

## INFORMATION TO USERS

This dissertation copy was prepared from a negative microfilm created and inspected by the school granting the degree. We are using this film without further inspection or change. If there are any questions about the content, please write directly to the school. The quality of this reproduction is heavily dependent upon the quality of the original material.

The following explanation of techniques is provided to help clarify notations which may appear on this reproduction.

1. Manuscripts may not always be complete. When it is not possible to obtain missing pages, a note appears to indicate this.
2. When copyrighted materials are removed from the manuscript, a note appears to indicate this.
3. Oversize materials (maps, drawings and charts are photographed by sectioning the original, beginning at the upper left hand corner and continuing from left to right in equal sections with small overlaps.

**UMI<sup>®</sup>**

ProQuest Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600

PREVIEW

—

AN ANALYSIS OF THE FEMALE/MALE  
WAGE DIFFERENTIAL

APPROVED:

John Hedderman  
Gloria A Young  
Kathleen Stuart

Michael E. Smith  
Dean of the Graduate School

AN ANALYSIS OF THE FEMALE/MALE  
WAGE DIFFERENTIAL

by

TAMRA KOENIG, B.A.

THESIS

Presented to the Faculty of the Graduate School of  
The University of Texas at El Paso  
in Partial Fulfillment  
of the Requirements  
for the Degree of  
MASTER OF ARTS

THE UNIVERSITY OF TEXAS AT EL PASO

December 1982

## ACKNOWLEDGEMENTS

I would especially like to thank John Hedderson, chairperson of my committee, for his time and encouragement in addition to his expertise which he provided me from beginning to completion of this thesis.

I would like to express my gratitude to Gay Young for her helpful suggestions and insights into the issue.

For providing me with invaluable information and assistance in the area of women's issue, I am very grateful to Katherine Staudt.

Last but not least I would like to thank Michael, my husband, for his support and encouragement without which I could not have completed this thesis.

July 30, 1982

## ABSTRACT

This study examines the female/male wage differential in an effort to delineate and clarify the factors which contribute to the differential. It includes an estimate of the impact of discrimination on women's wages. Only full-time year-round employed individuals are included in the sample. Choice of variables is based in part upon the human capital model of earnings determination. Some characteristics of occupation are included as well as characteristics of the individual that cannot be considered human capital. The regression model tests for the effect of education, work experience, motivation, occupational status, union contract, type of employer, marital status and region. The 1977 Panel Study of Income Dynamics data was utilized. Separate analyses for whites and blacks in addition to the total sample are included. The application of multiple regression with between group substitutions to the data indicates that the wage differential cannot be adequately explained by differences between men and women in qualifications and characteristics. When differences between men and women on all variables are removed, women earn 66 percent of men's earnings, little more than before the adjustment (58 percent). However, the additional earnings women gain when given the male rates of return to all variables indicate that discrimination may be a key factor in explaining the female/male wage differential.

## TABLE OF CONTENTS

		<u>Page</u>
	List of Tables . . . . .	6
Chapter I	THEORETICAL PERSPECTIVES OF THE MALE/FEMALE WAGE DIFFERENTIAL . . . . .	8
	Status Attainment . . . . .	9
	Human Capital . . . . .	13
	Wage Differential Studies . . . . .	17
	Dual Labor Market . . . . .	25
	Radical Theories of the Labor Market . . . . .	31
	Summary . . . . .	34
Chapter II	DATA, PROCEDURES AND VARIABLES . . . . .	36
	Data . . . . .	36
	Procedures . . . . .	38
	Specification of Variables . . . . .	40
Chapter III	DATA ANALYSIS . . . . .	44
Chapter IV	SUMMARY AND CONCLUSIONS . . . . .	74
	Bibliography . . . . .	87

## LIST OF TABLES

Table	Page
1 SUMMARY OF EARNINGS DIFFERENTIAL STUDIES	18
2 MALE AND FEMALE WORKERS IN THE PRIMARY AND SECONDARY LABOR MARKETS, 1970	27
3 MEANS AND STANDARD DEVIATIONS FOR ALL MALES AND FEMALES WORKING FULL-TIME YEAR-ROUND IN 1976	45
4 REGRESSION COEFFICIENTS FOR ALL VARIABLES OF MALES AND FEMALES WORKING FULL-TIME YEAR-ROUND IN 1976	47
5 CORRELATION COEFFICIENTS, MALES AND FEMALES	49
6 CORRELATION COEFFICIENTS, WHITE MALES AND WHITE FEMALES	51
7 CORRELATION COEFFICIENTS, BLACK MALES AND BLACK FEMALES	53
8 MEANS AND STANDARD DEVIATIONS FOR WHITE MALES AND FEMALES WORKING FULL-TIME YEAR-ROUND IN 1976	57
9 MEANS AND STANDARD DEVIATIONS FOR BLACK MALES AND FEMALES WORKING FULL-TIME YEAR-ROUND IN 1976	58
10 DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN FEMALES AND MALES DUE TO CHARACTERISTIC AND QUALIFICATION DIFFERENCES	62
11 DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN WHITE FEMALES AND WHITE MALES DUE TO CHARACTERISTIC AND QUALIFICATION DIFFERENCES	63
12 DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN BLACK FEMALES AND BLACK MALES DUE TO CHARACTERISTIC AND QUALIFICATION DIFFERENCES	65
13 DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN FEMALES AND MALES DUE TO DIFFERENCES IN RETURNS TO QUALIFICATIONS AND CHARACTERISTICS	67
14 DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN WHITE FEMALES AND WHITE MALES DUE TO DIFFERENCES IN RETURNS TO QUALIFICATIONS AND CHARACTERISTICS	68



Table		Page
15	DECOMPOSITION OF EARNINGS DIFFERENCES BETWEEN BLACK FEMALES AND BLACK MALES DUE TO DIFFERENCES IN RETURNS TO QUALIFICATIONS AND CHARACTERISTICS	70
16	COMPUTATION OF HYPOTHETICAL EARNINGS FOR FEMALES	71

## CHAPTER I

### THEORETICAL PERSPECTIVES OF THE MALE/FEMALE WAGE DIFFERENTIAL

The earnings gap between women and men is an issue that has been growing in importance in recent years. Despite the growth of the women's movement, inroads made by women into traditionally male occupations and a higher labor force participation rate of women, the earnings differential has not decreased over the past few decades. Instead it has remained fairly constant, slightly increasing. For instance, in 1955 women who worked at year-round full-time jobs earned 64¢ for every dollar earned by men; in 1965 it was 60¢ for every dollar; and in 1977 it was 59¢ (Earnings Gap Between Women and Men 1979, p. 6).

As attention to the persistence of this earnings gap has increased in recent years so have the number of studies attempting to describe and explain it. This paper is an attempt to examine the cost of being a female worker and to quantify some factors that account for part of the earnings differential between women and men. For the purposes of this study worker is defined as working outside the home full-time year-round.

In any study attempting to explain the earnings gap quantitatively, a major problem is to describe accurately the cost of being a female worker. Cost has been defined as that portion of the earnings gap between groups which remains unexplained after variables that affect wage disparity are controlled for statistically. The

unexplained portion of the earnings gap is that which reflects discrimination in addition to other factors or variables not taken into account. Measuring the "cost" of being a female worker is affected by one's selection of data source; choice of statistical technique; and the types, number and measurement of variables.

There exist a handful of major theories to explain why women are disadvantaged in the labor market. Almost all of these are economic theories; however, sociologists, as well as economists apply them in research. They are status attainment, human capital, dual labor market and a variety of Marxist theories.

### Status Attainment

The status attainment theory is the only theory which is truly sociological in nature. The sociological literature in the early 1970's concerning occupational choice and social mobility began to be referred to as "status attainment." The status attainment theory hypothesizes that status is determined by a process which begins early in life and continues into adulthood. Attention focuses on the influence of parents and their statuses on their offspring. Family background variables such as father's education, father's occupational status, and number of siblings are commonly utilized. Status of respondent is measured by educational and occupational attainment. Falk and Cosby (1975) describe status attainment research as the search for intervening influences between success of parents and their offspring, noting that attainment is a product of prior influence as well as current circumstances.

This theory originated in studies of male populations. Therefore, there is relatively little research on how the process of status

attainment applies to women. The mid 1970's saw the introduction of studies attempting to ascertain how this process does apply to women. Treiman and Terrell (1975) found that the processes of educational and occupational attainment for both sexes is substantially similar; occupational status depends on educational attainment and little else. They found the mean level of education for white women and men to be 12.3 years and 11.9 years, respectively, and for non-white women and men, 10.9 years and 9.2 years. They concluded that labor market discrimination does not extend to the status of occupations open to women. However, they did find a substantial difference in ability to convert education into earnings, especially for whites. Their cost computations, while controlling for education, occupational prestige, number of preschool and school-age children, hours worked per year, percent of years worked since education completed, resulted in an increase in women's expected mean income from 42 percent to 67 percent of husband's mean income.

Work experience has often been suggested as a factor largely responsible for women earning less than men. The theory is that married women drop in and out of the labor force, fitting their work outside the home around family responsibilities. Treiman and Terrell's findings lend support to this idea. Their statistics show a 13 percent difference in mean annual earnings between never-married and married women. When controlling for work experience and family background, somewhat less than half of the difference in average earnings between men and women can be attributed to differences in work experience, as measured.

McClendon (1976) did a replication of the study by Treiman and Terrell, using superior data and more family background variables. The findings are similar to those of Treiman and Terrell. The extended model of status attainment, the inclusion of mother's education and respondent's age, provides little additional explanatory power over the basic model.

McClendon, like Treiman and Terrell, also notes the similar occupational statuses of women and men and the dissimilar earning power. His explanation is that there exists quite dissimilar occupational structures for women and men: two-thirds of women in his sample are in white collar jobs with more than half of these clerical, resulting in status parity with males, not income equality. Different occupational structures are attributed to paternalistic attitudes which create inequality through sex roles; in other words, women are in low-paying white collar jobs which are cleaner, safer and more comfortable than blue collar jobs, which men dominate and which generally pay better.

Much criticism has been written of the status attainment model. Criticisms of the status attainment theory take two forms: one which critiques the theory within its framework in an attempt to improve its ability to accomplish its goals; and the other critiques it on the basis of what it attempts to accomplish, or its overall structure.

Two critics of the first type are Falk and Cosby (1975). Falk and Cosby assert that one of the primary problems with the status attainment theory is that it does not take into account sex-related differences. They feel that the career-developmental process for women is more complex at every stage and that research that does not consider sex-related limitations is doomed to fail; they suggest an expanded

model to include marital plans, fertility plans, mother's education and occupation, family finances and number of male siblings. They stress a continued search for variables of importance in understanding the status attainment process.

Those critics of the second type include Elizabeth Almquist and Natalie Sokoloff. Almquist's (1979) review of the model concludes that it is lacking in its ability to determine the cause of income inequality between women and men. To the extent that the model identifies only employee behavior to the exclusion of employer behavior and does not take into account occupational characteristics such as job segregation by sex, overcrowding into women's occupations and male/female differences in authority within occupations, it is incapable of distinguishing between two explanations: (1) women and men have different preferences and behave differently; and (2) women suffer discrimination at all stages of the process of obtaining earnings.

Sokoloff (1980) believes that the status attainment model's most important contribution is its focus on sex roles and the socialization process as it relates to women's experiences in the labor market. She also believes that it does not get at the underlying problem of income inequality: devalued home life vs. men's work in the labor market which is valued. Like Almquist she criticizes the theory for its focus on status to the neglect of other occupational criteria such as occupational segregation; she views the assumption that personal characteristics determine how one fares in the labor market a way of explaining income inequality by "blaming the victim." Further, any attempt to analyze women's position in the labor market without regard for her non-market activities is incomplete.

Almquist and Sokoloff make the error of assuming that the status attainment model attempts to explain income inequality between women and men. Its purpose originally was to assess which factors, and in what capacity, affect status attainment. That is still its purpose; however, the application of the model to assess women's status attainment in recent years and its expansion to include additional variables into the model has resulted in the use of income in a few studies to compare women and men. Income is not used as a measure of status but as an added dimension with which to compare women and men.

Although the purpose of the status attainment theory has not been to determine the causes of income differences between women and men, some of the findings have contributed to the body of literature with such a purpose. Findings of similar educational attainment and occupational prestige for women and men provide evidence to exclude explanations such as lack of education as reason for income inequality. At one time these could have been cited as reasons for income inequality but no more. Its focus on socialization and its relation to sex roles, as Sokoloff notes, is an important contribution also. These, most assuredly, are the basis of income inequality. The problem is to find the factors directly affecting inequality in income which are the outcome of paternalistic attitudes.

### Human Capital

The human capital theory stems from neoclassical economics. The basis of the theory is the quantity and quality of human capital determines income level. Individuals accumulate human capital by investing in education and training in order to become more productive

which will make them more valuable as employees and result in rewards of higher income and/or status. It assumes an economic rationality by individuals, employees and employers alike; an individual decides whether to invest by comparing the cost of the investment with the return, discounting both costs and returns to the time at which the investment is made (Rosenfeld 1979, p. 298). Thus, age and time remaining in the labor force are factors affecting an individual's decision to invest.

The human capital theory attempts to explain the wage differential between women and men by suggesting that women, because of marriage and family responsibilities, intermittently work in the labor force and as such their human capital is diminished; further, since investment usually occurs when individuals are young, women may choose to invest less in education and training, as this period of time coincides with peak childbearing years. In other words, women choose low-paying occupations requiring little training with high turnover rates such as secretarial and clerical work. There may also be a perception on the part of the employers, true or not, that women employees are not career-oriented, work intermittently and as such are a larger risk than male employees in terms of investing time and money in on-the-job training.

There is evidence that women are not as career-oriented as men, lending support to the human capital theory. Rosenfeld (1979) found that women generally are not employed continuously, whereas men remain attached to the labor force and a general line of work, moving up in status during their careers. Women also, when working, remain in the same type of occupation but do not move up in status or income level over time. Chenoweth and Maret (1980) examined three career patterns of



women: work in the home, mixed home and labor force participation and labor force participation. Forty percent of the women in their study had mixed careers, 30 percent had labor force careers and the remaining 30 percent had home careers. They found: (1) the stronger the familial investment (marital commitment, number of children, conservative husband's and respondent's attitudes), the more likely an individual would have a home career; (2) the higher the education and market rewards, the more likely a career in the labor force.

Oppenheimer (1973) and Fuchs (1974) believe that if the economy continues to develop as it has in recent decades, society will demand more female labor. Oppenheimer suggests that as this occurs women will be in the labor force at all points in the family life cycle; as a result women's family status will become less important as a determinant of her status in the labor force. Accompanying this increased labor force participation will be a growing dissatisfaction with poor pay and limited advancement of most female occupations. Fuchs (1974), hypothesizing that traditional role differentiation is the major cause of the wage differential, thinks that as women's participation in the labor force approaches the male rate, role differentiation will lessen. This, in combination with its consequences for women's human capital accumulation, will substantially increase women's earnings.

Although women may become as career-oriented as men in the future, they are not at present. However, even if they were, that does not guarantee a decrease in the wage gap. The main argument of human capitalists is if women had the same human capital accumulation as men, the differentiation would be lessened considerably. Variables such as marital status, number of children, occupation, work experience,

education, part-time/full-time, number of hours and weeks worked, are important in human capital studies. These variables attempt to measure the human capital of women and men for comparative purposes to determine if it is a lack of human capital which in turn affects productivity, that creates the wage differential. Thus, qualifications and productivity of women, as they relate to labor force status, are key issues. Although these are important issues in explaining wage differentials, the theory does not discount discrimination as a determining factor of the wage gap.

Becker (1971) states that there exist "productivity" differences between women and men and that these explain a significant part of income and occupation differentials; however, he also theorizes that part of the differential between majority and minority groups is due to pure discrimination. Employers, employees and consumers alike have a "taste" for discrimination, in varying degrees, and it is this "taste" that is the most important immediate cause of actual discrimination. Psychic costs incurred from hiring, working with and buying from women result in hiring more men than women, and thus paying a price for discrimination by paying higher wages. Discrimination on the part of employers results in a wage differential greater than the productivity differential between men and women; whereas, employee discrimination usually leads to job segregation instead of wage differentials (Sawhill 1973, p. 383).

Brown (1976) has found that discrimination by consumers has a greater impact on the earnings of women than does discrimination by either private or government employees. Brown's study examined three types of employer -- government, private and self-employment -- and how

they affect earnings differences. He found that women employed in government gained more from labor force participation and experience than women in private or self-employment. Men in the self-employment category gained the most from labor force participation and experience, which is the opposite for the women. From these findings Brown concluded consumer discrimination affects women's earnings the most.

There is no doubt that discrimination plays an important role in explaining the female/male wage differential. The problem for researchers is to discern what portion of that differential is due to differences between men and women in productivity and qualifications and what portion is due to discrimination and other factors not accounted for yet. The majority of human capital studies address this question. Generally, the basic procedure is to determine the wage differential for the sample in use, break down the differential into components, one being the amount due to differences in productivity, qualifications and other measured characteristics, and the other the discrimination component. Although different statistical techniques are used to arrive at these components, the components are the same in all studies. Variables differ from study to study but all are chosen in an attempt to measure employee qualifications and productivity; most studies include personal characteristics and other factors such as geographic area or city size which may affect wage differentials.

#### Wage Differential Studies

The following is a review of literature of the human capital perspective that focuses on the male/female wage differential. A summary of findings from some of the studies is provided in Table I. The gross