a firm (Treiman & Hartmann, 1981). Since individual productivity is virtually impossible to measure, researchers have attempted to estimate productivity indirectly, by assuming that individual differences in "human capital" cause differences in productivity, thus resulting in the wage differential. Any differences in earnings other than those explained by the differences in human capital are often assumed to represent discrimination.

In most investigations to date, worker characteristics account for very little of the earnings disparity between men and women. Studies by Mincer and Polachek (1974), as well as Corcoran and Duncan (1979) explain the greatest amount of the earnings differentials, yet they account for less than half the difference of the observed male-female earnings gap.

Since researchers have found that a substantial part of the earnings differential cannot be explained by factors thought to measure worker productivity, it can be assumed that additional factors may be playing a significant role in the wage disparity. Institutional barriers and discrimination are two possible factors that contribute to the on going wage differential.

Research Objectives

This study involves an analysis of data related to employees of department, specialty, and discount stores. The objectives of this study are (1) to determine the salary

levels of men and women in the retail positions of buyer, sales manager or department head, and salespeople, (2) to determine whether sex or marital status affect the salary levels of retail employees, (3) to determine the affect on salary levels by controlling for variables such as age, level of education, hours worked, and the presence of children less than five years old.

Overview

Chapter II, the Review of Literature, is divided into four sections. Salary and occupational differentials between men and women are introduced in section one; both general and specific retail studies are discussed. An explanation of differences and similarities of occupational segregation and discrimination is presented in section two. Stereotypes and socialization processes are discussed as possible causes of occupational segregation and discrimination, as well as how they affect women in the labor market. The focus of section three is on two theoretical explanations for occupational segregation and male-female wage disparities: 1) human capital and 2) discrimination. Various legislative statutes against work force discrimination including the Equal Pay Act, Title VII of the Civil Rights Act, and the creation of the Equal Employment Opportunity Commission are discussed in section four.

CHAPTER II

REVIEW OF LITERATURE

The continuing differential in male and female earnings, and the fact that men and women are concentrated in different occupations, are two generally accepted and well documented facts. Research in this area has, in general, not tried to disprove these facts, but has focused on determining how and why these disparities have persisted throughout the last century and continue today.

One argument which has received increased acceptance in explaining the earnings gap is occupational segregation. Occupational segregation is the propensity of women and men to be employed in different occupations. Researchers' explanations of why the labor force has consistently supported differences in men's and women's status and rewards have varied. Prominent explanations which will be reviewed in this chapter include the socialization process, human capital, and actual discrimination.

Several pieces of legislation have been enacted over the last two decades to try to combat male-female disparities in the work force, and the various effects resulting from the differentials. The purpose and effects of these statutes will be discussed at the end of this chapter

SALARY AND STATUS DIFFERENTIALS BETWEEN WOMEN AND MEN

The average woman working full time earns approximately 60% as much as her male counterparts (Blumrosen, 1979-80; Rytina, 1981; Treiman & Hartmann, 1981; Hartmann & Treiman, 1983; Grune & Reder, 1983; Ruble, Cohen & Ruble, 1984; Mallan, 1982; Lefcourt, 1984). This earnings gap between men and women has been stable for several decades; as a result, numerous studies which focus on determining the causes, and in turn possible remedies to this problem have been undertaken.

Although women comprise the majority, sixty-four percent of the 3 million retail employees (U.S. Bureau of the Census, 1983), few of them are reaching the executive levels (Gerstenberg & Ellsworth, 1949; Gillespie, 1977-78; Williams et al, 1983; Gable, 1984). Mellor (1984) also points out that women are no earning comparable money to their male counterparts even in the lower levels of retailing.

Occupational Status Levels in Retailing

Studies by Gerstenberg and Ellsworth (1949); Gillespie (1977-78); Williams, Faltot, and Madaire (1983); and Gable, Gillespie, and Topol (1984), investigated the occupational status of women in retailing. The Gerstenberg/Ellsworth study (1949), which used a mail survey to gather information from department and specialty store employees, showed women occupying 43.2 percent, of the managerial and executive positions in the retail industry. This may have been an effect

of World War II, when women replaced men in many non-military occupations.

Gillespie (1977-78) used the 1976 Directory of Department Stores as a data base to study status levels held by women in retail department and specialty stores. During the years between the Gerstenberg/Ellsworth study (1949) and Gillespie's investigation (1977-78), the men had re-established their foothold on the executive ranks. From 1949 to 1976 the number of women in managerial and executive positions in retailing decreased by nearly 10 percent, from 43.2 percent to 33.8 percent.

With data from the 1980 Directory of Department Stores, Williams, Faltot, and Madaire replicated Gillespie's study. This investigation showed some gains for women occupying managerial positions. The percent of women in managerial positions increased from 33.8 percent (1976) to 39.3 percent (1980). Although these results are encouraging, they hardly support the premise that women have achieved parity with men in terms of executive status (Williams et al, 1983).

Gable, Gillespie, and Topol (1984), using data from the 1983 Directory of Department Stores, also replicated the Gillespie study (1977-78) and found that women hold positions representing 43.8 percent of the total managerial positions in retailing. This is the largest documented share that women have ever held in the executive ranks of the retail industry. The data also showed that the majority of the women in the managerial ranks are clustered at the bottom of the

executive hierarchy, in entry level positions. Men continue to dominate at the top, where women constitute only 15 percent of the upper level positions (Gable et al, 1984).

An additional finding reported by Gable et al (1984) was the fact that the larger the firm and the larger the number of executive positions, the less likely it is that women will achieve executive status.

Salary Disparities Between Women and Men in Retailing

Earl Mellor (1984) used the Current Population Survey (CPS) to investigate the female-male earnings gap, and found that "about half the women in sales were salesclerks in retail trade, one of the lowest paying sales occupations...and overall, women in sales jobs earned only 55 percent as much as men in 1982" (Mellor, 1984, p.19). Mellor also reported that "among retail salesclerks, with a median [weekly] income of $188, a small proportion (about 1 percent) reported earnings of $900 or more but a much larger proportion (81 percent) had earnings under $300, and some (29 percent) were under $150" (Mellor, 1984, p.23). The following statistics (see Table 2.1), calculated from data in Mellor's study (1984, Table 2, p.20-21) further represent the inequality in women and men's earnings in the retail industry.

TABLE 2.1 WEEKLY EARNINGS AND EMPLOYMENT OF MEN AND WOMEN IN RETAILING

Occupation	Women #	Women Weekly Earnings	Men #	Men Weekly Earnings	Difference Weekly Earnings
Buyer, wholesale & retail trade	69	271	84	412	141
Sales managers & department heads, retail trade	128	227	193	386	159
Salesclerks, retail trade	600	167	420	239	72

= # employed in that position
Source: Mellor, 1984, p. 20-21.

Occupational Segregation or Discrimination

Intentional, sex-based wage disparity, the condition traditionally depicted as purely discriminatory, usually involves women who perform the same work as men but who are paid less because they are female, this is commonly referred to as direct discrimination. However, discriminatory effects can occur as a result of non-intentional, discriminatory employment practices which result in an adverse impact on a protected group. This more subtle form of wage discrimination can be caused by what is commonly referred to as indirect or societal discrimination, which often leads to occupational segregation of the sexes.

Occupational segregation refers to the situation in which women work at jobs that have historically been

dominated by women. The index of segregation also known as the index of dissimilarity, indicates that almost two-thirds of women or men would have to change occupations in order for women to have the same occupational distribution as men in the general labor market (Hartmann & Treiman, 1983). The majority of working women experience a relative isolation in occupations which are disproportionately female such as teachers, nurses, clerical workers, retail sales clerks, and service workers; many of which can be seen as direct extensions of women's stereotyped homemaking roles (Blumrosen, 1979-80; Greenwood, 1984a, 1984b; Sorensen, 1984). Generally these occupations are characterized by substantially lower wages and subordinate status compared to similar male occupations.

Occupations classified as female-dominated include those where 60 percent or more of the employees are women (Rytina, 1981; Rytina & Bianchi, 1984). Where jobs are segregated, it is likely the pay rate is influenced by the female character of the job. Female-dominated occupations generally pay a substantially lower rate than those dominated by men; in fact, the more an occupation is dominated by women, the less it pays (Treiman & Hartmann, 1981; Hartmann & Treiman, 1983).

Researchers have placed increasing emphasis on the relationship between occupational segregation and the male-female earnings gap. The concentration of women in a narrow range of overwhelmingly female-dominated jobs has increasingly been viewed as the single most important cause of the wage gap

(Grune & Reder, 1983; Hartmann & Treiman, 1983). Regardless of which type of discrimination is currently dominant in the labor force, the fact remains that women are paid substantially less than their male peers and that they are clustered in a relatively small group of occupations.

Wage setting practices since the implementation of anti-discrimination legislation in the early 1960's are less likely to be blatantly discriminatory and more likely to be a result of occupational segregation and/or historical sex bias, but the result is the same. The majority of research in this area focuses on trying to explain the origins of discriminatory practices, and what strategies might decrease the discriminatory bias.

Stereotypes and Socialization

Both discrimination and occupational segregation have socio-historical roots, such as socialization differences between the sexes, vocational choices based on traditional sex role differentiation, and opinions and prejudices based on sexual stereotypes (Levit & Mahoney, 1984). Each of these causes will be described here in further detail.

Several studies have concluded that cultural and societal factors involved in the socialization process, result in stereotypical attitudes. These attitudes can and do influence the discriminatory bias which is often directed against women in the work environment (Heilman, 1984; Ruble et al, 1984; White, Crino, & DeSanctis,1981). Stereo-

types based on gender are of three different varieties. They are similar, in that through stereotypes individuals are assigned a dispositional quality based only on their membership in a particular group. Stereotypes are distinct, both in the manner by which they are perpetuated, and in the way they affect the perception of managerial skills and abilities attributed to women as opposed to men.

Sex characteristic stereotypes are those beliefs concerning personality trait differences, felt to be inherently possessed by those of one gender or the other (Terborg, 1977; White et al, 1981; Ruble et al, 1984). Men are often viewed as possessing characteristics such as independence, self confidence, and aggressiveness; while women are characterized by such traits as gentleness, understanding, warmth, and dependence.

Sex role stereotypes are based on the appropriateness of behaviors for males and females. This concept is tied closely to the socialization process and the attitudes children are exposed to in their formative years. Boys and girls are conditioned at very early ages to identify with certain behaviors deemed "appropriate". This appropriateness is usually attributed solely to the gender of the child.

Sex role stereotypes are rooted in the socialization process which begins at birth. This is exemplified by the way boys and girls are identified by color (blue or pink) from the minute they are born. Baby boys are more often bounced on the knee, while baby girls are held ever so

gently, almost as if there is something inherently tied to their gender that makes girls more fragile (Gould, 1985). Little boys are weaned earlier than girls, and are taught to be tough and independent, while little girls are told to be nice and good. Boys are told to try things and are encouraged to master their own small worlds, while girls are expected to stay clean and be pretty (Gould, 1985; Hennig & Jardim, 1977; and Kanter, 1977). Granted some of these practices are beginning to change. However, while many parents are trying to raise their children in a non-sexist environment, their attempts at decreasing built-in sexism are commonly overwhelmed by contradictory messages promoted through television, movies, commercials, and other adults (Gould, 1985).

Attributes typically viewed as appropriate for males include those of control, dominance and authority over the situation, as well as over other people. These attributes have traditionally been viewed as masculine. On the other hand, behaviors viewed appropriate for females, typically described as feminine, include: sensitivity, nurturance, and dependence. In other words, our culture expects men and women to perpetuate role models, dependent solely on ones gender (Sargent, 1983; Terborg, 1976; White et al, 1981; and Ruble et al, 1984).

Males and females, by the time they have reached adulthood, have certain orientations that tend to be classified in terms of their work orientations and skills. Men have been

socialized to express task-oriented or instrumental behavior, heavily laden with analytical problem solving skills. Women have learned and developed skills with more of a human relations orientation such as expressing concern for others welfare, and work cohesiveness.

The choice of, and training in, particular careers can even out the differences in the types of skills and behavior typically attributed to one's gender. In a study by Gomez-Mejia (1983), it was shown that differences in work attitudes between men and women resulting from childhood socialization vary with occupation and years of experience. As a result of an increase in the task related orientation of women, resulting from occupational socialization, the "attitudinal gap" proved to decrease. These findings suggest that if women are given appropriate opportunities they tend to internalize, on the job, those norms and attitudes commonly associated with their male peers.

A tendency to stereotype jobs, typically identified with one sex or the other is the third type of stereotypical bias present in the work force. This occurrence is identified in several ways by different authors; Occupational Sex Typing (Ruble et al, 1984), Sex Segregation or Sex Polarization of Jobs (Kanter, 1977; Mincer and Polachek, 1974; Sorensen, 1984; Rytina, 1981). This determination of what is considered men's work or women's work can affect the opportunities available to women and the success of women in the labor market.

socialized to express task-oriented or

heavily laden with

have

Effects of Stereotypes on Women in the Labor Market

Stereotypic biases can manifest themselves at a variety of times throughout an individual's career resulting both in access discrimination and treatment discrimination. If there is an inconsistency between perceptions of job requirements and group-derived perceptions of a woman's abilities, the probability of discriminatory bias being involved in hiring, compensation, or promotion, decisions is increased (Ruble et al, 1984; White et al, 1981; Heilman, 1984).

Hiring decisions can be dramatically changed dependent on the evaluator's perceptions of role behaviors (Ruble et al, 1984; White et al, 1981). "If his [the interviewer''s] perception of the women's role is not compatible with his perception of the manager's role he will seldom combine them" (White et al, p.228, 1981). The net effect of this occurence has, in the past, and continues to keep women out of positions due solely to the employer's perception of the type of job being filled.

Research by Heilman (1980) on the effects of varying the sex composition of an applicant pool showed that when the representation of women is at 25 percent or lower of the overall group, the chances of a woman receiving the job are minimal. Further research by Heilman (1984) indicates that when highly job-relevant information about the applicant's prior work skills, is provided to the evaluator, it can be very influential in deterring discriminatory personnel decisions based on the applicant's sex. Providing information on

past employment successes, which relate to the type of work situation being applied for, can minimize the extent to which sex stereotypes enter into personnel decisions.

Once women have gained entry into occupational positions, the combination of sex characteristic stereotypes and sex role stereotypes can affect the evaluations of both their performance, and their potential. Evaluations of women's work performance and/or potential, based on role perceptions can have devastating effects on the rest of a woman's managerial career. Negative evaluation, as a function of a supervisors more general negative attitude toward women in business, can result in the misallocation of organizational rewards based on those evaluations. This in turn, may result in wage and prestige disparities, based solely on prejudicial attitudes and biases.

A study by Reif, Newstrom & Manczlca (1975) concluded that decisions made about women on the basis of their sex, are likely to be wrong; and that stereotypes of women are not representative of women who hold, or aspire to, responsible positions in business.

Research in the area of management characteristics has generally concluded that individuals with masculine characteristics are considered most likely to be successful in managerial positions (Powell and Butterfield, 1979; Ruble, 1979; Ruble et al, 1984; Schein, 1973; 1975; White et al, 1981). As Ruble et al (1984) points out, this attitude of favoring those with masculine characteristics for managerial

positions, promotes two types of bias. The first bias is against females who are often assumed to possess more feminine characteristics, based on stereotyped attitudes, whether correct or not (sex role bias). The second type of bias is against those individuals with overt feminine characteristics, regardless of sex (Ruble et al, 1984).

Compensation rates are often affected by discriminatory bias, both present and past. In general, the more an occupation is dominated by women, the less it tends to pay (Fuchs, 1971; Treiman & Hartmann, 1981; Bergmann, 1974). Prior to the enactment of the Equal Pay Act and Title VII it was common for employers to use a dual pay system in setting different wage structures for men and women (Blumrosen, 1979-80). Since most wage increases have tended to be either a flat cents per hour or a percentage of existing wage rates, the relationship between the jobs and the real depressed wage position of women's jobs established prior to the 1964 passage of Title VII remains. Seemingly neutral wage setting practices currently applied to historically overt discriminatory wage rates, continue to perpetuate the discriminatory wage differentials (Blumrosen, 1979-80).

Wage structures, upon which many current wage levels are based, were developed in an era when women's income was viewed as supplemental to the income of her husband or parent, and generally viewed as being temporary; until she was married or started a family (Blumrosen, 1979-80; Greenwood, 1984a). Generally this had the effect of depressing women's

wages since they were not expected to work in a primary support capacity. In turn, women didn't expect to earn as much as men and were willing to work for less.

The sex of the person performing the work often has a prejudicial effect on subjective judgements involved in wage setting processes. Since the majority of women's work has historically been unpaid labor, the perception of its worth has been devalued, and women historically, have been viewed as having less of a need for financial compensation (Greenwood, 1984a). These judgements have a tendency to incorporate sex stereotypes which result in the undervaluation of work traditionally performed by women (Blumrosen, 1979-80).

Wage Satisfaction

Sex roles and social customs also play a role in the wage rates men and women expect to receive and upon which satisfaction is derived. Social comparisons play a major role in determining the wages men and women expect. Since men and women have traditionally held different roles they have developed separate reference groups with whom they compare themselves. Men and women tend to look to same-sex others for social comparison purposes, thus when comparing what constitutes a fair or reasonable wage, men and women use different standards: women base their wage expectations on a generalized women's standard and men on a men's standard (Treiman & Hartmann, 1981; Major and Konar, 1984; Sorensen, 1984). Historically women have accepted a lower fair wage

standard based on social custom.

Studies by Crosby (1982) and Major & Konar (1984), investigated women's and men's perceptions concerning what constitutes a fair wage. Crosby described the pattern of women being satisfied with their wages in spite of underpayment in comparison to men as "the paradox of the contented female worker".

Major and Konar looked at differences in sex based pay expectations, using MBA students as their sample. They found that the women had significantly lower career-entry and career peak pay expectations than the men. The men in the study expected to earn approximately 16.5 percent more pay at career entry and 45 percent more pay at career peak than the women in the sample, suggesting that the "paradox of the contented female worker may be attributed in part to the tendency for women to expect less pay than men and thus be more likely to have their expectations fulfilled, even though they earn less" (Major & Konar, p.788, 1984). Both studies concluded that, in general, women and men have internalized different fair wage standards, therefore although women earn less than men, women are no more dissatisfied with their pay than men.

Differences in Work Attitudes of Men and Women

According to Brief and Aldag (1975), differences in men's and women's attitudes toward work environments and rewards have frequently been used to explain the sex differ-

ences in occupational orientation and work motivation. The hypothesized difference in work attitudes has been used to justify wage and status disparities. Several studies (Rosen & Jerdee, 1973, 1974a, 1974b; Schein, 1973, 1975; and Schuler, 1975) suggest that women are less appropriate candidates for managerial positions than are men, in part because of the belief that women tend to desire social rewards, oriented toward human relationships, i.e. friendships with co-workers and pleasant work environments: rewards that are derived from the work but not directly associated with the work itself. Men on the other hand, have been suggested to prefer more work-related rewards, such as responsibility, pay, promotions, and authority. These assumptions were refuted in a study done by Brief and Oliver (1976) which showed that, when controlling for occupation and organizational level, differences by gender in preference of rewards, were not apparent.

Men and Women: Differences in Familial Responsibilities

Economists and social scientists alike have suggested that centuries of social customs have established different family roles for men and women, which in turn have been associated both with occupational segregation and the male/female wage gap (Greenwood, 1984a, 1984b; Sorensen, 1984; Blumrosen, 1979-80). These traditional sex roles have placed the majority of financial responsibility on men, while women have been expected to provide emotional support for the men and children, as well as perform the essential household duties.

Women who chose to work outside the home, have often been thought to be working only for a limited time: until they got married or started a family.

The historical exclusion of women from positions of authority seem deeply imbedded in the traditional male/female roles resulting from habits and socialization processes. Even when women do succeed in high status occupational positions the old adage that being married is an asset for a man (having a calming affect on him) while at the same time, being married is a disadvantage for a woman (making her unpredictable), is still held to be true by many employers today (Hull, 1982). Results from several studies show that many women who have attained executive status in their occupations, have done so at the cost of what is thought of as a traditional family life. Hull (1982) as well as Levine-Shneidman & Levine (1985) cite the fact that women executives tend to be single at a much higher rate than their male peers; and women executives are three to six times as likely to be divorced, as a direct result of their careers as men in comparable positions.

THEORETICAL EXPLANATIONS FOR OCCUPATIONAL SEGREGATION AND MALE-FEMALE WAGE DIFFERENTIALS

A major issue in determining the relationship between occupational segregation and the male-female earnings gap pertains to whether differences, in the occupational distri-

bution of the sexes, result from different choices made by each, given equal opportunities, or from unequal opportunities stemming from discriminatory employment practices.

Many researchers have recognized women's additional familial responsibilities as a possible explanation for the types of jobs women have chosen upon entering the paid labor force. Whether these decisions are truly based on a woman's choice, or are predisposed due to expectations of discrimination remains to be seen.

Two theories dominate the research literature attempting to explain occupational segregation and the wage disparity between male and female workers: human capital and discrimination.

Human Capital

It is commonly believed that women adjust their labor market behavior and job choices, or withdraw entirely from the labor market, so as to accommodate child rearing and family responsibilities. Human capital theorists, Mincer and Polachek (1974), in applying human capital theory to the earnings of women, focus on the relationships within family units: between time allocation and investments in human capital. Using data from the 1967 National Longitudinal Survey of Work Experience (NLS) Mincer and Polachek (1974) investigated the relationship of family and work histories of women, and the sequence of human capital accumulation, to their current market earning power.

In developing a human capital explanation for women's labor market choices based on sex-role differentiation, Mincer and Polachek (1974) claim women's labor market choices are based on conscious decisions, made by women, due to familial responsibilities. They attribute the fact that women choose lower paying, female-dominated jobs, based on the assumption that they are less demanding and allow more flexibility for women to accommodate non-market family needs such as, bearing and/or raising children. It is also suggested that women choose to enter occupations for which earnings losses from anticipated absences from the labor force over the life cycle will be the smallest.

Studies by Corcoran and Duncan (1979) and England (1982) oppose the conclusions drawn by Mincer and Polachek in a variety of instances. Corcoran and Duncan (1979) dispute the finding that women choose lower paying jobs because they are less demanding and allow more flexibility. Their evidence suggests that the higher a woman's or man's professional level, the greater their flexibility in taking time off or setting their own hours. In 1982, England refuted Mincer and Polachek's assumption that female-dominated occupations have lower penalties, she concluded that occupations with higher proportions of females do not consistently show lower penalties for intermittent employment, than occupations with lower proportions of women. Therefore, the choice of a traditionally female occupation, based on the assumption of intermittent employment, would not be economically rational. England

(1982) further concluded that the women in her sample with a history of continuous employment, were no less apt to be in female-dominated occupations, thereby negating Mincer & Polachek's reasoning that women tend to choose female dominated occupations in order to decrease the penalties of intermittent employment.

In addition to current family responsibilities, Mincer and Polachek (1974) presume that expectations of future family and market activities, are also important determinants of current investments in human capital. The prospect of future interruption is thought to influence women to invest less in education and training, thus limiting their accumulation of work related human capital, and in turn resulting in lower wages. Mincer and Polachek (1974) further argue that women's human capital (work skills) will depreciate during their withdrawals from the work force, thus decreasing their wages upon return. In the course of analyzing their data with ordinary least-squares (OLS) regression, they found the coefficient of home time (the time spent out of the labor force) to be negative, indicating a net depreciation of earning power, amounting to an average of 1.5 percent per year (Mincer & Polachek, 1974).

In a replication of Mincer and Polachek's (1974) study, Sandell and Shapiro (1978) point out a coding error, made by the Bureau of the Census. This error discovered by the Center for Human Resource Research, may have biased some of Mincer and Polachek's regression results by understating work

experience and overstating the home time of some of the women in the sample. Using corrected data, Sandell and Shapiro's (1978) study resulted in two significant differences. The effect of "depreciation" of human capital on women's earnings was concluded by Sandell and Shapiro, to be approximately one-half of one percent, per year compared to the one and one-half percent observed by Mincer and Polachek (1974). Sandell and Shapiro (1978) also suggest that discrimination has more to do with the male-female wage gap than Mincer and Polachek (1974) implied.

Additional research indicates that while labor force withdrawals do reduce wages, because of the lack of work experience and seniority being accumulated, there is no additional penalty due to the depreciation of skills. In fact, the period following a woman's return to the work force is characterized by rapid wage growth, and the net loss in wages from dropping out, is small (Corcoran, 1978; Corcoran & Duncan, 1979; and Corcoran, Duncan & Ponza, 1983).

The extent to which differences in the work-experience histories of men and women directly account for the wage differentials of the two groups is disputed by various investigations. The Mincer and Polachek (1974) study estimates that nearly one-half of the male-female wage differential results from differences in work experiences between men and women. This is in sharp contrast to Sandell and Shapiro's (1978) estimate that only one-fourth of the male-female wage differential is directly accounted for by the differences in

work experience. Studies by C7rcoran (1978), and Corcoran and Duncan (199) also concluded that less than half of the male-female earnings gap could be explained by differences in education, job qualifications, work continuity, or labor force attachment.

In an effort to estimate the productivity of individual workers, Treiman and Hartmann (1981) assume that differences in "human capital" cause differences in productivity which results in the wage differential. Any differences in earnings other than those explained by the differences in human capital are often assumed to represent discrimination.

Discrimination

Several authors have suggested that instances of direct and indirect discrimination by employers, have promoted the persistence of both occupational segregation and the male-female earnings gap in the labor market (Bergmann, 1974; Blumrosen, 1979-80).

Bergmann (1974) developed a theory explaining occupational segregation based on the fact that women face barriers to entry into male-dominated occupations, and thus tend to become crowded into a small number of female dominated occupations. These barriers can be the result of direct employer discrimination and/or indirect societal discrimination based on women's traditional role, and what occupations are considered proper for women as opposed to men.

This theory also partially explains the earnings differ-

ential between male and female dominated occupations. As a result of the "crowding" effect, the labor supply in female-dominated occupations increases thereby reducing the wage rate, while at the same time limiting the supply of labor and raising the wages in male-dominated occupations.

The implementation of equal employment opportunity legislation designed to remedy wage disparities in the labor force, suggests by their mere existence, that discrimination does occur in the labor market. A study by Beller (1982) on the effectiveness of equal employment opportunity (EEO) legislation, concludes that the success of EEO laws suggest that discrimination was a determinant of occupational segregation, as argued by Bergmann (1974).

Affirmative action policies, which were implemented to insure the existence of opportunities for women and other protected classes, in hiring and promotion situations, are often seen as a double edged sword. Affirmative Action has helped to bring sex biases to the attention of employers, and while more women may be hired who would not have been hired prior to the implementation of anti-discrimination legislation, employers often retaliate against the pressure to hire women by recommending lower starting salaries, assigning them to less challenging tasks, blocking opportunities for advancement, and other forms of resistance or retaliation (Rosen and Mericle, 1979; White et al, 1981).

LEGISLATIVE STATUTES AGAINST DISCRIMINATION

The Equal Pay Act

The Equal Pay Act (EPA) of 1963, passed as an amendment to the Fair Labor Standards Act of 1938, addresses one very specific form of employment discrimination: paying different wages to women and men whose jobs require equal skill, effort, and responsibility, and are performed under similar working conditions (Blumrosen, 1979-80; Dorsen, Bender, Neuborne, & Law, 1979; Levit & Mahoney, 1984; Lefcourt, 1984).

The only type of wage differentials allowed by the EPA are those based on (1) a seniority system, (2) a merit system, (3) a system which measures earnings by quantity or quality of production, or (4) a differential based on any other factor other than sex.

It is not necessary for the plaintiff filing a case under the EPA to show intent to discriminate on the part of the employer. In order to establish a prima facie case, the plaintiff must only show that the employer pays workers of one sex more than workers of the opposite sex for jobs that are equal in content. Once the plaintiff shows proof to substantiate the claim, the burden of proof then shifts to the employer who must establish that the work is not equal or that the wage differertial is justified under one of the four exceptions (Levit & Mahoney, 1984; Lefcourt, 1984; Dorsen et al, 1979). Even though intent to discriminate is not required in building a case under the EPA, merely proving pay differences can be difficult due to the shroud of secrecy which

commonly surrounds pay levels.

When determining what jobs are comparable under the EPA, courts have held that jobs must be "substantially identical", however, titles of jobs compared do not need to be the same if the actual duties are; that job and pay comparisons can be those of one employee and a predecessor or a successor; and that jobs can be compared despite additional duties assigned to one of those jobs if those duties are incidental, occasional or pretextual (Lefcourt, 1984).

To the extent that women remain occupationally segregated, they are unable to meet the equal work standard and are thus outside the scope of relief offered by the Equal Pay Act. However, "the United States Supreme Court ruled in July 1981 that sex-based wage discrimination suits could be filed under the Title VII of the Civil Rights Act, even though no member of the opposite sex held an equal but higher paying job" (Sorensen, p.465, 1984).

Title VII

Title VII of the Civil Rights Act of 1964 (Title VII) has been the principal body of federal legislation in the area of fair employment practices to date. Title VII prohibits discrimination with respect tc conditions of employment (hiring/firing), compensation, or working conditions because of race, color, religion, sex or national origin (Dorsen et al, 1979; Hart, 1984a, 1984b, Levit & Mahoney, 1984; Lefcourt, 1984). However, the term "discrimination" was never

precisely defined, which left the law open for broad interpretation by the courts. Four general categories of discrimination are recognized under Title VII: disparate treatment, adverse impact, present effects of past discrimination, and failure to make reasonable accommodation (Sobol & Ellard, 1985).

A disparate treatment case is when an employer intentionally discriminates, or treats some person or persons less favorably than others because of their race, color, religion, sex or national origin. The plaintiff would be responsible for proving discriminatory intent in this type of case. Intent can be proved either by direct evidence, or inferred from indirect, circumstantial evidence (Dorsen et al, 1979; Lefcourt, 1984; Levit & Mahoney, 1984).

Adverse impact refers to employment practices which are not necessarily purposefully discriminatory but do have a discriminatory impact on women or other protected groups. In this type of case, plaintiffs have to prove that an apparently neutral employment practice has an adverse impact on the protected group. The prima facie disparate impact case does not require proof of intent, but looks at effects rather than motivations (Dorsen et al, 1979; Lefcourt, 1984; Levit & Mahoney, 1984; Sobol & Ellard, 1985). The rule of thumb in determining adverse impact is the four-fifths or 80% rule. Under this rule, an employment practice with a selection rate for any race, sex, or ethnic group which is less than four-fifths or 80% of the selection rate for the majority group is

regarded as having an adverse impact on the minority group (Sobol & Ellard, 1985).

Present effects of past discrimination refers to policies or practices which continue to perpetuate historical cases of discrimination which existed before the passage of the Civil Rights Act of 1964 (Sobol & Ellard, 1985). An example of this is when wage structures are based on past practices of blatant discrimination.

The fourth type of discrimination involves instances where employers fail to make reasonable accommodations for an employee's handicap or religious observance. This type of discrimination has no direct bearing on the study being conducted, therefore discussion of this type will be left for future research.

It is obviously more difficult to prove during litigation, that discrimination is the result of deliberate intent than to show that some form of discriminatory effect resulted from an employment practice. This leads to a conflict that is currently plaguing the judicial system: determining which standard of proof, discriminatory intent or discriminatory effect, should be applied in Title VII cases. Until this conflict of interpretation is resolved, and clear cut standards implemented, the question of what constitutes discrimination and what does not will be up to the discretion of the individuals involved in each case.

Equal Employment Opportunity Commission

In addition to the specific laws, the Equal Employment Opportunity Commission (EEOC), was created by Title VII of the Civil Rights Act. The EEOC was given the authority to process, investigate and conciliate complaints. The EEOC, which is an independent regulatory agency, sets policy and in individual cases, determines whether there is "reasonable cause" to believe that unlawful discrimination has occurred. They did not, however, have any legal authority, with which to enforce their rulings.

The Equal Employment Opportunity Act of 1972 strengthened and expanded the coverage of Title VII by granting the EEOC the right to bring suit against private sector employers. Before 1972, the Justice Department held the power to enforce Title VII. As a result of this change in enforcement privileges, the number of employment discrimination cases reaching federal district courts has increased dramatically (Beller, 1982; Dorsen et al, 1979).

CHAPTER III

METHODS AND PROCEDURES

Questionnaire

The data used in this study are from the Current Population Survey, March 1982, which was conducted by the Bureau of the Census for the Bureau of Labor Statistics.

The Current Population Survey (CPS) is a household sample survey conducted monthly, to provide estimates of employment, unemployment, and other characteristics of the general labor force, of the population as a whole, and of various sub-groups of the population. The CPS is also a comprehensive source of information on the personal characteristics of the total population such as age, sex, marital status, family status, and years of school completed (CPS Technical Documentation, 1982, p.5).

History

The CPS has been in existence since 1940, and is probably the oldest continuous monthly sample survey of households in the world (Bregger, 1984; Ryscavage & Bregger, 1985). It originated in March 1940 as part of the Works Progress Administration in order to monitor the level and changes in the size of labor force employment and unemploy-

ment (Bregger, 1984). It has since grown in sample size, but the basic concepts used to measure employment and unemployment have remained the same. The CPS is built around the "activity concept" which identifies a person's major activity in relation to the labor market during a one-week reference period. Using the activity concept, the CPS divides the population into the categories employed, unemployed, and not in the labor force. The CPS is primarily concerned with measuring the current labor force activities of the U.S. population and is the government's official source of the unemployment rate (Ryscavage & Bregger, 1985).

The population to which the CPS refers includes the civilian non-institutional population of the U.S. and approximately 871,000 members of the Armed Forces in the U.S. living off post or with their families on post, but excludes all other members of the Armed Forces (U.S. Bureau of the Census; Current Population Reports, 1983). The population parameter for the March 1982 CPS included 227,375,000 persons, however the income data was only collected for persons 15 years old and over.

Current Population Survey Sample

"The CPS sample is located in 629 sample areas comprising more than 1,000 counties and independent cities with coverage in every state and in the District of Columbia. This file reflects interviews for approximately 60,000 households, containing about 130,000 persons. Each household is inter-

viewed once a month for four consecutive months in one year, and again for the corresponding time period one year later" (CPS Technical Documentation, 1983, p.5). This rotation pattern lends stability to the estimates of month to month and year to year changes.

Interview Procedure

Interviews for the CPS are initially conducted in person, during the first month of each four month sampling sequence, and subsequent interviews, for the second, third, and fourth months, are conducted by telephone. On average, about 35 percent of the monthly interviews are personal visits and 65 percent are by telephone. Generally, one household member will answer questions on behalf of all members 16 years or older. The interviews average from five to seven minutes per person (Bregger, 1984; Ryscavage & Bregger, 1985).

The reference period for the interview is the week containing the 12th day of the month and data are typically collected in the week of the 19th, therefore the recall period is in the context of last week. Data for the reference week are used to represent an individuals status for the entire month (Ryscavage & Bregger, 1985).

No interview was obtained for approximately five percent of the 63,000 households in the March 1982 CPS sample. A variety of reasons for this occurrence include "no one home," "temporarily absent," or "refusals" (U.S. Bureau of the

Census; Current Population Reports, 1983). This is consistent with an average overall response rate for the CPS of 95 to 96 percent (Ryscavage & Bregger, 1985).

CPS Sample Deficiencies

A serious problem often found in household surveys is that of "item non-response". This is particularly troublesome in the area of income data collection. Even when an interview is conducted, complete information for all of the income questions is not always available, unknown, or refused (U.S. Bureau of the Census; Current Population Reports, 1983).

As in most household surveys, the CPS has a problem with respondents underreporting their income. "Comparisons of the 1980 CPS estimates with independent totals reveal that overall income in the survey after allocation is underreported by 11 percent" (U.S. Bureau of the Census; Current Population Reports, 1983, p. 216). However, underreporting tends to be more pronounced for income sources that are not derived from earnings. "Overall, income earned from wages or salary is much better reported than other sources of income and, when dollar imputations are assigned for nonreporting, total wage and salary income approximates independently derived estimates" (U.S. Bureau of the Census; Current Population Reports, 1983, p.3).

There are many various reasons for the underreporting of income, of which the following are some of the more impor-

tant:

> "(1) respondents' overlooking income received (especially in small amounts not regularly received), (2) reluctance to reveal the receipt of certain income types, (3) reporting rounded amounts, (4) misunderstanding the questions, (5) lack of information especially covering family members not present during the interviews, (6) interviewer's errors in recording information on the questionnaire, (7) biases in the allocation of nonresponses, and (8) errors resulting from the aggregation of the information collected from individual questionnaires" (U.S. Bureau of the Census; Current Population Reports, 1983 p.216).

Data Analysis

The variables to be used in this study include demographic and situational characteristics that may affect the salaries of retail employees. The dependent variable is the annual salary of male and female retail employees. The independent variables include gender and marital status. Co-variates used to reduce the influence of extraneous factors, include age, level of education, hours worked, and children less than five years old.

Data Collection

The data base used in this study includes information collected from full-time retail employees in a wide variety of retail establishments. The retail establishments were aggregated into three broad categories, department stores, specialty stores, and discount stores, in order to analyze and compare the results. Table 3.1 shows the three retail categories specified by this researcher and the retail

classifications which comprise each. Also included are the 3-digit SIC codes for each type of retail establishment.

TABLE 3.1 CATEGORIZATION OF RETAIL ESTABLISHMENTS

Category	SIC Codes
Department Stores	
Department Stores	531
Mail Order Establishments	532
Specialty Stores	
Apparel & Accessory Stores, except shoe stores	56 except 566
Furniture & Home Furnishing Stores	571
Household Appliances, TV, & Radio Stores	572, 573
Drug Stores	591
Miscellaneous Retail Stores	593-595, 599 except 5992
Not Specified Retail Trade	
Discount stores	
Limited Price Variety Stores	533
Miscellaneous General Merchandise Stores	539

Variable Definitions

Occupational Status: The occupational levels included in this study are buyer, sales manager or department head, and salesperson.

Age: The age of the person at his/her last birthday (CPS, Technical Documentation, 1982, p.113).

Salary: The total money earnings received for work performed as an employee during the calendar year, before deductions are made for taxes (CPS, Technical Documentation, 1982, p.128).

Marital Status: The CPS identifies four major categories: single (never married), married, widowed, and divorced (CPS, Technical Documentation, 1982, p.121-122).

Children less than five years old: All children in the household, less than five years old, who are related to the householder by birth, marriage, or adoption (CPS, Technical Documentation, 1982, p.126).

Level of Education: Referred to by the CPS as years of school completed, applies only to progress in "regular" school. Regular schooling is that which may advance a person toward an elementary school certificate, or high school diploma, or a college, university, or professional degree (CPS, Technical Documentation, 1982, p.128-129).

Hours of Work: Statistics relate to the actual number of hours worked during the survey week (CPS, Technical Documentation, 1982, p.115). It is assumed to be an average week.

Objectives, Hypotheses and Statistical Analysis

The research objectives of this investigation include six operational hypotheses. Each hypothesis will be tested using data from full-time department, specialty and discount store employees. Each hypothesis is divided into sub-hypotheses, by occupation, and individual tests will be used to analyze each sub-hypothesis.

The research objectives of this study are: (1) to determine the salary levels of men and women in the retail positions of buyer, sales manager or department head, and salespeople (2) to determine whether sex or marital status affect the salary levels of retail employees (3) to determine the affect on salary levels by controlling for variables such as age, level of education, hours worked, and the presence of children less than five years old.

H1: There are no significant differences between the salaries of males and females within the occupational classifications of:

A. buyer

B. sales manager or department head

C. salesperson

An Analysis of Variance (ANOVA) model was used to test the effects of an employee's gender (independent variable) on the salary levels (dependent variable) of women and men in the retail positions of buyer, sales manager or department head, and salesperson.

H2: When controlling for the factors age, level of education, and hours worked: there will be no significant difference in the salary levels of males and females in the position of:

A. buyer

B. sales manager or department head

C. salesperson

An analysis of co-variance (ANCOVA) was used to test hypothesis 2. Salary was the dependent variable, sex was the independent variable, and age, level of education and hours worked were used as co-variates.

H3: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single females within the occupational classifications:

A. buyer

B. sales manager or department head

C. salesperson

H4: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single males, within the occupational classifications:

A. buyer

B. sales manager or department head

C. salesperson

An analysis of co-variance (ANCOVA) was used to analyze hypotheses three and four. The ANCOVA model will be used to control for the co-variates age, education, and hours worked; and any possible impact they would have on the dependent variable, annual salary.

H5: When controlling for children less than five, there will be no significant differences in the salary levels of married and single, female retail employees in the positions of:

A. buyer

B. sales manager or department head

C. salesperson

H6: When controlling for children less than five, there will be no significant differences in the salary levels of married and single male retail employees in the positions:

A. buyer

B. sales manager or department head

C. salesperson

Analysis of co-variance was the statistical procedure used to test both hypotheses 5 and 6. The presence of children less than five years old, was controlled due to the possible variations it could have on an employee's occupational and familial responsibilities, as well as on the dependent variable, salary.

CHAPTER IV

RESULTS

This chapter is a summary of the demographic and statistical findings from the collected data. Chapter IV is divided into two sections. Section One is a discussion of demographic characteristics of the sample. The second section is a discussion of the statistical results using Analysis of Variance and Analysis of Co-Variance models. Each section is divided into three sections for the occupational classes evaluated.

Demographic Information

The information included in this section is a summary of the demographic characteristics of the sample analyzed in this study.

Data were collected and analyzed for a total of 647 subjects, 398 women and 249 men. In this sample 61.5% of the employees were women compared to 63.5% for retailing in general (U.S. Bureau of the Census, 1983).

The establishments evaluated in this study included department, specialty, and discount stores. The data were analyzed by the occupational classifications of buyer, sales manager or department head, and salesperson. Each position

was then segregated by sex to determine the number of women and men in the specific occupational levels.

The proportional difference of men versus women in the occupational classification of buyer was fairly large in all three categories of store types, ranging from 28% men and 72% women in the department store group to 100% women in the discount stores group.

The category of sales managers and department heads had a fairly large difference in men versus women between the types of store classifications. In the sample of department stores there was almost an equivalent amount of men (46%) and women (54%), while there was a significant difference in the sample of specialty stores, with 70% men and 30% women. Discount stores fell right in between with 40% men and 60% women.

Department stores and discount stores, the classifications with more women sales managers and department heads, are generally larger and have more employees than most specialty stores. This does not support the conclusion of a Gable et al (1984) study which found that the larger the firm and number of executive positions, the less likely it is that women will occupy them.

Department stores and discount stores had significantly more women than men while in the specialty store group there was nearly an equivalent number of men and women.

The breakdown by sex, of the total sample as well as the number of employees in each occupational classification, by

store category is presented in Table 4.1.

For discussion purposes, each demographic variable will now be addressed independently. The demographic variables examined were marital status, age, level of education, and hours worked last week.

Marital Status

The majority of the individuals in the sample, both male and female, indicated that they were married. Approximately 62% of the males were married while 54% percent of the females were married.

The majority of male buyers were single (62%), whereas in the occupational classifications of sales managers and department heads and salespeople the majority of males were married. The proportional differences between married and single women were much smaller than for men, ranging from 3% for buyers to 20% for sales managers and department heads.

Since the hypotheses using marital status as the independent variable looked at salary differentials only within gender group this demographic variable was not analyzed for male versus female differences. A summary of the breakdown of marital status by occupation is presented in Table 4.2.

Age of Respondent

Respondents were asked to specifiy their ages at their last birthday. The majority (67%) of respondents in the total sample were between the ages of sixteen and forty-four.

TABLE 4.1 SEX DISTRIBUTION BY POSITION

	Male n	%	Female n	%	Total n	%
Total Sample						
Buyer	13	(28.26)	33	(71.74)	46	(7.11)
Sales Manager & Department Head	56	(52.83)	50	(47.17)	106	(16.38)
Salespeople	180	(36.36)	315	(63.64)	495	(76.51)
					647	(100.00)
Department and Mail-Order Establishments						
Buyer	8	(27.59)	21	(72.41)	29	(10.32)
Sales Manager & Department Head	31	(45.59)	37	(54.41)	68	(24.20)
Salespeople	44	(23.91)	140	(76.09)	184	(65.48)
					281	(100.00)
Specialty Stores						
Buyer	5	(35.71)	9	(64.29)	14	(4.20)
Sales Manager & Department Head	23	(69.70)	10	(30.30)	33	(9.91)
Salespeople	131	(45.80)	155	(54.20)	286	(85.89)
					333	(100.00)
Discount Stores						
Buyers	0	(0.0)	3	(100.00)	3	(9.09)
Sales Manager & Department Head	2	(40.00)	3	(60.00)	5	(15.15)
Salespeople	5	(20.00)	20	(80.00)	25	(75.76)
					33	(100.00)

TABLE 4.2 MARITAL STATUS

	Males		Females	
	#	%	#	%
Total Sample				
Married	154	(61.85)	216	(54.27)
Single	95	(38.15)	182	(45.73)
	249	(100.00)	398	(100.00)
Buyers				
Married	5	(38.46)	17	(51.52)
Single	8	(61.54)	16	(48.48)
	13	(100.00)	33	(100.00)
Sales Managers & Department Heads				
Married	38	(67.86)	30	(60.00)
Single	18	(32.14)	20	(40.00)
	56	(100.00)	50	(100.00)
Salespeople				
Married	111	(61.67)	169	(53.65)
Single	69	(38.33)	146	(46.35)
	180	(100.00)	315	(100.00)

This also held true for the individual occupational classifications of buyer (83%), sales manager and department head (67%), and salespeople (62%). A breakdown of the respondents age by sex and occupation is provided in Table 4.3.

Level of Education

The subjects were also asked to state the years of school completed, which would advance a person toward an elementary school certificate, a high school diploma, or a college, university, or professional degree. The majority of the sample had between 13 and 17 years of school ranging from 84% of the salespeople to 96% of the buyers. A summary of the educational levels of the subjects is provided in Table 4.4.

Hours Worked

The data classified as hours worked represents the amount of time a worker actually spent working during the survey week. For the total sample, the majority of both males and females said that they worked between 36 and 45 hours (Table 4.5). It should also be noted that of those that worked 46 or more hours, 82% were men.

Statistical Results of the Hypotheses

The research objectives for this study were: (1) to determine the salary levels of men and women in the retail positions of buyer, sales manager or department head, and

TABLE 4.3 AGE OF RESPONDENT

Age of Respondent	Males #	Males %	Females #	Females %	Total #	Total %
Total Sample						
16 - 24	44	(31.88)	94	(68.12)	138	(21.33)
25 - 34	97	(50.79)	94	(49.21)	191	(29.52)
35 - 44	44	(42.72)	59	(57.28)	103	(15.92)
45 - 54	33	(31.73)	71	(68.27)	104	(16.07)
55 - 64	23	(47.06)	71	(52.94)	94	(14.53)
65 - +					17	(2.63)
					647	(100.00)
Buyers						
16 - 24	2	(33.33)	4	(66.67)	6	(13.04)
25 - 34	6	(33.33)	12	(66.67)	18	(39.13)
35 - 44	2	(14.29)	12	(85.71)	14	(30.44)
45 - 54	1	(33.33)	2	(66.67)	3	(6.52)
55 - 64	1	(25.00)	3	(75.00)	4	(8.70)
65 - +	1	(100.00)	0	(0.00)	1	(2.17)
					46	(100.00)
Sales Managers & Department Heads						
16 - 24	10	(56.63)	9	(47.37)	19	(17.93)
25 - 34	23	(63.89)	13	(36.11)	36	(33.96)
35 - 44	7	(43.75)	9	(56.25)	16	(15.09)
45 - 54	6	(40.00)	9	(60.00)	15	(14.15)
55 - 64	8	(44.44)	10	(56.56)	18	(16.98)
65 - +	2	(100.00)	0	(00.00)	2	(1.89)
					106	(100.00)
Salespeople						
16 - 24	32	(28.32)	81	(71.68)	113	(22.83)
25 - 34	68	(49.64)	69	(50.36)	137	(27.68)
35 - 44	35	(47.95)	38	(52.05)	73	(14.75)
45 - 54	26	(30.23)	60	(69.77)	86	(17.37)
55 - 64	14	(19.44)	58	(80.56)	72	(14.54)
65 - +	5	(35.71)	9	(64.29)	14	(2.83)
					495	(100.00)

TABLE 4.3 AGE OF RESPONDENT

Age of Respondent	Total

TABLE 4.4 **LEVEL OF EDUCATION**

Years of Education	Males #	Males %	Females #	Females %	Total #	Total %
Total Sample						
12 or less	14	(17.95)	64	(82.05)	78	(12.06)
13	102	(32.28)	214	(67.72)	316	(48.84)
14-15	60	(49.18)	62	(50.82)	122	(18.86)
16-17	64	(55.65)	51	(44.35)	115	(17.77)
18 or more	9	(56.25)	7	(43.75)	16	(2.47)
					647	(100.00)
Buyers						
12 or less	1	(50.00)	1	(50.00)	2	(4.35)
13	5	(23.81)	16	(76.19)	21	(45.65)
14-15	3	(42.86)	4	(57.14)	7	(15.22)
16-17	4	(25.00)	12	(75.00)	16	(34.78)
18 or more	0	(00.00)	0	(00.00)	0	(00.00)
					46	(100.00)
Sales Managers & Department Heads						
12 or less	2	(22.22)	7	(77.78)	9	(8.49)
13	20	(43.48)	26	(56.52)	46	(43.40)
14-15	15	(57.69)	11	(42.31)	26	(24.53)
16-17	16	(72.73)	6	(27.27)	22	(20.75)
18 or more	3	(100.00)	0	(00.00)	3	(2.83)
					106	(100.00)
Salespeople						
12 or less	11	(16.42)	56	(83.58)	67	(13.54)
13	77	(30.92)	172	(69.08)	249	(50.30)
14-15	42	(47.19)	47	(52.81)	89	(17.98)
16-17	44	(57.14)	33	(42.86)	77	(15.56)
18 or more	6	(46.15)	7	(53.85)	13	(2.62)
					495	(100.00)

TABLE 4.5 HOURS OF WORK

Hours Worked	Males #	Males %	Females #	Females %	Total #	Total %
Total Sample						
25 or less	9	(20.45)	35	(79.55)	44	(6.80)
26 - 35	9	(13.85)	56	(86.15)	65	(10.05)
36 - 45	168	(36.44)	293	(63.56)	461	(71.25)
46 or more	63	(81.82)	14	(18.18)	77	(11.90)
					647	(100.00)
Buyers						
25 or less	0	(00.00)	2	(100.00)	2	(4.35)
26 - 35	0	(00.00)	3	(100.00)	3	(6.52)
36 - 45	8	(22.86)	27	(77.14)	35	(76.09)
46 or more	5	(83.33)	1	(16.67)	6	(13.04)
					46	(100.00)
Sales Managers & Department Heads						
25 or less	1	(100.00)	0	(00.00)	1	(.94)
26 - 35	1	(25.00)	3	(75.00)	4	(3.77)
36 - 45	38	(46.34)	44	(53.66)	82	(77.36)
46 or more	16	(84.21)	3	(15.79)	19	(17.93)
					106	(100.00)
Salespeople						
25 or less	8	(19.51)	33	(80.49)	41	(8.28)
26 - 35	8	(13.79)	50	(86.21)	58	(11.72)
36 - 45	122	(35.49)	222	(64.53)	344	(69.49)
46 or more	42	(80.77)	10	(19.23)	52	(10.51)
					495	(100.00)

salesperson, (2) to determine whether sex or marital status affect the salary levels of retail employees, (3) to determine the affect on salary levels by controlling for variables such as age, level of education, hours worked, and the presence of children less than five years old. Analysis of Variance (ANOVA), and Analysis of Co-Variance (ANCOVA) were the statistical models used in determining the presence of male/female wage disparities and which, if any, variables influenced them. A Multiple Classification Anlysis (MCA), which is a projection of the differences between unadjusted salaries and those adjusted for the independent variables and co-variates, was also run for each hypothesis. The R squared value is the proportion of variance accounted for by the model.

Individual tests were performed on the occupational classifications of buyer, sales manager or department head and salesperson. In order to simplify the reported results of the data, each hypothesis has been broken down into sub-hypotheses according to the occupational classifications. The results of hypotheses 1 - 6 will be discussed for buyers first, followed by the discussion of results for sales managers and department heads and finally, those for salespeople.

Buyers

H1-A: There are no significant differences between the salaries of males and females within the occupational classification of buyer.

Analysis of Variance (ANOVA) was used to determine the effects of an employee's gender on the salary levels of retail buyers. Significant differences were found between the salaries of male versus female retail buyers ($p<.05$), therefore, hypothesis 1-A was rejected. The grand mean for retail buyers salary was $14,960.61. The mean difference between the salaries of male and female retail buyers was $5,914.71, with men earning an average salary of $19,203.77 while women earned an average of $13,289.06. The results of the ANOVA for retail buyers is presented in Table 4.6.

While there is a significant difference in salary levels for male versus female buyers, the R square value of .101 is relatively low, which means that the model does not explain a great degree of the variation.

Additional variables were added as covariates in hypothesis two in order to control for factors which may affect wage disparity.

H2-A: When controlling for the factors age, level of education, and hours worked: there will be no significant difference in the salary levels of male and female buyers.

An Analysis of Co-Variance (ANCOVA) was conducted to determine which, if any of the covariates provided more information about the difference in salary levels of male and female buyers. A summary of the results of the ANCOVA for salary variations of retail buyers is presented in Table 4.7. Hours worked was the most significant ($p<.001$) source of

TABLE 4.6 SALARY VARIATIONS OF MALE AND FEMALE BUYERS USING ANOVA

	SS	DF	MS	F	Significance
Main Effects					
Sex	.326E+09	1	.326E+09	4.947	.031*
Explained	.326E+09	1	.326E+09	4.947	.031*
Residual	.290E+10	44	.660E+08		
Total	.323E+10	45	.717E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $14,960.61

Source	N	Unadjusted Salary	Adjusted for Independent Variable
Sex			
Male	13	$19,203.77	$19,203.77
Female	33	$13,289.06	$13,289.06
Mean Difference		$ 5,914.71	$ 5,914.71
			R squared = .101

TABLE 4.7 SALARY VARIATIONS OF MALE AND FEMALE BUYERS; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Sex	.191E+08	1	.191E+08	.395	.533
Co-Variates	.122E+10	3	.407E+09	8.394	.001***
Age	.249E+09	1	.249E+09	5.125	.029*
Education	.165E+09	1	.165E+09	3.412	.072
Hours Worked	.118E+10	1	.118E+10	24.296	.001***
Explained	.124E+10	4	.310E+09	6.394	.001***
Residual	.199E+10	41	.485E+08		
Total	.323E+10	45	.717E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $14,960.61

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Covariates
Sex			
Male	13	$19,203.77	$16,088.32
Female	33	$13,289.06	$14,516.36
Mean Difference		$ 5,914.71	$ 1,571.96
			R squared = .384

variation for salary. Age was also significant ($p<.05$). Education was not significant. The results of this test indicate that the model was a significant predictor of salary disparity, and hypothesis 2-A was rejected.

When the salaries of buyers were adjusted for the independent variable and co-variates, the difference was reduced to $1,571.76. This is a substantial reduction in the wage differential of male and female buyers, however, a significant disparity between the sexes remains. This model explained a large proportion of the salary variation (R squared = .384).

H3-A: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single female buyers.

An Analysis of Co-Variance (ANCOVA) model was specified with marital status as the independent variable, and age, level of education and hours worked as the covariates. Table 4.8 shows the results of the ANCOVA model as well as the MCA.

The main effect of marital status was not a significant predictor of salary for female buyers. However, when the co-variate adjustments were made, the explained variance was significant ($p<.05$), therefore hypothesis 3-A was rejected. Hours worked was the only co-variate which explained the salary variation between married versus single female buyers at a significant level ($p<.01$).

When the salaries were adjusted for marital status and

TABLE 4.8 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE BUYERS; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.134E+06	1	134948.89	.004	.953
Co-Variates	.420E+09	3	.140E+09	3.747	.022*
Age	.749E+08	1	.749E+08	2.004	.168
Education	.700E+08	1	.700E+08	1.870	.182
Hours Worked	.414E+09	1	.414E+09	11.061	.002**
Explained	.421E+09	4	.105E+09	2.811	.044*
Residual	.105E+10	28	.374E+08		
Total	.147E+10	32	.459E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $13,289.06

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	17	$12,584.00	$13,217.43
Single	16	$14,038.19	$13,365.17
Mean Difference		$ 1,454.19	$ 147.74
			R squared = .287

the co-variates, the difference between married and single, female buyers was $147.74. This model explained 29 percent of the variation between married and single female buyers salaries.

H4-A: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single, male buyers.

Due to the small number of respondents (n = 13) included in the sample of male buyers, no statistical analysis was conducted for hypothesis 4-A. As a result, hypothesis 4-A cannot be rejected.

H5-A: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, female buyers.

An ANCOVA was conducted to determine whether controlling for marital status and children less than five would have a significant effect on the salary levels of female buyers. No significant results were found. The results of the ANCOVA leading to a failure to reject hypothesis 5-A are presented in Table A.1 in Appendix A.

H6-A: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, male buyers.

Due to small sample size (n = 13), no statistical

analysis was conducted for male buyers. It should be noted that a mean difference of $9,187.17 was found for married versus single male buyers with a grand mean of $19,203.77.

Sales Managers and Department Heads

H1-B: There are n significant differences between the salaries of males and females within the occupational classification of sales manager and department head.

The independent variable, sex, was a significant source of variation for salary levels ($p<.001$) of male and female sales managers and department heads. Therefore, hypothesis 1-B was rejected. The grand mean for salary was $16,943.86. In this occupational classification there was a mean difference of $8,385.09 between the salaries of males and females. Even though this model showed a significant difference between male and female salary levels, it explained very little of the proportion of the difference (R squared = .169). The results of the ANOVA as well as the MCA for this hypothesis are presented in Table 4.9.

H2-B: When controlling for the factors age, level of education, and hours worked: there will be no significant difference in the salary levels of male and female sales managers and department heads.

When the influence of the co-variates were added to the independent variable sex, the amount of variance explained

TABLE 4.9 SALARY VARIATIONS OF MALE AND FEMALE SALES MANAGERS AND DEPARTMENT HEADS USING ANOVA

	SS	DF	MS	F	Significance
Main Effects					
Sex	.186E+10	1	.186E+10	21.126	.001***
Explained	.186E+10	1	.186E+10	21.126	.001***
Residual	.914E+10	104	.879E+08		
Total	.110E+11	105	.105E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $16,943.86

Source	N	Unadjusted Salary	Adjusted for Independent Variable
Sex			
Male	56	$20,899.09	$20,899.09
Female	50	$12,514.00	$12,514.00
Mean Difference		$ 8,385.09	$ 8,385.09

R squared = .169

was significant ($p<.001$), therefore hypothesis 2-B was rejected. Both the co-variates age and hours worked were significant ($p<.001$). The co-variate education was not significant. Results of the ANCOVA and MCA are presented in Table 4.10.

When the salary levels of male and female sales managers and department heads were adjusted for both the independent variable and the co-variates, it was revealed that women are paid significantly less than men in these positions. The difference remaining was $6,678.31 with women earning $13,415.70 and men earning $20,094.01. This model explained a relatively large amount of the salary variation between male and female sales managers and department heads (R squared = .33).

H3-B: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single female sales managers and department heads.

The independent variable, marital status along with the covariates age, level of education and hours worked comprised the Analysis of Co-Variance model used to test this hypothesis. None of the variables were significant in explaining salary variations between married and single female sales managers and department heads, therefore this hypothesis was not rejected. These results can be reviewed in Table A.2, located in Appendix A.

TABLE 4.10 SALARY VARIATIONS OF MALE AND FEMALE SALES MANAGERS AND DEPARTMENT HEADS; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Sex	.100E+10	1	.100E+10	13.78	.001***
Co-Variates	.263E+10	3	.877E+09	12.02	.001***
Age	.114E+10	1	.114E+10	15.58	.001***
Education	.171E+09	1	.171E+09	2.35	.129
Hours Worked	.161E+10	1	.161E+10	22.05	.001***
Explained	.363E+10	4	.909E+09	12.46	.001***
Residual	.737E+10	101	.729E+08		
Total	.110E+11	105	.105E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $16,943.86

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Sex			
Male	56	$20,899.09	$20,094.01
Female	50	$12,514.00	$13,415.70
Mean Difference		$ 8,385.09	$ 6,678.31
			R squared = .330

H4-B: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single, male sales managers and department heads.

Marital Status, as an independent variable seems to have had little influence on the differences in salary, until the co-variates were added. Results of the Analysis of Co-Variance revealed that marital status was not significantly related to income for male sales managers and department heads (see Table 4.11). Age and hours worked were significant co-variate variables ($p<.001$). Hypothesis 4-B was rejected.

The grand mean for male sales managers and department heads annual salary was $20,899.09. In this sample married men earned $5,742.18 more than single men. When the salaries were adjusted for the independent variable and co-variates, the difference was reduced to $3,054.68. Thirty-seven percent of the variation in the annual salaries of this sample of men was explained by this model

H5-B: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, female sales managers and department managers.

An ANCOVA was conducted to determine whether controlling for children less than five would have a significant effect on the salary levels of married versus single female buyers. No significant differences were found, therefore hypothesis

TABLE 4.11 SALARY VARIATIONS OF MARRIED AND SINGLE MALE SALES MANAGERS AND DEPARTMENT HEADS; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.100E+09	1	.100E+09	1.978	.166
Co-Variates	.141E+10	3	.471E+09	9.295	.001***
Age	.830E+09	1	.830E+09	16.379	.001***
Education	.376E+09	1	.376E+08	.742	.393
Hours Worked	.682E+09	1	.682E+09	13.455	.001***
Explained	.151E+10	4	.378E+09	7.466	.001***
Residual	.258E+10	51	.507E+08		
Total	.410E+10	55	.745E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $20,899.09

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	38	$22,744.79	$21,880.95
Single	18	$17,002.61	$18,826.27
Mean Difference		$ 5,742.18	$ 3,054.68

R squared = .369

5-B cannot be rejected. The results the ANCOVA are presented in Table A.3 in Appendix A.

H6-B: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, male sales mangers and department heads.

An ANCOVA model indicated a significant relationship between marital status and the salary levels of male buyers ($p < .01$). The addition of the co-variate, children less than five years old, had no additional effect on the variation of salary levels (Table 4.12). Due to the significant results of this model, hypothesis 6-B was rejected.

The difference in average salaries for married versus single male sales managers and department heads is presented in the Multiple Classification Analysis. The grand mean was $20,899.09. Based an the unadjusted figures, married men made $5,742.18 more than single men. When the salaries were adjusted for marital status and the presence of children less than five, the difference increased to $8,210.16. Even though these models show a significant difference in the salaries of married and single men included in this sample, the proportion of the variance accounted for is relatively small (R squared = .192).

TABLE 4.12 SALARY VARIATIONS OF MARRIED AND SINGLE MALE SALES MANAGERS AND DEPARTMENT HEADS; CHILDREN LESS THAN FIVE YEARS OLD AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.690E+09	1	.690E+09	11.04	.002**
Co-Variate					
Children < 5	.972E+08	1	.972E+08	1.555	.218
Explained	.787E+09	2	.393E+09	6.298	.004**
Residual	.331E+10	53	.625E+08		
Total	.410E+10	55	.745E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $20,899.09

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	38	$22,744.79	$23,538.07
Single	18	$17,002.61	$15,327.91
Mean Difference		$ 5,742.18	$ 8,210.16

R squared = .192

Salespeople

H1-C: There are no significant differences between the salaries of males and females within the occupational classification of salespeople.

The results of an Analysis of Variance (ANOVA) model led to the rejection of hypothesis 1-C. The independent variable sex was a significant source of variation for salary levels ($p<.001$) of male and female salespeople.

The salary grand mean for salespeople was $10,898.49. In this occupational classification the males earned $8,394.35 more than the females. Although there was a significant difference between male and female salary levels, the model explained only eighteen percent of the difference. Results of the ANOVA, as well as the MCA for this hypothesis are presented in Table 4.13.

H2-C: When controlling for the factors age, level of education, and hours worked: there will be no significant difference in the salary levels of male and female salespeople.

When the influence of the co-variates age, level of education, and hours worked were included in the model the amount of variance explained was significant ($p<.001$). A summary of the ANCOVA results is presented in Table 4.14. The results led to the rejection of hypothesis 2-C. When the salary levels of male and female sales managers and department heads were adjusted for both the independent variable and the co-variates, it showed that women are paid $7,012.03 less than men in the position of salesperson. This model

TABLE 4.13 SALARY VARIATIONS OF MALE AND FEMALE SALESPEOPLE USING ANOVA

	SS	DF	MS	F	Significance
Main Effects					
Sex	.807E+10	1	.807E+10	105.282	.001***
Explained	.807E+10	1	.807E+10	105.282	.001***
Residual	.378E+11	493	.767E+08		
Total	.459E+11	494	.928E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $10,898.49

Source	N	Unadjusted Salary	Adjusted for Independent Variable
Sex			
Male	180	$16,240.35	$16,240.35
Female	315	$ 7,846.00	$ 7,846.00
Mean Difference		$ 8,394.35	$ 8,394.35

R squared = .176

TABLE 4.14 SALARY VARIATIONS OF MALE AND FEMALE SALESPEOPLE; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA.

Source	SS	df	MS	F	Signif.
Main Effects					
Sex	.482E+10	1	.482E+10	70.039	.001***
Co-Variates	.732E+10	3	.244E+10	35.475	.001***
Age	.891E+09	1	.891E+09	12.950	.001***
Education	.933E+09	1	.933E+09	13.552	.001***
Hours Worked	.566E+10	1	.566E+10	82.247	.001***
Explained	.121E+11	4	.304E+10	44.116	.001***
Residual	.337E+11	490	.688E+08		
Total	.459E+11	494	.928E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $10,898.49

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Sex			
Male	180	$16,240.35	$15,360.69
Female	315	$ 7,846.00	$ 8,348.66
Mean Difference		$ 8,394.35	$ 7,012.03

R squared = .265

explained approximately twenty-seven percent of the variation between male and female salespeople.

H3-C: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single female salespeople.

The independent variable, marital status, along with the covariates age, level of education and hours worked, comprised the Analysis of Co-Variance model used to test this hypothesis. Marital status by itself proved to not be a significant source of variation for salary. However, when combined with the co-variates age and hours worked, salary differentials turned out to have a high level of significance ($p<.001$). Level of education was the only non-significant co-variate. Hypothesis 3-C was rejected.

Twenty-two percent of the variation between the salaries of married versus single female salespeople was explained by this model. When adjusted for the independent variable and the co-variates, the difference between the salary levels of married and single women salepeople was $556.84, with a grand mean of $7846.00. The results of the ANCOVA and the MCA are in Table 4.15.

H4-C: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single, male salespeople.

The explained difference between the salary levels of

TABLE 4.15 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE SALESPEOPLE; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA.

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.229E+ 08	1	.229E+08	1.351	.246
Co-Variates	.150E+10	3	.499E+09	29.429	.001***
Age	.254E+09	1	.254E+09	14.963	.001***
Education	.327E+08	1	.327E+08	1.925	.166
Hours Worked	.107E+10	1	.107E+10	63.193	.001***
Explained	.152E+10	4	.380E+09	22.409	.001***
Residual	.526E+10	310	.170E+08		
Total	.678E+10	314	.216E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $7,846.00

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variate;
Marital Status			
Married	169	$7,707.29	$7,587.91
Single	146	$8,006.56	$8,144.75
Mean Difference		$ 299.27	$ 556.84
			R squared = .224

married and single men ($p<.05$) increased significantly when the co-variates age and hours worked were added to the ANCOVA model ($p<.001$). Education was not a significant co-variate (Table 4.16). Hypothesis 4-C was rejected.

The grand mean for the annual salary of male salespeople was $16,240.34. In this sample married men earned $7,089.89 more than single men. When the salaries were adjusted for the independent variable and co-variates, the difference was reduced to $4,332.81. The proportion of the salary variation explained by this model was relatively weak (R squared = .133).

H5-C: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, female salepeople.

Marital Status as an independent variable had little influence on salary levels of the respondents in this sample. The presence of children less than five years old, added as a co-variate in the ANCOVA model did bring the explained variance up to a significant level ($p<.01$), see Table 4.17. Hypothesis 5-C was rejected.

The grand mean for annual salary in this sample was $7,846.00. Single women earned $299.27 more than the married women, but when the presence of children less than five was considered, the difference in annual salaries of married and single women was reduced to $48.13. Although this model was considered statistically significant, the R squared value

TABLE 4.16 SALARY VARIATIONS OF MARRIED AND SINGLE MALE SALESPEOPLE; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA.

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.649E+09	1	.649E+09	4.224	.041*
Co-Variates	.349E+10	3	.116E+10	7.570	.001***
Age	.150E+10	1	.150E+10	9.773	.002**
Education	.152E+09	1	.152E+09	.988	.322
Hours Worked	.188E+10	1	.188E+10	12.255	.001***
Explained	.414E+10	4	.103E+10	6.733	.001***
Residual	.269E+11	175	.154E+09		
Total	.310E+11	314	.173E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $16,240.34

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	111	$18,958.13	$17,901.25
Single	69	$11,868.24	$13,568.44
Mean Difference		$ 7,089.89	$ 4,332.81

R squared = .133

TABLE 4.17 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE SALESPEOPLE; CHILDREN LESS TAHAN FIVE YEARS OLD AS CO-VARIATES USING ANCOVA.

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.177E+06	1	176884.676	.008	.927
Co-Variate					
Children < 5	.199E+09	1	.199E+09	9.445	.002**
Explained	.199E+09	2	.997E+08	4.727	.01**
Residual	.658E+10	312	.211E+08		
Total	.678E+10	314	.216E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $7,846.00

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	169	$7,707.29	$7,823.69
Single	146	$8,006.56	$7,871.82
Mean Difference		$ 299.27	$ 48.13

R squared = .029

of.029 indicates that this was a very poor model for predicting salary levels of female salespeople.

H6-C: When controlling for children less than five years old, there will be no significant differences in the salary levels of married and single, male salespeople.

A significant relationship existed between marital status and the salary levels of male salespeople ($p<.001$). The addition of the co-variate, children less than five years old, decreased the amount of variation explained in this model to ($p<.01$). Hypothesis 6-C was rejected.

The Multiple Classification Analysis showed a relatively large difference in average salaries of married and single, salesmen. The grand mean was $16,240.34. Based on the unadjusted figures, single men made $7,089.89 more than married men. When the salaries were adjusted for marital status and the presence of children less than five, the difference increased slightly to $7,290.52. Even though a significant difference is evident in the salaries of married and single men included in this sample, the proportion of the variance accounted for in this model is very small (R squared = .069). The result of this model are included in Table 4.18.

A summary of the six hypotheses, the statistical models used to test them, and the results are presented in Table 4.19.

TABLE 4.18 SALARY VARIATIONS OF MARRIED AND SINGLE MALE SALESPEOPLE; CHILDREN LESS THAN FIVE YEARS OLD AS CO-VARIATES USING ANCOVA.

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.195E+10	1	.195E+10	11.975	.001***
Co-Variate					
Children < 5	.197E+09	1	.197E+09	1.206	.274
Explained	.215E+10	2	.107E+10	6.591	.002**
Residual	.289E+11	177	.163E+09		
Total	.310E+11	179	.173E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $16,240.34

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	111	$18,958.13	$19,035.04
Single	69	$11,868.24	$11,744.52
Mean Difference		$ 7,089.89	$ 7,290.52
			R squared = .069

Table 4.19 SUMMARY OF HYPOTHESES TESTING: DEPENDENT VARIABLE SALARY, USING ANOVA AND ANCOVA MODELS

Hypothesis	Independent Variables	Covariants	Evaluation
H1-A	Sex*		Rejected
H1-B	Sex***		Rejected
H1-C	Sex***		Rejected
H2-A	Sex	Age* Education Hours Worked***	Rejected
H2-B	Sex***	Age*** Education Hours Worked***	Rejected
H2-C	Sex***	Age*** Education*** Hours Worked***	Rejected
H3-A	Marital Status	Age Education Hours Worked**	Rejected
H3-B	Marital Status	Age Edcation Hours Worked	Failed to Reject
H3-C	Marital Status	Age*** Education Hours Worked***	Rejected
H4-B	Marital Status	Age*** Education Hours Worked***	Rejected
H4-C	Marital Status*	Age** Education Hours Worked***	Rejected

Table 4.19 continued

Hypothesis	Independent Variables	Covariants	Evaluation
H5-A	Marital Status	Children < Five	Failed to Reject
H5-B	Marital Status	Children < Five	Failed to Reject
H5-C	Marital Status	Children < Five**	Rejected
H6-B	Marital Status**	Children < Five	Rejected
H6-C	Marital Status***	Children < Five	Rejected

A = Buyers
B = Sales Managers or Department Heads
C = Salespeople

* p<.05
** p<.01
*** p<.001

CHAPTER V

DISCUSSION

Analysis of Variance (ANOVA), Analysis of Co-Variance (ANCOVA), and Multiple Classification Analysis (MCA) models were applied to the current data in order to determine the amount of salary differences which existed between male and female as well as married versus single, retail employees. The first two hypotheses of the study focused on determining the salary differentials between male and female employees. The third, fourth, fifth, and sixth hypotheses investigated the difference in salary levels within each gender group based on marital status. Co-variates were included in order to control for variables that may have influenced the differentials. The results stated in Chapter IV of this study addressed the salary differentials of male and female employees by each occupational classification: buyer, sales manager and department head, and salespeople. In this chapter, the discussion will be of a general nature focusing on the differences, between the occupational levels, within each of the hypotheses. The hypotheses were originally stated in the null form; this discussion will focus on the alternatives. A summary of the results is presented in Table 5.1. A discussion of the results for each hypothesis is

presented in the following section.

Table 5.1 SUMMARY OF HYPOTHESES TESTING

Hypothesis	Result	R squared	Evaluation
H1-A	Significant *	.101	Rejected
H1-B	Significant ***	.169	Rejected
H1-C	Significant ***	.176	Rejected
H2-A	Significant ***	.384	Rejected
H2-B	Significant ***	.330	Rejected
H2-C	Significant ***	.265	Rejected
H3-A	Significant *	.287	Rejected
H3-B	Not Significant	-	Failed to Reject
H3-C	Significant ***	.224	Rejected
H4-A	Not Significant	-	Failed to Reject
H4-B	Significant ***	.369	Rejected
H4-C	Significant ***	.133	Rejected
H5-A	Not Significant	-	Failed to Reject
H5-B	Not Significant	-	Failed to Reject
H5-C	Significant **	.029	Rejected
H6-A	Not Significant	-	Failed to Reject
H6-B	Significant **	.192	Rejected
H6-C	Significant **	.069	Rejected

A = Buyer
B = Sales Managers and Department Heads
C = Salespeople

* $p<.05$
** $p<.01$
*** $p<.001$

Hypothesis 1

H1: There are no significant differences between the salaries of males anl females within the occupational cassifications of:
A. buyer
B. sales manager and department head
C. salesperson

The first step was to identify whether there was any disparity in salary levels of retail employees based only on

sex. Using an ANOVA model, hypothesis one was designed to test the level of salary variation between male and female retail employees within each occupational classification. A significant difference was found between the salary levels of men and women in all classifications. This finding reaffirms, for this sample, the result of previous studies; that women make significantly less than men (Blumrosen, 1979-1980; Bergman, 1974; Ferber & Lowry, 1976; Grune & Reder, 1983; Hartmann & Treiman, 1983; Lefcourt, 1984; Mellor, 1984; Rytina, 1981; and Treiman & Hartman, 1981). Despite significant results of the ANOVA model using sex as a predictor of salary, the R squared figures were extremely low for all three occupational categories. The R squared values indicated that the model explained a range from ten to eighteen percent of the salary variations. These low values suggest that while there was a significant difference in the salary levels of men and women in this sample, there are other variables which should explain more of the disparity. These variables will be discussed in subsequent hypotheses. An argument which has received increased acceptance in explaining the earnings gap between males and females is occupational segregation; or the propensity of men and women to be employed in different types of occupations (Hartmann & Treiman, 1983; and Grune & Reder, 1983). Occupational segregation is exemplified by women being employed in occupations that have historically been dominated by women. According to Rytina (1981) and Rytina & Bianchi (1984), a female

dominated occupation is one where 60 percent or more of the employees are female. Retailing is a prime example of a female dominated occupation; in retailing in general there are 63.5 percent women employees (U.S. Bureau of the Census, 1983) in this sample, there are 61.5 percent women. While the occupation of retailing is female dominated overall, there are various proportional differences of men versus women in this sample (see Table 4.1). The only position which had a majority of men (70%), specialty store sales managers and department heads, was also the position with the highest salary differential. Males in this position earned an average of $11,139.74 more than females in the same position. Table 5.2 includes the salary differentials by occupational and store category. It should be noted that the average salaries of males were higher than those of females in every category, including those in which females held the majority of positions. Many researchers agree that female dominated occupations pay substantially less than those which are male dominated (Bergmann, 1974; Fuchs, 1971; Hartmann & Treiman, 1983 and Treiman & Hartmann, 1981). Determining why this is the case has been the focus of numerous studies in the past few years, and is the underlying reason for the current study. The two most prominent explanations for occupational segregation and the wage gap are human capital theory and discrimination. While direct or indirect societal discrimination may have influenced opportunities available to the subjects, as Bergmann (1974) and Blumrosen (1979-1980)

TABLE 5.2 MALE AND FEMALE SALARY DIFFERENTIALS

	Male	Female	Differentials
Buyers			
Department Stores	$19,618.63	$13,344.29	$ 6,274.34
Specialty Stores	$18,540.00	$12,944.22	$ 5,595.78
Discount Stores	*	*	*
Sales Managers and Department Heads			
Department Stores	$19,324.88	$12,766.25	$ 6,558.63
Specialty Stores	$23,707.74	$12,568.00	$11,139.74
Discount Stores	$13,000.00	$ 9,223.00	$ 3,777.00
Salespeople			
Department Stores	$15,428.91	$ 7,987.08	$ 7,441.83
Specialty Stores	$16,780.14	$ 7,817.27	$ 8,962.87
Discount Stores	$ 9,238.20	$ 7,081.10	$ 2,157.10

* sample size too small for analysis

suggest, and in turn their choice of retailing as an occupation, there was no way of determining this using secondary data. The lack of data on the reasons for subject's occupational choices prompted the use of human capital theory as the framework on which to base this investigation. The combination of skills and abilities possessed by individuals is referred to as human capital. According to Treiman & Hartmann (1981) a basic premise of human capital theory is that in the absence of discrimination, workers will be paid an amount exactly equal to the productivity they provide to a firm. In order to estimate the amount of productivity an employee provides, researchers in this area have based their research on the assumption that individual differences in human capital cause differences in productivity, which result in the wage differentials. Age, level of education and hours worked were the measurements of human capital used to represent productivity in the following hypotheses.

Hypothesis 2

H2: When controlling for the factors age, level of education, and hours worked: there will be no significant difference in the salary levels of males and females in the positions of:
A. buyer
B. sales manager and department head
C. salesperson

Age, level of education, and hours worked were added in hypothesis 2 as co-variates, representing the productivity variables described above. Age was considered a proxy variable for experience in this study. A much larger per-

centage of the disparity in salary level was explained by hypothesis two with R square values of 27%, 33% and 38% for salespeople, sales managers and department heads and buyers respectively. The results indicate that by controlling for the vari ables, age and hours worked there was a significant increase in the amount of salary variation explained in all three occupational classifications. Education was shown as having a significant impact ($p<.001$) on salary level for the sample of salespeople but not for the other two categories of employees. This is an interesting finding since the salesperson category is generally thought of as the type of position requiring only the most basic skills and the least amount of education to perform satisfactorily. While retailing is classified as a woman's occupation, according to the standards described in studies by Rytina (1981) and Rytina & Bianchi (1984), there are areas within the field that seem to be more of a man's domain, i.e. those positions requiring extensive product knowledge, such as electronics, appliances and automotive areas. One possible explanation for the importance of education in explaining salary levels of salespeople is that more salespeople involved in technical or mechanical sales, needing specialized training or advanced education, are male. Another possible explanation is that the subjects included in this sample were among the growing numbers of highly educated people, unable to obtain jobs in their respective fields, who take positions that do not require additional training. Retailing is a highly labor

intensive industry with relatively high turnover rates, it is therefore an attractive employment option for people who need a short term job. The high number of part-time retail positions, which rarely pay over minimum wage, may also lend support to the human capital theory, that women take the type of position in which they can maximize their flexibility to coordinate a paying job with their familial responsibilities, as is hypothesized by Mincer and Polachek (1974). The large amount of temporary jobs available in retail ing, (i.e. summer or Christmas sales help) may also explain the significance of education in explaining the wage gap between male and female salespeople. Many of these employees could actually be college students or other highly educated persons who take the positions in order to earn some extra money. Human capital theorists, Mincer & Polachek (1974), suggest that the differentiation of family roles by sex, will influence women to invest less in market oriented human capital. This does not hold true for the sample of buyers or sales managers and department heads since education did not significantly affect salary variations. In addition to the level of education, it would have contributed more to know what the subjects had studied. Just because a person is well educated does not necessarily mean that the education has a direct bearing on a retail job. In addition to formal education, having information on the respondents investments in increasing or developing their market oriented human capital skills, such as sales training and management seminars, would have

been a valuable contribution to this study.

Hypotheses three and four were designed to investigate the effects of differences in human capital (productivity variables) on salary levels within gender groups; married versus single women and married versus single men. These two hypotheses will be compared to each other in order to contrast between males and females.

Hypothesis 3

H3: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married and single females within the occupational classifications:
A. buyer
B. sales manager or department head
C. salesperson

Results of an ANCOVA test revealed that no significant differences were found between married and single sales managers and department heads who were female. Furthermore there were no significant differences in any of the three occupational categories for women due to the main effect of marital status. Only by including one or more of the covariates did the salary differential reach the following significant levels: buyers ($p<.05$) and salespeople ($p<.001$). In the buyer classification neither age, nor level of education were significant, however by controlling for the hours worked a significant amount of salary variation between married and single women was explained ($p<.01$). This may represent an affirmation of the human capital supposition

promoted by Mincer & Polachek (1974), that as the number of hours worked is decreased, due to family responsibilities, so also are the wages. For the salesperson sample, both age and hours worked were found to be significant ($p<.001$). In this sample, age could possibly be considered a proxy for experience, thus explaining the salary differential due to the amount of time spent in the position. Hours worked could be considered a predictor of salary level both for hourly or commissioned salespeople, generally the more time spent selling the higher the salary.

Hypothesis 4

H4: When controlling for age, level of education, and hours worked, there will be no significant differences in the annual salaries of married single males, within the occupational classifications:
A. buyer
B. sales manager or department head
C. salesperson

The salary levels of male retail employees were significantly impacted ($p<.05$) by marital status within the classification of salespeople only. In the buyer and sales manager or department head categories the main effect of marital status was not significant. When the co-variates were added the significance explained was at the $p<.001$ level for both salespeople and sales managers or department heads. The co-variates age and hours worked explained a significant amount of the wage gap between men in both occupational categories. According to human capital theory, both of these co-variates are measure ments of the level of productivity

contributed by the employee. Education was not significant. There were no significant results using this model to predict salary levels for male buyers due to the small sample size. Having preschool age children could have an impact on the career commitment of an employee. Hypotheses five and six were designed to determine whether a persons family responsibilities would cause a significant variation on salary levels.

Hypothesis 5

H5: When controlling for children less than five, there will be no significant differences in the salary levels of married and single, female retail employees in the positions of:
A. buyer
B. sales manager or department head
C. salesperson

There were significant differences ($p<.01$) between married and single women only in the salesperson category. The extremely low R squared value of .029 for the salesperson category, and the insignificance of the buyer and sales manager or department head categories indicated that this was not a good model for predicting salary differentials.

Hypothesis 6

H6: When controlling for children less than five, there will be no significant differences in the salary levels of married and single male retail employees in the positions of:
A. buyer
B. sales manager or department head
C. salesperson

The results from the ANCOVA indicated that controlling

for children less than five years old had no significance in determining the amount of the variation in salary levels between married and single male employees in any of the occupational categories. Marital status was a significant predictor of salary for men in the sales manager or department head and salesperson classifications but not for the buyers. Even though this model held some statistical significance the R square values were relatively low, therefore not explaining very much of the salary differentials for the classifications of sales managers and department heads or salespeople. According to Hull (1982), being married is commonly an asset for men while at the same time being a disadvantage for women. This was not evident for this sample, in fact marital status had no affect on the salaries of women while it did significantly affect the salaries of men in hypotheses 4-C, 6-B, and 6-C. While marital status was a significant predictor of income for men in the above stated hypotheses, the variance explained was relatively low for all three, ranging from seven to nineteen percent. Overall the variables used in hypotheses five and six were fairly poor models for predicting salary variations.

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

The purpose of this study was to investigate salary levels of retail employees and to determine whether there were any significant variables which would affect salary differentials.

The research objectives for this study included: (1) to determine the wage rates of men and women in the retail positions of buyer, sales manager or department head, and salesperson. (2) to determine whether sex or marital status affect the salary levels of retail employees. (3) to determine the affect on salary levels by controlling for variables such as age, level of education, hours worked, and the presence of children less than five years old.

The data base used in this study was the Current Population Survey, March 1982, which was conducted by the Bureau of the Census for the Bureau of Labor Statistics. The information used in this study was collected from employees in department, specialty and discount stores. Data were collected and analyzed for a total of 647 subjects; 398 women and 249 men, employed as buyers, sales managers or department heads, and salespeople.

Analysis of Variance, Analysis of Co-Variance, and

Multiple Classification Analysis models were conducted on the data in order to determine the affects demographic and situational variables had on the dependent variable, salary.

The Analysis of Variance model indicated that a significant disparity exists between the salary levels of men and women in the retail classifications of buyer, sales manager or department head, and salespeople. The combination of high levels of significance and low R squared values led the researcher to conclude that variables other than sex were more important in explaining the wage gap between the males and females included in this study.

In an attempt to isolate and explain a greater amount of the salary disparity, variables representing human capital skills or investments were added to the model. Age, level of education, hours worked, and the presence of children less than five years old were included as co-variates attempting to measure the workers productivity.

The co-variates age and hours worked explained a significant amount of the wage differential between men and women in all three occupational classifications. Education was significant in explaining the salary differential for the sample of salespeople only, the group with the least amount of authority.

Salary differentials between married and single retail employees were also investigated using human capital variables as co-variates in order to determine the influence on wage levels within gender group. Marital status was signifi-

cant for the sample of male salespeople only. Age and hours worked were also found to be significant in explaining the wage differentials for female salespeople, male sales managers or department heads, and male salespeople. Hours worked was the only variable significant in explaining salary differences between married and single female buyers.

Using marital status as the independent variable and the presence of children less than five years old as a co-variate an Analysis of Co-Variance model was used to determine whether there were significant salary differences within gender groups. Marital status was not a significant predictor of income for the female respondents. However the presence of children less than five years old was significant for the sample of female salespeople. The opposite was true for the male respondents, with marital status being significant in predicting salary levels while children less than five showed no significance.

Limitations

While using data from the Census Bureau provided this study with the benefits of a comprehensive, national data base, there were also some limitations involved in using secondary data, in addition to the sample deficiencies discussed in Chapter three. The scope of this investigation was limited to the variables that were included in the initial survey, which in some cases were more general than desired. There were also several variables which, if

included, could have contributed to a better understanding of the specifics of salary differentials between male and female retail employees.

It would have been beneficial if data had been available on the respondents actual work experience. Data on the respondents labor force attachment (amount of home time versus time spent in the labor market) would have given this research additional credence in rejecting or upholding human capital theory as it applies to salary levels. The variable age, was used as an estimate of experience, it would have been far more informative to include the type and years of experience.

There was no information available on the size of the retail stores included in the database, therefore it can only be assumed that some of the department stores and discount stores were probably larger than the specialty stores. Since it is likely that large stores pay higher salaries than smaller stores there is an inherent flaw in the mean salaries reached by aggregating the stores into one sample. However, since this occurrence would have manifested itself for both men and women in the sample, the proportional differences in compensation included in this study, would not necessarily be flawed.

Recommendations

Based on the results of this study, the use of the Current Population Survey is recommended for studying salary

differentials of men and women. It is also the recommendation of this researcher that the use of other national survey databases be investigated in order to try to rectify some of the limitations discussed in the previous section.

The best type of data to use for the investigation of salary differentials would be primary data. Developing a survey for data collection would allow the research to focus on specific variables which would contribute to a better understanding of salary differentials between male and female retail employees. Respondent's work experience, labor force attachment, and types of education or training would all benefit this type of investigation.

A longitudinal study of salary differentials would be valuable in determining the effect of the presence of children at various ages as well as the amount of home time versus time in the labor market and how these events affect the salary levels of male and female employees. Compiling salary levels of employees over time, would provide information into whether salary differentials evident at one point in a persons career would have a long term affect on his or her salary, or whether it could rebound over time. Information on the type of human capital investments made by subjects over time would be beneficial in determining exactly which variables affect wage rates.

Additional research should be conducted to see if by limiting the sample to the same type or size of retailers, additional insight could be provided as to where and how pay

disparity occurs.

APPENDIX

TABLE A.1 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE BUYERS; CHILDREN LESS THAN FIVE YEARS OLD AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.241E+08	1	.241E+08	.503	.484
Co-Variate					
Children < 5	.657E+07	1	.657E+07	.137	.714
Explained	.307E+08	2	.153E+08	.320	.729
Residual	.144E+10	30	.479E+08		
Total	.147E+10	32	.459E+08		

*p<.05, **p<.01, ***p<.001

Grand Mean = $13,289.06

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	17	$12,584.00	$12,436.86
Single	16	$14,038.19	$14,194.52
Mean Difference		$ 1,454.19	$ 1,757.66

R squared = .021

TABLE A.2 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE SALES MANAGERS AND DEPARTMENT HEADS; AGE, LEVEL OF EDUCATION, AND HOURS WORKED AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.204E+06	1	.204E+06	.002	.965
Co-Variates	.420E+09	3	.140E+09	1.363	.266
Age	.325E+09	1	.325E+09	3.158	.082
Education	447.364	1	447.364	.000	.998
Hours Worked	.226E+09	1	.226E+09	2.197	.145
Explained	.420E+09	4	.105E+09	1.022	.406
Residual	.462E+10	45	.103E+09		
Total	.504E+10	49	.103E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $12,514.00

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	30	$12,924.63	$12,569.43
Single	20	$11,898.05	$12,430.85
Mean Difference		$ 1,026.58	$ 138.58
			R squared = .083

TABLE A.3 SALARY VARIATIONS OF MARRIED AND SINGLE FEMALE SALES MNAGERS AND DEPARTMENT HEADS; CHILDREN LESS THAN FIVE YEARS OLD AS CO-VARIATES USING ANCOVA

Source	SS	DF	MS	F	Signif.
Main Effects					
Marital Status	.278E+08	1	.278E+08	.264	.610
Co-Variate					
Children < 5	.695E+08	1	.695E+08	.661	.420
Explained	.973E+08	2	.487E+08	.462	.633
Residual	.495E+10	47	.105E+09		
Total	.504E+10	49	.103E+09		

*p<.05, **p<.01, ***p<.001

Grand Mean = $12,514.00

Source	N	Unadjusted Salary	Adjusted for Independent Variables and Co-Variates
Marital Status			
Married	30	$12,924.63	$13,134.53
Single	20	$11,898.05	$11,583.20
Mean Difference		$ 1,026.58	$ 1,551.33

R squared = .019

LIST OF REFERENCES

LIST OF REFERENCES

Beller, A. (1982). Occupational segregation by sex: Determinants and changes. The Journal of Human Resources, 17(3), 371-392.

Bergmann, B. (1974). Occupational segregation, wages and profits when employers discriminate by race or sex. Eastern Economic Journal, April-July, 103-110.

Blumrosen, R. (1979-1980). Wage discrimination, job segregation and women workers. Women's Rights Law Reporter, 16(1-2), 19-57.

Bregger, J. (1984). The current population survey: A historical perspective and BLS' role. Monthly Labor Review, 107(6), 8-14.

Brief, A. & Aldag, R. (1975). Male-female differences in occupational values within majority groups. Journal of Vocational Behavior, 6, 305-314.

Brief, A. & Oliver, R. (1976). Male-female differences in work attitudes among retail sales managers. Journal of Applied Psychology, 61, 526-528.

Corcoran, M. (1978). The structure of female wages. American Economic Association Earnings and Employment, 68(2), 165-170.

Corcoran, M. & Duncan, G. (1979). Work history, labor force attachment, and earnings differences between the races and sexes. The Journal of Human Resources, 14(1), 3-20.

Corcoran, M., Duncan, J., & Ponza, M. (1983). A longitudinal analysis of white women's wages. The Journal of Human Resources, 18(4), 497-520.

Dorsen, N., Bender, P., Neuborne, B. & Law, S. (1979). Emerson, Haber, & Dorsen's Political and Civil Rights In the United States, Fourth Edition, Volume II, Law School Edition. Little, Brown & Company (Inc.), Boston Toronto.

England, P. (1982). The failure of human capital theory to explain occupational sex segregation. The Journal of Human Resources, 17(3), 358-370.

Fuchs, V. (1971). Differences in hourly earnings between men and women. Monthly Labor Review, 94(5), 9-15.

Gable, M., Gillespie, K., & Topol, M. (1984). The current status of women in department store retailing: An update. Journal of Retailing, 60(2), 86-104.

Gerstenberg, K., & Ellsworth, T.D. (1949). Who wears the pants in department and specialty stores? A survey of women executives in retailing. Journal of Retailing, 24, 97-103.

Gillespie, K. (1977-78). The status of women in department and specialty stores: A survey. Journal of Retailing. 53(4), 17-32.

Gomez-Mejia, L. (1983). Sex differences during occupational socialization. Academy of Management Journal, 18(3),492-499.

Gould, R. (1985). Why can't a working woman be more like a man? Working Woman, April, 104.

Greenwood, D. (1984a). The institutional inadequacy of the market in determining comparable worth: Implications for value theory. Journal of Economic Issues, 18, 457-463.

Greenwood, D. (1984b). The economic significance of "woman's place" in society: A new-institutional view. Journal of Economic Issues, 18, 663-680.

Grune, J. & Reder, N. (1983). Pay equity: An innovative public policy approach to elimination sex-based wage discrimintation. Public Personnel Management Journal, 12(4), 395-403.

Hart, A. (1984a). Intent vs. Effect: Title VII case law that could affect you (part 1). Personnel Journal, March, 31-47.

Hart, A. (1984b). Intent vs. Effect: Title VII case law that could affect you (part 2). Personnel Journal, April, 50-58.

Hartmann, H. & Treiman, D. (1983). Notes on the NAS study of equal pay for jobs of equal value. Public Personnel Management Journal, 12(4), 404-407.

Hedges, J. & Mellor, E. (1979). Weekly and hourly earnings of U.S. workers, 1967-78. Monthly Labor Review, 102(8), 31-41.

Heilman, M. (1980). The impact of situational factors on personnel decisions concerning women: Varying the sex composition of the applicant pool. Organizational Behavior and Human Performance, 26, 386-395.

Heilman, M. (1984). Information as a deterrent against sex discrimination: The effects of applicant sex and information type on preliminary employment decisions. Organizational Behavior and Human Performance, 33, 174-186.

Hennig, M. & Jardim, A. (1977). The Managerial Woman. Anchor Books, Anchor Press/Doublesday, Garden City, New York.

Hull, J. (1982). Female bosses say biggest barriers are insecurity and "being a woman". Wall Street Journal, November, 2, 29.

Kanter, R. (1977). Men and Women of the Corporation. Basic Books, Inc., New York, New York.

Lefcourt, C. editor. (1984). Women and the Law. Clark Boardman Company, Ltd. New York, New York.

Levine-Shneidman, C. & Levine, K. (1985). If we're so smart, why aren't we happy? Working Woman, April, 113.

Levit, N. & Mahoney, J. (1984). The future of comparable worth theory. University of Colorado Law Review, 56(1), 99-133.

Major, B. & Konar, E. (1984). An investigation of sex differences in pay expectations and their possible causes. Academy of Management Journal, 27(4), 777-792.

Mallan, L. (1982). Labor force participation, work experience, and the pay gap between men and women. The Journal of Human Resources, 17(3), 437-448.

Mellor, E. (1984). Investigating the differences in weekly earnings of women and men. Monthly Labor Review, 107(6), 17-28.

Mincer, J. & Polachek, S. (1974). Family investments in human capital: Earnings of women. Journal of Political Economy, 82(2), S76-S108.

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. International Economic Review, 14, 693-709.

Powell, G. & Butterfield, D. (1979). The "good manager": Masculine or androgynous? Academy of Management Journal, 22(2), 395-403.

Reif, W., Newstrom, J., & Manczka, R. (1975). Exploding some myths about women managers. California Management Review, 17(4), 72-79.

Rosen, B. & Jerdee, T. (1973). The influence of sex-role stereotypes on the evaluation of male and female supervisory behavior. Journal of Applied Psychology, 57, 44-48.

Rosen, B. & Jerdee, T. (1974a). Effects of applicant's sex and difficulty of job on evaluations of candidates for managerial positions. Journal of Applied Psychology. 59, 9-14.

Rosen, B. & Jerdee, T. (1974b). Influence of sex-role stereotypes on personnel decisions. Journal of Applied Psychology. 59, 9-14.

Rosen, B. & Mericle, M. (1979). Influence of strong versus weak fair employment policies and applicant's sex on selection decisions and salary recommendations in a management simulation. Journal of Applied Psychology, 64, 435-439.

Ruble, T. (1979). Sex-role stereotypes and management potential: An exercise. Journal of Experiential Learning and Simulation, 1, 283-292.

Ruble, T., Cohen, R., & Ruble, D. (1984). Sex stereotypes: Occupational barriers for women. American Behavioral Scientist, 27(3), 339-356.

Ryscavage, P. & Bregger, J. (1985). New household survey and the CPS: A look at labor force differences. Monthly Labor Review, 108(9), 3-12.

Rytina, N. (1981). Occupational segregation and earnings differences by sex. Monthly Labor Review, 104, 49-53.

Rytina, N. & Bianchi, S. (1984). Occupational reclassification and changes in distribution by gender. Monthly Labor Review, 107(3), 11-17.

Sandell, S. & Shapiro, D. (1978). An exchange: The theory of human capital and the earnings of women. The Journal of Human Resources, 13(1), 103-117.

Sargent, A. (1983). The androgynous manager, AMACOM, New York, New York.

Schein, V. (1973). Relationships between sex role stereotypes and requisite management characteristics. Journal of Applied Psychology, 57, 95-100.

Schein, V. (1975). Relationships between sex-role stereotypes and requisite management characteristics among female managers. Journal of Applied Pshchology, 60, 340-344.

Schuler, R. (1975). Sex, organizational level, and outcome importance: Where the differences are. Personnel Psychology, 28, 365-376.

Sobol, M. & Ellard, C. (1985). Evaluating the four fifths rule vs a statistical criterion for the determination of discrimination in employment practices. Labor Studies Journal, 10(2), 153-169.

Sorensen, E. (1984). Equal pay for comparable worth: A policy for eliminating the underevaluation of women's work. Journal of Economic Issues, 18, 465-472.

Terborg, J. (1977). Women in management: A research review. Journal of Applied Psychology, 62, 647-664.

Treiman, D. & Hartmann, H. (1981). Women, work and wages: Equal pay for jobs of equal value, Washington: National Academy Press.

Williams, K., Faltot, J., & Madaire, C. (1983). and specialty store management. Journal of Retailing, 59(4), 107-115.

White, M., Crino, M., & DeSanctis, G. (1981). A critical review of female performance, performance training and organizational initiatives designed to aid women in the work-role environment. Personnel Psychology, 34, 227-248.

U.S. Bureau of the Census. (March, 1982). Current Population Survey. Washington D.C.: U.S. Department of Commerce.

U.S. Bureau of the Census. (1983). 1982-83 Statistical Abstract. Washington D.C.: U.S. Department of Commerce.

U.S. Bureau of the Census. (March, 1983). Current Population Reports, Consumer Income Series P-60, No. 137. Washington D.C.: U.S. Department of Commerce.