

DISCRIMINATION AGAINST YOUNG WOMEN IN CAREER  
SELECTION BY HIGH SCHOOL COUNSELORS

Dissertation for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY

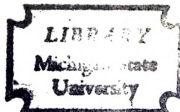
THOMAS J. DONAHUE

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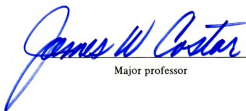


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SELECTION BY HIGH SCHOOL COUNSELORS

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ABSTRACT

DISCRIMINATION AGAINST YOUNG WOMEN IN CAREER  
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By

Thomas J. Donahue

The purpose of this study was to determine if high school counselors, when considering careers for female students, have a predisposition toward occupations that pay less, require less education, and need more supervision than careers considered for male students. In addition, an attempt was made to ascertain if certain personal characteristics of school counselors and selected environmental variables are correlated with such a predisposition. It was felt that a study of this type is important in order to heighten counselor awareness that such a condition may exist and to provide data useful for the improvement of both in-service and university-based counselor education programs.

A random sample of three hundred counselors in senior high schools throughout Michigan was asked to select from a list of 28 occupations the most appropriate occupation for each of three male and three female case study subjects. The personal characteristics of the student in each case study could describe either a male or a female. Two forms of the case study questionnaire were developed. Each form contained identical case study information. However, on the second form the sex

designation of each case study subject was the opposite of the sex designation of the first form. Thus, each case was presented to half of the counselors in the sample as a male student and to the other half of the counselors in the sample as a female student.

On a short personal data sheet, attached to the case study questionnaire, respondents were asked to provide information related to the independent variables: sex, marital status, age, professional training and experience, and socio-economic background.

Each of the 28 occupations possessed three weighted coefficients on a seven-point scale: one for salary, one for prerequisite educational level, and one for level of supervision. A respondent's score on each of the three dependent variables of salary, education, and supervision was determined separately by computing the sum of the coefficients of the occupations chosen for the three female case study subjects and subtracting it from the sum of the coefficients of the occupations chosen for the three male case study subjects. Scores were adjusted to assure that test forms were equivalent.

The data were collected over a four-month period. Eighty-six percent of the subjects returned their questionnaires. However, only 76 percent were completed sufficiently for use in the study. The data were analyzed using a variety of statistical tests including multivariate analysis of variance, univariate analysis of variance, and dependent t tests.

The results clearly demonstrated that the counselors in the study tended to choose lower paying occupations that are more highly

supervised and require less prerequisite education for female case study subjects than for male subjects. The differences were statistically significant for all three variables.

It was also shown that the educational level of the counselor's mother had a statistically significant effect on the kinds of careers that both male and female counselors chose for female and male case study subjects. A counselor whose mother had an average amount of formal education tended to choose careers for female case study subjects that paid less, required less education and more supervision than counselors whose mothers had either more than or less than the average formal education.

Differences in the kinds of careers counselors chose for male and female subjects were also related to the demographic location of the schools in which the counselor worked. Those who worked in schools located in cities over 25,000 in population tended to choose careers for female subjects that were different from those chosen for male subjects in regard to both preparation and remuneration.

When analyzed separately, neither the sex nor the age of the counselor alone appeared to have a statistically significant effect on the kinds of occupations chosen. However, there was a statistically significant interaction between them. Males over 40 years of age discriminated least against female case study subjects, followed by female counselors under 40, and male counselors under 40. Females over 40 years old exhibited the greatest discrepancy between the careers chosen for female and male case study subjects. This finding supports tentative similar conclusions suggested in the literature.

The only other significant two-way interaction was found between the counselor's age and the level of his or her father's education. A counselor who is under 40 and whose father had an average educational background was least likely to choose lower paying occupations for females, whereas the counselor who is over 40 and whose father had less formal education than most people was most likely to choose lower paying occupations for female case study subjects.

In brief, this study demonstrated that high school counselors tended to choose lower paying jobs that required less education and more supervision for female case study subjects than for identical male case study subjects. Female counselors over 40 exhibited the strongest predisposition to do this, whereas male counselors over 40 tended to discriminate least. Counselors who worked in schools situated in cities tended to discriminate less than counselors in rural schools. The amount of formal education attained by the counselor's mother and father was also related to this predisposition.



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By

Thomas J. Donahue

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To Mary Ann,  
who understands.



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## CHAPTER I

### INTRODUCTION

#### Background

During the last decade women throughout the world have made strides toward recognition as the social, intellectual, economic, and spiritual equals of men. To do this, feminists have attacked most institutions of society, including church, school, family, government, and business. In many cultures this struggle has gone on for centuries. Its origin is one of history's conundrums, although there are many points of view on why male supremacy exists and how it began. Many well-known writers addressed themselves to this topic, including, for example, Plato, Machiavelli, John Stuart Mill, and Friedrich Engels.<sup>1</sup>

Women have evolved through the stages of chivalry and suffrage and are now in the midst of what Millett has called the "sexual revolution."<sup>2</sup> Regardless of whether a revolution is upon us, the fact

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<sup>1</sup>Plato, The Dialogues of Plato, trans. B. Jowett (New York: Random House, 1937); N. Machiavelli, The Discourses (New York: Random House, 1950); J. S. Mill, The Subjection of Women, reprinted in Three Essays by John Stuart Mill, World's Classic Series (London: Oxford University Press, 1966); F. Engels, The Origin of the Family, Private Property and the State (1884), trans. E. Untermann (Chicago: Charles Kerr, 1902).

<sup>2</sup>K. Millett, Sexual Politics (London: Sphere Books Ltd., 1969).





that women are often treated as second-class citizens in today's world has been well documented.<sup>1</sup> As professionals, counselors who continually encounter this phenomenon in the course of their daily work should examine the role they are playing in the unfolding drama that surrounds the role of women.

Many high school counselors are involved with the self-actualization of their clients. As such, they become concerned when barriers are placed in the developmental paths of those with whom they work. They may become even more concerned when they find that they are personally detrimental to the female client's self-actualization.

It seems reasonable to assume that counselors generally hold the attitudes and values of the society in which they live. These same social mores, attitudes, and values often serve to keep women from developing to the highest level of their potential. Thus it is not unlikely that most high school counselors, during their own socialization, assimilate at least some of the societal attitudes that are limiting the personal, social, educational, and vocational development of women.

### Purpose of the Study

Despite frequent discussions in the professional literature and news media, little scientific research has been conducted to determine whether sex discrimination does exist among high school counselors.

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<sup>1</sup>Infra, Chapter II.



The primary purpose of this study is to determine whether counselors in secondary schools share many of the attitudes that are generally prevalent in the American culture. Second, an attempt is made to identify some of the concomitants of this propensity to limit the kinds of occupations considered for female clients. Hopefully, promulgation of the results of this study will make counselors more aware of predispositions that may unconsciously affect their counseling with females, and thus diminish the intrusion of stereotypic thinking into the counseling process.

#### Need for the Study

Although the Equal Rights Amendment proposed for the Federal Constitution has not yet been ratified by the legislatures of three-fourths of the states, new legislation and recent court decisions continue to extend the rights of women at an increasing pace. Regardless of the new laws, denial of equal opportunity to women will probably continue in some degree because it is based on social-cultural patterns that are not likely to vanish in a single generation. Since social legislation tends to be a reflection of prevailing social attitudes rather than a primary cause of attitude change, the problem of providing equal opportunity for women must continue to be attacked at all levels of society and in all areas.

Opinion abounds about the role high school counselors play in career development of women; but, except for a few empirical studies, little has been done either to show that bias does exist in counselors or to isolate the correlates of this bias. In this study an



attempt is made to demonstrate that counselors may be a cultural element in society that is instrumental in preserving the traditionally subservient occupational roles of women.

The fact that women's talents may be undervalued or repressed in the labor market is a personal, social, and economic loss for all. If counselors do, in fact, discriminate against female clients either as a result of well-intentioned realism or unconscious attitudes and stereotypes, analysis and understanding of this phenomenon may enable them to control that tendency. Studies dealing with sex bias in career counseling lead not only to a greater awareness of the problem, but to modification of counselor behavior, and ultimately, sex-fair vocational counseling.

### Definitions

The following terms are defined according to their use in this study.

Negative bias: As used in this study, bias is the tendency of a counselor to guide females, either consciously or unconsciously, toward occupations that require less education, pay lower salaries, and require more supervision than those occupations to which males are guided.

The phrase negative bias, as used in this study, does not connote affect or in any way impugn the motives of the counselor. Bias is expected to be nonmalicious, probably unconscious, and perhaps even benevolent. For example, a counselor who does not encourage a girl to aspire to become a corporation executive may do so because he or she believes



there are too many reality factors that will thwart her success as an executive and that it is a counselor's responsibility to protect a client from probable failure resulting from an unrealistic choice.

Because the word bias carries a negative connotation in colloquial speech, the words predisposition, propensity, and discrimination are substituted in this study whenever possible.

Counselor professionalism: For the purpose of this study, the degree of professionalism is defined on the basis of education, experience, and membership in professional organizations. It is hypothesized that counselors who are highly professional are less likely than other counselors to be influenced by the vocational bias against women that is prevalent in the culture in which they live. In operational terms, a highly professional counselor is defined as one who fulfills all three of the following conditions: (1) holds a master's degree in Guidance and Counseling, (2) has had at least five years of counseling experience, and (3) is a member of at least two professional organizations.

Socioeconomic background: Assessment of a counselor's socioeconomic background is based on the counselor's perception. An absolute educational or economic scale would not be possible because the ages of the counselors vary, and the economy and average educational attainment levels have changed. For example, the parent of a 60-year-old counselor whose father held a high school diploma and earned \$4,500 per year when the counselor was a child should not be considered to have lower socioeconomic status than the parent of





a 25-year-old counselor, who holds an associate degree and earned \$10,000 per year when the counselor was a child.

Counselors were asked to rate their mother's educational level, their father's educational level, and their family's financial status when they were children on the following three-point scale: 1 = below average, 2 = average, and 3 = above average. The following formula was devised to give equal weight to the parents' education and the family's economic status:

$$\frac{\text{mother's education} + \text{father's education} + 2X \text{ family economic status}}{4}$$

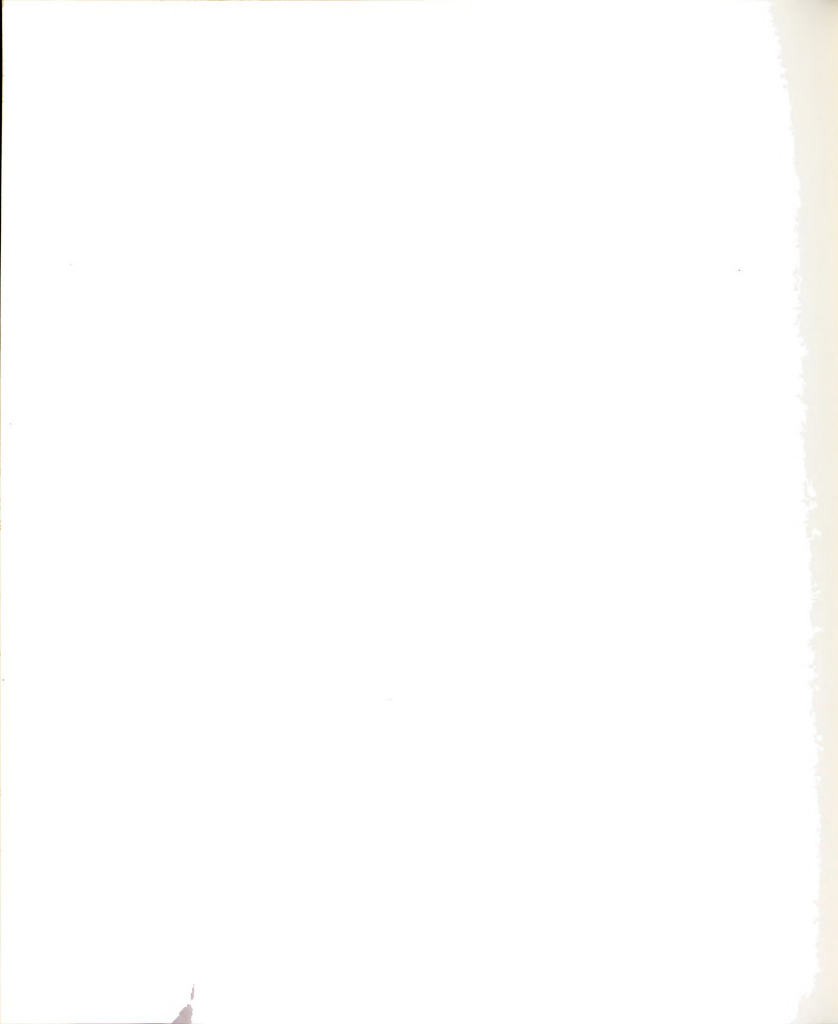
Demographic location: Demographic location refers to the area in which the counselor's school is located. Three demographic locations are considered: schools located in greater Detroit, schools located in other cities of more than 25,000 in population, and rural areas. Rural areas include all schools not included in the first two categories.

Supervision: The degree of supervision of an occupation is based on the amount of authority, responsibility and judgment exercised in that occupation. Occupations that are supervisory in nature are considered to be the least supervised.<sup>1</sup> Supervision, remuneration, and prerequisite education levels of occupations are operationally defined in Chapter III.

Labor market: Labor market refers to all persons 14 years old and over who have a job (the employed) or are looking for a job (the unemployed). Not included are housewives, full-time students, people

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<sup>1</sup>Infra, Chapter III, p. 69.



in institutions, and retired persons who are neither working nor seeking work.

### Assumptions

The principal assumption that underlies this study is that women receive unequal treatment in many aspects of the American culture, particularly within the labor market. This assumption is substantiated by the literature reviewed in Chapter II, but such a broad generalization is always difficult to prove scientifically.

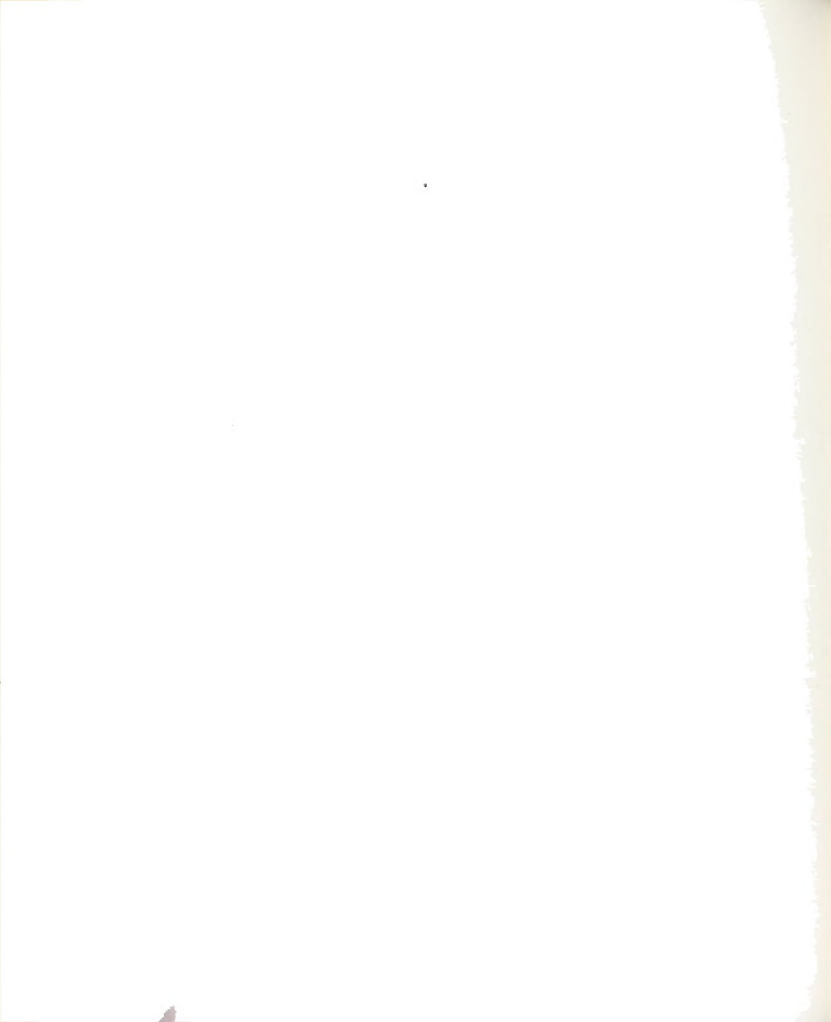
A second assumption holds that bias has its origins in the nature of humankind, and that specific biases develop as a result of the culture in which a person lives. The fact that sex stereotyping and sex biases do exist in many cultures has been accepted in most anthropological theories. Significant anthropological studies dealing specifically with sex bias have been conducted by Mead, Goldberg, Epstein, Davis, and others.<sup>1</sup>

A third assumption pertains to measurement of bias: Personality and environmental factors determine the relative strength of an individual's bias. This assumption is also substantiated in Chapter II of this report.

A fourth assumption relates directly to the counseling process: Counselors have an effect on counselees. Stated more directly, counselor attitudes and values are sometimes adopted partially or

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<sup>1</sup>M. Mead, Sex and Temperament in Three Primitive Societies (New York: The New American Library of World Literature, Inc., 1935); P. Goldberg, "Prejudice Toward Women: Some Personality Correlates," paper presented at the APA Convention, Honolulu, Hawaii, 1972; C. F. Epstein, Woman's Place (Berkeley: University of California Press, 1971); E. G. Davis, The First Sex (New York: Putnam, 1971).



completely by the client. This is true in several ways. If counselors did not in any way affect their clients, they would be useless. However, this assumption is not accepted by all counseling theorists. Many client-centered and existential counselors maintain that their values and attitudes are not transferred to the client, but rather, that the counselor simply helps counselees to clarify their own values, develop their own attitudes, choose their own occupations, and become distinctively unique as individuals. However, the value a client-centered counselor places upon knowing, accepting, understanding one's self, and becoming a unique self-actualizing individual definitely plays a part in the interview and is sometimes adopted by the client as a result of many hours of striving to attain these goals for himself or herself with the help of the counselor.

Greenspoon conducted an ingenious experiment to prove this point when the professional debate between the behaviorists and non-directive therapists was reaching its zenith in 1950.<sup>1</sup> He asked naive subjects to say any words that came to their minds. After plural nouns the counselor nodded assent and said, "Um-hum!" After a few moments, nearly all clients were saying only plural nouns. When the subjects were later asked to describe what had happened, some said they simply spoke whatever words came to mind, but others said they felt the counselor wanted to hear only plural nouns. Whether the subject realized it or not, the counselor's values had a demonstrable effect on the subjects' behavior. Rosenthal and Jacobson

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<sup>1</sup>J. Greenspoon, "The Effect of a Verbal Stimulus as a Reinforcement" (Ph.D. dissertation, University of Indiana, 1950).



also showed how teacher and parent attitude affect particular children's behavior, even if the attitudes are not verbalized.<sup>1</sup> Although their study did not specifically test counselors, the inference that counselor attitudes also affect achievement and behavior is inescapable.

The fifth assumption is that the case study questionnaire is a valid instrument and that the list of careers is reliably classified according to salary, education, and supervision. The method used to develop the questionnaire and classify the occupations is discussed in Chapter III.

The sixth assumption is that the paper-and-pencil instrument used actually measures the underlying propensity to behave in the certain way that it purports to measure.

### Methodology

Three hundred randomly selected senior high school counselors in Michigan were asked to choose from among 27 occupations for each of three male and three female case study subjects. Each occupation was assigned a coefficient on three seven-point scales that describe the remuneration, amount of prerequisite education, and level of supervision associated with it.

Three one-way analyses of variance were computed to learn if counselors choose lower paying jobs that require more supervision and less education for female case study subjects than they do for male case study subjects. In addition, six one-way multivariate analyses of variance were performed to determine whether a counselor's sex,

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<sup>1</sup>R. Rosenthal and L. Jacobson, Pygmalion in the Classroom (New York: Holt, Rinehart and Winston, Inc., 1968).





age, marital status, professionalism, demographic location, or socio-economic background affect the kinds of careers chosen for male and female case study subjects. Two-way interaction effects that seemed promising were also tested.

### Limitations and Scope of the Study

Not all aspects of counselor behavior toward females who are in the process of selecting careers can be completely explored in a single study. The present effort is limited to both a specific geographic area and a specific set of independent variables to be considered.

Only six counselor variables are considered: sex, marital status, age, demographic location, professionalism, and socio-economic background. A perfunctory examination of a counselor's realism-idealism as it relates to bias is also made. No doubt other characteristics may be related to a counselor's behavior toward female clients, such as: the counselor's training program, number of male and female siblings, work setting, race, personality structure, religious beliefs, risk-taking tendency, preference of counseling theory, and self-concept. However, to keep this study within manageable limits only the six variables mentioned earlier are examined.

Geographically, only high school counselors who work in Michigan are included in the population. A stratified random sample of high school counselors from throughout the state is used.

The usual limitations of studies using the questionnaire method regarding validity, reliability of the instrument, and veracity of the respondents apply to this study as well.



### Hypotheses

Stated in general terms, the central hypothesis of this study is that many senior high school counselors have a predisposition that causes them to limit, either consciously or subconsciously, the kinds of occupations they consider in guiding female counselees toward career choices. To detect and measure this predisposition in an unobtrusive yet scientific manner, a case study format was chosen in which male and female names were interchanged on alternate forms. In more specific terms, the major hypotheses of this study are:

Hypothesis 1: High school counselors will select lower paying occupations for female case study subjects than for identical male case study subjects.

Hypothesis 2: High school counselors will select occupations that require less educational preparation for female case study subjects than for identical male case study subjects.

Hypothesis 3: High school counselors will select occupations that require more supervision for female case study subjects than for identical male case study subjects.

If counselors do have a predisposition to choose lower paying jobs that require less education and more supervision for females than for males, it is likely that some counselors would have a stronger predisposition than others. Further, counselors whose tendency to discriminate is stronger would probably have other shared characteristics. Predicting these characteristics must be intuitive in many respects because no previous research has attempted to isolate any covariables. The subordinate hypotheses are intended to explore some of these characteristics. They include:

Hypothesis 4: Female high school counselors are likely to discriminate against females less than are male counselors.



Previous research on this subject is somewhat contradictory. Even though most research shows no difference between male and female counselors, it is logical to assume that female counselors would understand and encourage girls to choose nontraditional occupations more frequently than male counselors would.

Hypothesis 5: Male high school counselors whose spouses are employed are more likely to select the same kinds of careers for female and male case study subjects than are male counselors who are single or whose spouses are not employed.

This hypothesis is reasonable because a counselor whose wife is employed is more apt to be conscious of the career orientation and problems of female clients.

Hypothesis 6: Older high school counselors are more likely than younger counselors to choose lower paying occupations that require less education and more supervision for female case study subjects than for male case study subjects.

Older persons are generally more traditional, presumably hold traditional sex-role stereotypes, and may be less in tune with the issues that currently are widely dealt with on university campuses and in entertainment and news media produced for the younger generation.

Hypothesis 7: High school counselors who are employed in rural school systems will tend to choose lower paying jobs that require less education and more supervision for female case study subjects than for male case study subjects in contrast to counselors who work in city schools.

Persons who live and work in rural areas, small towns, and suburbs are generally thought to be more traditional than those who live and work in cities. For this reason, such counselors are expected to view careers in a more traditional, stereotypic manner.



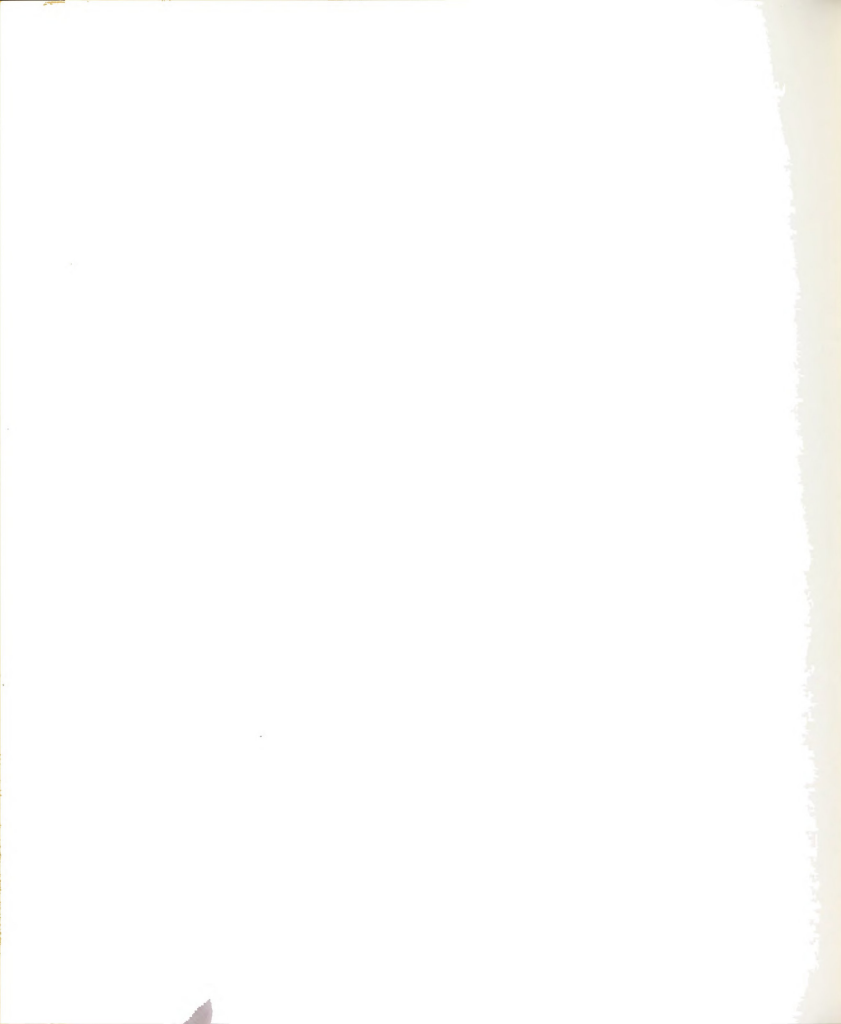
Hypothesis 8: High school counselors who are highly professional are less likely than other counselors to choose lower paying occupations that require a less sophisticated educational background and more supervision for female case study subjects than for male case study subjects.

A counselor who is experienced, well-educated, and active in professional associations is probably more aware of himself and the labor market and is more aware of trends in the professional and contemporary world. It follows that the professional counselor would consciously avoid sex-role stereotyping.

Hypothesis 9: High school counselors who have a higher socioeconomic background are more likely than other counselors to choose similar careers for male and female case study subjects.

Socioeconomic background, as defined on page 5 of this chapter, is determined by the amount of the father's formal education plus the amount of the mother's formal education, plus two times the economic status of the family divided by four. Of the three factors inherent in the socioeconomic background, the mother's educational level seems to be the most likely variable to have a significant effect on the counselor's attitude, since an adult's attitude toward women is molded at least to some degree by his view of his mother.

The second factor that is likely to influence counselor attitude toward women's careers is the family's economic situation. The women's liberation movement is essentially a middle-class phenomenon. In poor and lower-middle-class families, a wife who stays at home is more likely to be seen as a status symbol, rather than as an individual whose personhood is repressed or self-expression limited. Since these attitudes were established while the counselor was growing up and since the largest number of high school counselors have





middle class or lower socioeconomic backgrounds, this seems to be a more pertinent variable than their current socioeconomic status.

Hypothesis 10: Counselors who consider themselves idealists are more likely to choose similar occupations for girls and boys than counselors who consider themselves realists.

Counselors who are realists probably tend to look at the world as it is, and guide women into traditionally low-paying, highly supervised occupations that are presently dominated by women. A realist may attempt to discourage a girl from entering a nontraditional occupation because of the difficulties she will most certainly encounter. An idealist, on the other hand, could be expected to encourage a girl to aspire to a challenging career, in spite of the social obstacles she might encounter.

### Summary

Women in our culture are faced with many institutional and social obstacles to their career development. High school counselors are interested in the total development of their female clients and are concerned when barriers are placed in their clients' developmental paths. Yet these same counselors often hold the values and attitudes that are prevalent in society that prevent women from attaining the maximum level of their potential as human beings.

The purpose of this study is to determine if high school counselors do have a predisposition to consider careers for female counselees that pay less and require less education and more supervision than the ones they choose for male counselees. An attempt is also made to examine some personality and environmental variables that might be correlated with this predisposition. Those factors to be



examined are: sex, age, marital status, professionalism, demographic location, and socioeconomic background.

Assumptions underlying the study are: (1) that discrimination against women exists in the labor market and in the American culture in general; (2) that bias is an aspect of man's nature that is shaped by the culture in which an individual lives; (3) that personality and environmental factors determine the relative strength of a bias; (4) that counselor attitudes, values, and personality have an effect on clients; and (5) that the questionnaire developed for this study is both valid and reliable.

Twelve hypotheses are proposed. They all fall under the general hypothesis that high school counselors have a predisposition to limit the kinds of occupations they consider in guiding female counselees toward career choices and include the major hypothesis that high school counselors tend to consider lower paying jobs that are more supervisory in nature and require less educational training for female clients than for male clients. It is also hypothesized that older counselors, counselors who work in rural areas, counselors who are not highly professional, and counselors from lower socioeconomic backgrounds tend to discriminate more against females than do other counselors.

### Overview

The review of the literature in Chapter II considers the nature of bias, and the position of American women in our culture, in education, and in the labor market. The implications of



counseling theory for female clients and those studies that deal with guiding women in career choice are also reviewed. Chapter III contains an explanation of the methodology used in the study and a description of how the case studies and questionnaire were developed. Included in Chapter IV are a presentation and analysis of the data gathered in the study, along with the major findings. A summary of the study, conclusions, discussion of the findings, and recommendations for further study are found in Chapter V.



## CHAPTER II

### A REVIEW OF THE LITERATURE

#### Introduction

The American Psychological Association's "Report of the Task Force on Sex Bias and Sex-Role Stereotyping in Psychotherapeutic Practice" states, "Research which explicitly addresses the issues of sex bias and sex-role stereotyping in therapy is in its infancy."<sup>1</sup> Not enough scientific research on the nature and causes of bias exists to establish a useful, reliable theory of bias. Until social scientists and psychologists more thoroughly understand exactly what bias is and how it develops, understanding of nonmalicious bias against females will be difficult to comprehend thoroughly.

This chapter begins with a review of the most widely accepted theories of bias. Then bias toward women in schools and in the labor market is examined. A general examination of counseling theories as they relate to the female client follows, and finally studies related to the vocational counseling of women are reviewed.

#### The Nature of Bias

This study examines a bias whose definition is limited to a very narrow range of behavior by members of a relatively small

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<sup>1</sup>American Psychological Association, "Report of the Task Force on Sex Bias and Sex-Role Stereotyping in Psychotherapeutic Practice" (Washington, D.C.: American Psychological Association, 1975). (Mimeographed.)





population. The study is not philosophical or theoretical, nor can it be considered a study in pure science. Theoretical aspects of bias against women discovered in this and other studies may ultimately lead to a theory that would explain this bias, but no pre-existing theoretical framework that has been developed to explain prejudice encompasses the form of nonmalicious bias that is examined in this study.

What little scientific work has been done on the study of bias is related to malicious and aggressive prejudice, since religious, racial, and ideological prejudices which have given rise to major social problems have generated the bulk of research. Even though some theories of prejudice maintain that it arises from the normal feelings of love and loyalty to one's friends, peers, or in-group,<sup>1</sup> no theory concentrates on the kind of bias we refer to in this study.

Charles Lamb described the feeling of prejudice well when he said,

For myself, earthbound and fettered to the scene of my activities, I confess that I feel the differences of mankind, national and individual. . . . I am, in plainer words, a bundle of prejudices--made of likings and dislikings--the veriest thrall to sympathies, apathies and antipathies.<sup>2</sup>

Although Lamb defined his feelings candidly and insightfully, scientists have not, to any appreciable degree, studied apathy and prejudice

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<sup>1</sup>M. F. Ashley-Montagu, On Being Human (New York: Henry Shuman, 1950).

<sup>2</sup>C. Lamb, quoted in G. W. Allport, The Nature of Prejudice (Garden City, N.J.: Doubleday-Anchor Books, 1954), p. 3.



in favor of certain stimulus objects. We possess only a rudimentary scientific literature dealing with malicious prejudice, and must infer from it a theory of benign or subconscious bias.

It is ironic that the most comprehensive theoretical work on the theory of prejudice stated on the very first page of the preface that "Normal men everywhere reject, in principle and by preference, the path of war and destruction . . . especially encouraging is the fact that in recent years men in large numbers have become convinced that scientific intelligence may help us solve the conflict [that results from prejudice]" (emphasis added).<sup>1</sup> Later in the work the author devoted two pages to prejudice toward women and concluded: "But for many people this 'war of the sexes' seems totally unreal. They do not find it a ground for prejudice."<sup>2</sup>

Theories of prejudice are of several varieties: economic theories, historical theories, social-cultural theories, psychodynamic theories, and phenomenological theories. Many individual theories fall under each of these categories. Only the most widely held theories are examined in this study. Although the word "theory" is used loosely throughout this section, there is no complete theory of prejudice, per se, but rather a series of low-level generalizations or theory fragments. Carkhuff defined the necessary components and

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<sup>1</sup>Allport, The Nature of Prejudice, p. 1.

<sup>2</sup>Ibid., p. 32f.



functions of a theory, and none of those discussed here actually approaches what can be considered a true theory of prejudice.<sup>1</sup>

### Economic Theory

Karl Marx viewed prejudice from an economic perspective. His exploitation theory held that prejudice is an attitude propagated by the exploiting class for the purpose of stigmatizing some group as inferior so that exploitation of the group or its resources might be justified. The rationalized self-interest of the upper classes is therefore considered the social origin of prejudice.<sup>2</sup> The imputed inferior nature of the exploited group, for example, can lead to condescension and altruistic, paternalistic attitudes toward them. Social taboos prevent the exploited group from gaining equality or mastery over their future or their resources.

Although the Marxist view is far too simple to explain the complexities of prejudice, it offers an interesting and at least partially valid explanation of prejudice in general and prejudice toward women in particular.

### Historical Theory

The historical approach to prejudice maintains that prejudice can only be understood if the total background of a conflict is examined. This approach maintains that psychological and sociological studies only examine personality and group behavior within narrow

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<sup>1</sup>R. R. Carkhuff, M. Alexik, and S. Anderson, "Do We Have a Theory of Vocational Choice?" Personnel and Guidance Journal 46 (December 1967): 335-45.

<sup>2</sup>O. C. Cox, Caste, Class and Race (New York: Doubleday, 1948), p. 393.



limits, and they neglect the social and historical antecedents that nurture personality, culture, and prejudice.<sup>1</sup> Although no social scientist today would subscribe completely to the earned reputation theory, historians may rightly point out ethnic or national traits that are menacing and may invite realistic hostility. The historical approach can complement other theories in the understanding of prejudice, but like the other theories presented here, it does not offer a complete explanation of prejudice.

### Social-Cultural Theory

The social-cultural approach to the understanding of prejudice considers it to be the result of redirected hostility. Sociologists see prejudice relative to factors such as upward mobility, in-groups, out-groups, traditions, urbanization, ethnocentrism, depersonalization, cultural mores, and social factors such as advertising, mass media, community standards, and the Zeitgeist or spirit of the times.

Lillian Smith developed a social-cultural theory in her book, Killers of the Dream.<sup>2</sup> Southern children during the first half of the century did not know about historical events, exploitation, or urban values. They only knew that they must conform to the complex and inconsistent teaching they received. Their prejudice was therefore a mirror image of their cultural situation. In short, this theory holds

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<sup>1</sup>O. Handlin, "Prejudice and Capitalist Exploitation," Commentary 6 (1948): 79-85.

<sup>2</sup>L. Smith, Killers of the Dream (New York: W. W. Norton, 1949).





that the child begins as a tabula rasa, or smoothed tablet, upon which the prejudices and attitudes of the culture are inscribed.

### Psychodynamic Theory

Psychodynamic theories of prejudice hold that prejudices arise from the nature of man. These theories maintain that humans are basically amicable, but when frustrated or caught up in a prolonged competitive situation, they tend to personify rather than analyze the evil. The frustration theory of prejudice is an outgrowth of the frustration/aggression hypothesis.<sup>1</sup> Scapegoating as an explanation for the origins of prejudice assumes that anger can be displaced on practically any object if certain preconditions are met.

Another commonly held psychodynamic theory was first postulated by Adorno and his colleagues,<sup>2</sup> who maintained that prejudice is a result of a particular type of personality structure. Although everyone may be prejudiced in one way or another, the authoritarian person maintains negative prejudice as a personality trait, which forms an integral part of his character structure and ego defenses. The authoritarian individual is insecure, anxious, acquiescent to authority, secretive, patriotic, humorless, and unempathic. Adorno and his colleagues presented scientific evidence to support their theory of prejudice. During the past 25 years considerably more

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<sup>1</sup>D. Krech and R. S. Crutchfield, Elements of Psychology (New York: Knopf, 1967), pp. 314ff.

<sup>2</sup>T. W. Adorno et al., The Authoritarian Personality (New York: Harper, 1950).



scientific research has reinforced and refined this theory. However, other theoretical considerations must be taken into account to explain why and how a generalized, free-flowing hostility attaches itself to some stimulus objects in an individual's life space and not to others.

### Phenomenological Theory

The phenomenological theory of prejudice emphasizes perception and cognition. This theory holds that although historical, cultural, and personality variables may underlie perceptions, individuals react to their world according to how they perceive it at a given moment. All previous factors converge on the common focus of a specific "here and now." Prejudice is a behavioral outcome of an individual's perceptions at a given moment.

### Related Theoretical Considerations

Each of the theories mentioned in this section has something to contribute to the understanding of prejudice, yet none can explain the origin and nature of prejudice without drawing support from the others. Jones maintained somewhat facetiously that it would probably take divine intervention to combine these fragments into a single coherent theory.<sup>1</sup> Yet, it is possible that science will one day be able to unravel the multiple causes of prejudice. On the other hand, we may be grappling with a problem akin to that of the medieval

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<sup>1</sup>J. M. Jones, Prejudice and Racism (Reading, Massachusetts: Addison-Wesley Publishing Co., 1972), p. 105.



alchemists who spent their lives attempting to manufacture gold, which we now realize is a basic element in nature.

Some specific observations about prejudice in the literature are related to several of the secondary hypotheses of this study. Although such intellectuals as Aristotle, Erasmus, Lord Chesterton, Benjamin Spock, and Norman Mailer are now notorious for their anti-feminist views, there is a body of research which indicates that higher education tends to reduce prejudice. Whether this is a result of enhanced feelings of security, more critical habits of thought, superior knowledge, or some other outcome of education has never been clearly resolved. However, it is clear that tolerance increases, at least to some degree, with education, and is passed on to the next generation.<sup>1</sup>

Age is related to prejudice in early years. Piaget discovered that children under seven years old resist having one loyalty within another (e.g., loyalty to a city as well as a country). By age 10 the child understands that one can be loyal to two concepts, one within another. By age 11 emotional attachments form. Piaget and Weil stated, "Everything suggests that, on discovering the values accepted in his immediate circle, the child feels bound to accept the circle's opinions of all other groups."<sup>2</sup> These prejudices are likely to increase or decrease, depending upon the kinds and amounts of experience individuals have with other groups. Even if age itself is

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<sup>1</sup>Allport, The Nature of Prejudice, p. 406.

<sup>2</sup>J. Piaget and A. M. Weil, "The Development in Children of the Idea of Homeland and of Relations With Other Countries," International Social Science Bulletin 3 (1951): 570.



not a significant variable, education and experience may be. As one generation modifies and assimilates the prejudices of previous generations, older persons may hold different prejudices than younger persons.

Applying this principle to the present study, it would not be unreasonable to assume that older persons today hold different biases toward woman's place in the labor market than do younger people.<sup>1</sup>

Young people today have been bombarded with television stories about successful career women, have been encouraged by mothers and other adult females who have been frustrated in their roles, have been affected by equal rights legislation and court decisions, and influenced by their peers who may hold more androgynous and egalitarian attitudes than their elders. So, today, it is likely that many young persons are less biased toward women than are older persons.

Economic status seems to have an effect on prejudice.<sup>2</sup> Prejudice thrives when economic competition enables individuals to envisage some object of prejudice as a symbol of all competitors. Economic theorists such as Marx have maintained that prejudice emanates from the ruling class. Whether socioeconomic status and intensity of prejudice are related has not yet been scientifically demonstrated, although Bettelheim found that prejudice is more intense when the stimulus object possesses approximately the same socioeconomic status

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<sup>1</sup>R. Useem, "Changing Cultural Concepts in Women's Lives," NAWDC Journal 24 (1960): 29-34.

<sup>2</sup>C. McWilliams, A Mask for Privilege (Boston: Little, Brown and Co., 1948).





as the person demonstrating the prejudice.<sup>1</sup> Thus, a wealthy white person may tend to be more prejudiced against Jews, whereas a poor white person may tend to be more prejudiced against blacks. In an extensive review of literature, Blalock found that prejudice seems to intensify during economic hard times.<sup>2</sup> Ehrlich stated that "In general, higher socioeconomic status entails slightly lower levels of acceptance of negative stereotypes and a greater likelihood of positional acceptance," but not intimate acceptance.<sup>3</sup>

Applying this research to the present study is somewhat difficult. The rationale for hypothesizing that socioeconomic background has an effect on an individual's biases is based more upon subgroup cultural norms than on the effect of the socioeconomic background per se. The feminist movement is primarily a middle-class movement; therefore persons from the middle class could be expected to display less bias toward women than those of the lower class and the upper class.

When a group finds itself to be the object of prejudice, its members may harbor prejudice against one another.<sup>4</sup> Such prejudice against peers may result from a desire to be assimilated into the dominant group, or it may be a result of class distinctions within the

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<sup>1</sup>B. Bettelheim and M. Janowitz, Dynamics of Prejudice (New York: Harper and Brothers, 1950), p. 55f.

<sup>2</sup>H. M. Blalock, Toward a Theory of Minority-Group Relations (New York: John Wiley and Sons, 1967), Chapter V.

<sup>3</sup>H. Ehrlich, The Social Psychology of Prejudice (New York: John Wiley and Sons, 1973), p. 78.

<sup>4</sup>Allport, The Nature of Prejudice, p. 147.



group. In-group prejudice may result from more dominant members of the hierarchy shifting much of the blame for their disadvantaged position upon the lower members of the hierarchy. Or perhaps they have so frequently heard certain undesirable characteristics ascribed to their group that they begin to believe the accusations. Thus, women can be prejudiced against women, blacks against blacks, and Jews against Jews.

In a study of women's prejudice toward women, Goldberg asked women to evaluate the quality of articles in a variety of professional subject areas. He found that women judged papers with a male's name at the top more favorably than the identical paper bearing a female's name at the top. His conclusion was that women are prejudiced against women since they consider academic work by men to be better than the same work done by women.<sup>1</sup>

Goldberg has conducted extensive research attempting to find some personality correlates of prejudice toward women. He used a variety of psychometric devices, including The California F Scale, The Goldberg Misogyny Test, The Minnesota Multi-Phasic Personality Inventory, The Rotter Incomplete Sentence Blank, and the Berger Self-Esteem Scale to test a wide variety of individuals.<sup>2</sup> He concluded that even though some personality correlates were found, prejudice toward women is culturally fixed and is an almost universal attitude;

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<sup>1</sup>P. A. Goldberg, "Are Women Prejudiced Against Women?" Trans-Action, April 1968, pp. 28-30.

<sup>2</sup>P. A. Goldberg, "Prejudice Toward Women: Some Personality Correlates," paper presented at the American Psychological Association Convention, September 1972). ERIC # ED 072 386.



as such, it is not profitable to look for final explanations of the phenomenon at the level of individual psychology.

Prejudice against women, since it is nonmalicious, is likely to be a result of cultural norms, rather than an individual's personality characteristics. This cultural norm is inculcated from the moment the proclamation "It's a girl!" sends friends and relatives scurrying from the hospital to purchase pink clothing, so there will be no mistake about how she is to be treated. The prejudice continues throughout the child's early life and schooling.

#### Females in School

Discrimination toward females progresses through infancy,<sup>1</sup> the toddler stage,<sup>2</sup> the preschool stage,<sup>3</sup> through elementary school<sup>4</sup> and secondary school,<sup>5</sup> in college,<sup>6</sup> and in graduate school.<sup>7</sup> Even

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<sup>1</sup>J. Z. Rubin, F. J. Provenzano, and Z. Luria, "The Eye of the Beholder: Parents' Views on Sex of Newborns," American Journal of Orthopsychiatry 44 (1974): 512-19.

<sup>2</sup>B. I. Fagot, "Sex-Related Stereotyping of Toddlers' Behaviors," Developmental Psychology 9 (1973): 429ff.

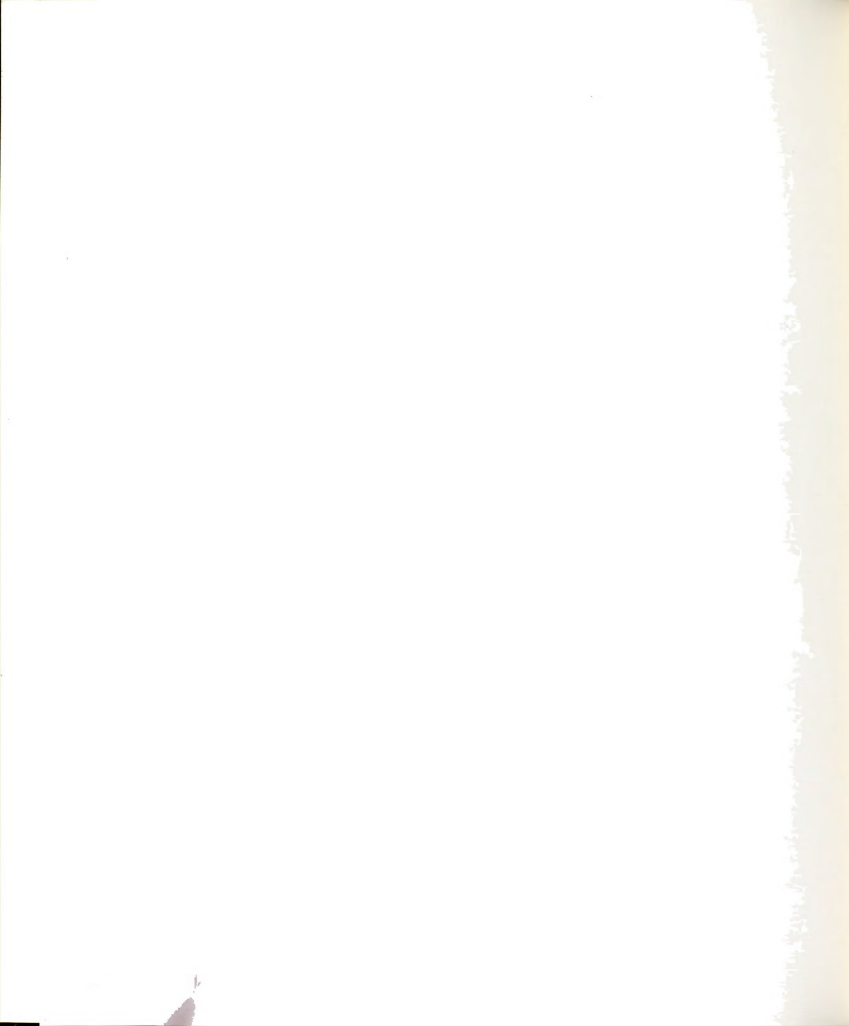
<sup>3</sup>L. Lansky, "Sex-Role Attitudes in Parents of Pre-school Children," Merril-Palmer Quarterly of Behavior and Development 13 (1967): 140-48.

<sup>4</sup>C. Jacobs and C. Eaton, "Sexism in the Elementary School," Today's Education 61 (1972): 20-22.

<sup>5</sup>J. L. Trecker, "Sex Stereotyping in the Secondary School Curriculum," Phi Delta Kappan 55 (October 1972): 110.

<sup>6</sup>N. Frazier and M. Sadker, Sexism in School and Society (New York: Harper and Row, 1973).

<sup>7</sup>C. I. Holmstrom and R. W. Holmstrom, "The Plight of the Woman Doctoral Student," American Education Research Journal 11 (1974): 1-18.



if the female overcomes the discrimination in the family, the neighborhood, and at school, and manages to succeed in the labor market, she is faced with discrimination as a supervisor.<sup>1</sup>

Sexist attitudes are inculcated in a child long before he or she begins to attend school. In his work with pseudo-hermaphrodites, Money found that after a child is beyond the age of three or four it is impossible to reverse his or her sex-role identity without severe psychological repercussions.<sup>2</sup>

The school reinforces sex-role stereotypes. Practically every aspect of the school plays a part in this reinforcement. The following paragraphs briefly consider the role of teachers, textbooks, curriculum, and tests in stereotyping sex roles.

### Teachers

Teachers need not teach sex roles; pupils can simply observe: 85 percent of all elementary teachers are females, whereas 87 percent of the elementary school principals are males.<sup>3</sup>

Sears and Feldman thoroughly reviewed the literature dealing with teacher interaction with boys and with girls,<sup>4</sup> and found

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<sup>1</sup>B. Rosen and T. H. Jerdee, "The Influence of Sex-Role Stereotypes on Evaluation of Male and Female Supervisory Behavior," Journal of Applied Psychology 57 (1973): 44-48.

<sup>2</sup>J. Money, "Psychological Approach to Psychosexual Misidentity With Elective Mutism," Clinical Pediatrics 6 (1968): 331-39.

<sup>3</sup>AASA Advisory Commission on Sex Equality in Education, Sex Equality in Educational Administration (Arlington, Virginia: American Association of School Administrators, 1975), p. 2.

<sup>4</sup>P. Sears and D. H. Feldman, Teacher Interaction With Boys and With Girls (Washington: NASSP, 1966).





inequities in grading, approval, achievement, and a host of other variables. Spalding found that a disproportionate number of teachers' negative remarks are directed toward girls (e.g., "Sally, you're wrong.>").<sup>1</sup>

Girls are usually assigned tasks like watering plants, dusting, and sorting books, whereas boys operate the movie projector, build scenery for plays, and move desks (even though girls in the class may be bigger and stronger). Boys are allowed to play rougher and dirtier games than girls without being reprimanded.<sup>2</sup>

#### Textbook Bias

Girls learn to be passive and observant not only from the teacher, but also from their textbooks. The book review section of The New York Times found that five times as many males as females appeared in book titles.<sup>3</sup> The booklet Dick and Jane as Victims explained subtle and blatant forms of sex-role stereotyping in textbooks.<sup>4</sup> The authors of this booklet clearly demonstrated that not only are girls less frequently portrayed in textbooks, but when they are, they are almost invariably characterized as being inept, passive,

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<sup>1</sup>R. L. Spaulding, Achievement, Creativity and Self-Concept Correlates of Teacher-Pupil Transactions in Elementary Schools, Cooperative Research Project No. 1352 (Washington, D.C.: U.S. Department of Health, Education and Welfare, 1963).

<sup>2</sup>T. Boslooper and M. Hayes, The Femininity Game (New York: Stein and Day, 1974).

<sup>3</sup>E. Fisher, "The Second Sex, Junior Division," The New York Times Book Review, May 1970.

<sup>4</sup>Dick and Jane as Victims: Sex-Role Stereotyping in Children's Readers (Princeton, New Jersey: Women on Words and Images, 1970).



weak, and domestic. Studies by Weitzman, U'Ren, Grambs, and many others have corroborated and broadened the discrimination demonstrated in the earlier manuscripts.<sup>1</sup>

Sex-biased occupational literature is of special interest to counselors, since it is one of their major tools used in vocational guidance. Birk, Cooper, and Tanney examined the illustrations in an array of occupational literature including the Occupational Outlook Handbook, the Encyclopedia of Careers, and the SRA Occupational Briefs.<sup>2</sup> The same patterns established in textbooks appeared. Women were pictured infrequently and when they were depicted, they were usually in passive, helping, subordinate roles.

#### Bias in the Curriculum

The school curriculum seems to be designed to treat girls as differentially as do teachers and textbooks.<sup>3</sup> Jacobs and Eaton showed how the sexist messages children receive in school damage girls' intellectual growth.<sup>4</sup> Kagan found that young children regard school

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<sup>1</sup>L. J. Weitzman et al., "Sex Role Socialization in Picture Books for Preschool Children," American Journal of Sociology 77 (May 1970): 1125-50; M. B. U'Ren, "The Image of Woman in Textbooks," in Woman in Sexist Society, ed. V. Gornick and B. K. Moran (New York: Basic Books, 1971); J. D. Grambs, "Sex-Stereotyping in Instructional Materials, Literature, and Language: A Survey of Research," Women Studies Abstracts 1 (Fall 1972): 91-94.

<sup>2</sup>J. Birk, J. Cooper, and F. Tanney, "Racial and Sex Role Stereotypes," in "Career Information Illustration" (College Park: University of Maryland, 1973). (Mimeographed.)

<sup>3</sup>J. Stacey, S. Bereaud, and J. Daniels, And Jill Came Tumbling After: Sexism in American Education (New York: Dell Publishing Co., 1974), p. 461.

<sup>4</sup>Jacobs and Eaton, "Sexism in the Elementary School."



as feminine<sup>1</sup>--a temporary advantage for girls who are trained to be docile and passive.

Boys are differentially encouraged to excel in mathematics and science. By the time they reach high school, boys score about 60 points higher than girls on the mathematics test of the College Board Exams.<sup>2</sup> Girls, however, improve their mathematics performance if the problems are simply reworded so that they deal with cooking and gardening, even though the abstract reasoning required for solution remains exactly the same.<sup>3</sup>

Course selection is another aspect of the curriculum that seems to discriminate against girls. Girls are directed into or choose home economics and secretarial classes, whereas boys are more likely to be found in science and mathematics classes. If not enough spaces are available in classes like mechanical drawing, girls are more likely than boys to be left out.<sup>4</sup>

### Test Bias

One of the tools used in helping a student elect a course of study is standardized tests. These tests, especially vocational

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<sup>1</sup>J. Kagan, "The Child's Sex Classification of School Objects," Child Development 35 (1964): 1051-56.

<sup>2</sup>R. Brown, Social Psychology (New York: Free Press, 1965), p. 162.

<sup>3</sup>G. A. Milton, Five Studies of the Relation Between Sex Role Identification and Achievement in Problem Solving, Technical Report # 3 (New Haven: Yale University, Department of Psychology, 1958).

<sup>4</sup>P. Bidol and P. Houseman, Sexism in Michigan Schools: Findings, Conclusions and Recommendations (Lansing: Michigan Department of Education, 1975).



interest tests, have been found to be biased against women. Carol Tittle indicated achievement tests that are widely used throughout the country are biased and consistently use sex-stereotyped content.<sup>1</sup> She found the bias in favor of males that arises from content selection was not primarily a function of language usage. One commonly used achievement test contained 14 times as many male nouns and pronouns as female pronouns and nouns. Educational achievement tests reflect the general bias in school instructional materials. Tittle clearly demonstrated that the tests contain numerous sex stereotypes and a consistent bias.

Although Tittle did not examine the effect content bias has on motivation, self-concept, and test scores, a relationship undoubtedly does exist. As early as 1958, Milton proved that a girl's score on an achievement test would increase if she was asked content-biased questions using words and concepts that catered to her self-concept, interests, and sense of content security.<sup>2</sup>

Achievement and ability test results also discriminate against girls by implying that they are unfeminine if they succeed.<sup>3</sup> Horner demonstrated that women fear achievement, and showed how their minds pervert an implanted fantasy of success into tragic and twisted stories.<sup>4</sup>

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<sup>1</sup>C. K. Tittle, "Women and Educational Testing," Phi Delta Kappan 55 (October 1973): 118-20.

<sup>2</sup>Milton, Five Studies.

<sup>3</sup>M. S. Horner, "Toward an Understanding of Achievement-Related Conflicts in Women," Journal of Social Issues 28 (1972): 157-76.

<sup>4</sup>M. S. Horner, "Fail: Bright Woman," Psychology Today 3 (November 1969).





To do well on most achievement tests, on many of the questions a girl must identify with a boy or man who is doing masculine tasks (e.g., building, calculating, flying an airplane). For the female who takes the test, such problems probably inhibit motivation and cause depressed scores or cause failure. Although an empirical study to test this hypothesis has not been done, the conclusion can be inferred from the work of Horner, Tittle, and Milton.

Achievement tests with the content bias that Tittle so clearly delineated intensify the fear of success that emanates from the fear of being unfeminine. Thus, the content of achievement and ability tests is biased against women; such tests intensify fear of success in girls, resulting in lower scores.

Within the context of career guidance, sex bias can be defined as any factor that might influence a person to limit--or might cause others to limit--the considerations of a career solely on the basis of sex.<sup>1</sup>

Vocational interest tests are tools of the guidance counselor that discriminate most against women. In the last few years there has been an explosion of articles and research papers dealing with sex bias in interest measurement. As a result, most popular vocational interest tests either have been revised or are in the process of being revised.<sup>2</sup>

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<sup>1</sup>E. E. Diamond, ed., Issues of Sex Bias and Sex Fairness in Career Interest Measurement (Washington: National Institute of Education, Government Printing Office, 1975), p. xxiii.

<sup>2</sup>C. K. Tittle, Women and Educational Testing: A Selective Review of the Research Literature and Testing Practices (New York: Office of Teacher Education, CUNY, January 1973).



The Strong Vocational Interest Blank, with its pink form for girls and blue form for boys, has received a great deal of criticism and has recently been revised.<sup>1</sup> The principal complaints about the test are that it:

1. maximizes sex differences
2. uses separate norms for male and female subjects
3. channels girls into low-paying, subservient occupations
4. caters to sex-stereotyped occupations
5. limits the range of occupations suggested to girls

Prediger and Cole<sup>2</sup> and Prediger and Hanson<sup>3</sup> differentiated between sex-restrictive and sex-biased inventories. They maintained that limiting or restricting an inventory to a single sex may be necessary to establish its validity. They claimed that a test can be "sex fair" and sex restrictive simultaneously.

During the past few years, volumes of literature have been written about sex bias in vocational inventories. Kirkland, after reviewing the literature, stated that tests tend to be viewed as relatively accurate measures related to subsequent success.<sup>4</sup> Test

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<sup>1</sup>D. P. Campbell, Strong Vocational Interest Blank: Manual for the Strong-Campbell Interest Inventory (Palo Alto: Stanford University Press, 1974).

<sup>2</sup>D. J. Prediger and N. S. Cole, Sex-Role Socialization and Employment Realities: Implications for Vocational Interest Measures, Research report No. 68 (Iowa City: American College Testing Program, 1975).

<sup>3</sup>D. J. Prediger and G. R. Hanson, "The Distinction Between Sex Restrictiveness and Sex Bias in Interest Inventories," Measurement and Evaluation in Guidance 7 (July 1974): 96-104.

<sup>4</sup>M. C. Kirkland, "The Effects of Tests on Students in School," Review of Educational Research 41 (1971): 303-50.



results frequently influence the counselor and the client. If a test is biased against women it can have a serious detrimental effect on female clients, since it is used to help place girls in a labor market that is selectively closed to them.

### Women in the Labor Force

The three major hypotheses of this study deal with the counselor's perception of the role of women in the labor force. It is important to remember that an underlying assumption of the study is that women experience discrimination throughout American society and particularly in the labor market. Counselors only reflect the biases and values of the society in which they live. Therefore, it is appropriate to examine the present role of women in the labor market. In this section, after a statistical examination of women who work, and the circumstances of their labor, some of the social and psychological obstacles females face in the labor market are considered.

### The Status of Women

One half of the women in the population between the ages of 18 and 65 are presently in the labor force, and the percentage continues to rise rapidly.<sup>1</sup> According to the Department of Labor, nine out of ten women will work at some time in their lives. Women constitute more than two-fifths of all workers. Most of them work because of economic need, yet they are concentrated in low-paying,

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<sup>1</sup>U.S. Department of Labor, Employment Standards Administration, Women's Bureau, Expanding Opportunities for Girls: Their Special Counseling Needs, Stock # 2902-0045 (Washington, D.C.: Superintendent of Documents, 1971).



dead-end jobs. Fully employed female high school graduates have less income on the average than fully employed men who have not completed elementary school.<sup>1</sup>

Among workers who are fully employed, women's median earnings are only three-fifths of men's.<sup>2</sup> Women are disproportionately restricted in the kinds of jobs they hold. Their concentration in the less rewarding, lower paying occupations provides them with fewer chances for advancement.<sup>3</sup>

More than 32,000,000 women in the United States work; they make up more than 42 percent of the labor force.<sup>4</sup> Although the Dictionary of Occupational Titles<sup>5</sup> lists 23,000 different job titles, one-third of American women who work are concentrated in only seven occupations: retail sales clerk, secretary, household worker, elementary school teacher, bookkeeper, waitress, and nurse. Another third are found in 20 occupations, including such occupational titles as maid, cook, baby sitter, and hairdresser. Excluding the occupations

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<sup>1</sup>U.S. Department of Labor, Employment Standards Administration, Women's Bureau, Women Workers Today, Stock # 543-758 (Washington, D.C.: Superintendent of Documents, 1973).

<sup>2</sup>U.S. Department of Labor, Bureau of Labor Statistics, U.S. Working Women--A Chart Book, Document # 1880 (Washington, D.C.: Superintendent of Documents, 1975), p. 56.

<sup>3</sup>U.S. Department of Labor, Employment Standards Administration, Women's Bureau, Careers for Women in the 70's, Stock # 521-381 (Washington, D.C.: Superintendent of Documents, 1973), p. 12.

<sup>4</sup>S. L. Hansen, "Counseling and Career Development of Women," Focus on Guidance (Denver: Love Publishing Co., 1974), p. 4.

<sup>5</sup>U.S. Department of Labor, Employment Standards Administration, Dictionary of Occupational Titles (Washington, D.C.: Superintendent of Documents, 1965).





of nurse and noncollege teacher, only 4 percent of women workers are in professional and technical occupations.<sup>1</sup> Women comprise only 1 percent of the engineers, 3 percent of the lawyers, and 7 percent of the physicians in the United States according to Kreps<sup>2</sup> and Kievit,<sup>3</sup> who have made a very detailed and complete statistical analysis of the role of women in the labor market.

According to the National Education Association, the plight of women in the labor force and educational world has been steadily worsening during the past 50 years. Although the average woman worker is as well-educated as the average male worker (12.4 years of schooling) and the percentage of women who work has steadily increased from 28.2 percent in 1940 to 43.9 percent in 1972, the proportion of female professional and technical workers has steadily decreased from 44.1 percent in 1920 to 39.3 percent in 1972.<sup>4</sup>

The most recent publication of the Bureau of Labor Statistics confirms that the role of women hasn't changed much during the past five years. Last year more than two-thirds of working women were clerical workers, service workers, or operatives; 98 percent

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<sup>1</sup>S. L. Bem and D. J. Bem, Training the Woman to Know Her Place: The Social Antecedents of Women in the World of Work (Stanford: Stanford University, Department of Psychology, 1971), p. 2f.

<sup>2</sup>J. Kreps, Sex in the Marketplace: American Women at Work (Baltimore: Johns Hopkins Press, 1971).

<sup>3</sup>M. B. Kievit, Review and Synthesis for Research on Women in the World of Work (Columbus: The Center for Vocational and Technical Education, Ohio State University, 1972).

<sup>4</sup>NEA, Facts About Women Workers, Stock # 0585-6-00 (West Haven: National Education Association, 1973).



of private household workers are women and 78 percent of the country's clerical workers are women. In addition, the rate of unemployment for job seekers is one and a half times higher for females than for males.<sup>1</sup>

In summary, nearly all women will work at some time in their lives. Most women work because of economic necessity and are relegated to low-paying jobs with little chance for advancement. Although the average woman has the same number of years of formal education as the average male, she only receives three-fifths the salary he receives; the woman's role in the labor market is declining in quality, even though more women participate in the labor market today than ever before.

#### Obstacles to Female Career Development

Women face some unique obstacles in career development. Sex-role conditioning and socialization cause a large proportion of women to choose the same careers, despite individual differences. Women experience role conflict about fulfilling multiple roles in marriage and work. A female who wishes to work outside the home is still often labeled "unusual."<sup>2</sup> A sizable body of literature is developing, showing that women, as a result of socialization, experience a fear of success.<sup>3</sup> In the past, women have generally lacked a work orientation.

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<sup>1</sup>U.S. Department of Labor, Bureau of Labor Statistics, U.S. Working Women--A Chart Book, p. 56.

<sup>2</sup>D. G. Zytowski, "Toward a Theory of Career Development for Women," Personnel and Guidance Journal 47 (1969): 660-64.

<sup>3</sup>Hansen, "Counseling and Career Development," pp. 1-16.



A Gallup Poll conducted in 1962 found that young women gave no thought to life after 40. Their planning generally consisted of graduation from high school and perhaps college and then marriage--period.<sup>1</sup> Lewis demonstrated that women lacked vocational goals and realistic planning.<sup>2</sup>

"In vocational psychology today, an almost universal commitment has been made in the field of theory building."<sup>3</sup> Yet, no theory of vocational development or occupational choice exists for females. However, several attempts have been made to superimpose a female model on a theory designed to explain the vocational development and choice of males. Super developed a logical scheme of women's career patterns, in which he identified seven kinds of female patterns: stable homemaking, the conventional, the stable working pattern, a double-track pattern, the interrupted pattern, the unstable pattern, and the multiple trial pattern.<sup>4</sup> Anastasi identified the blue-collar pattern, the active volunteer, the interim job, the late-blooming career, and the double-life pattern.<sup>5</sup> Zytowski also

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<sup>1</sup>G. Gallup and E. Hill, "The American Woman," The Saturday Evening Post, December 22, 1962, pp. 15-32.

<sup>2</sup>E. C. Lewis, "Counselors and Girls," Journal of Counseling Psychology 12 (1965): 159-66.

<sup>3</sup>J. O. Crites, Vocational Psychology (New York: McGraw-Hill Book Co., 1969), p. 630.

<sup>4</sup>D. E. Super, The Psychology of Careers (New York: Harper Brothers, 1957).

<sup>5</sup>A. Anastasi, "Sex Differences in Vocational Choices," National Catholic Conference Journal 13 (1969): 63-76.



made a "contribution toward a theory,"<sup>1</sup> and Holland made an attempt to modify his essentially male theory to include females,<sup>2</sup> but no theory of vocational development has been postulated for humans--including males and females. This problem is present not only in vocational development theories, but in all psychological theories according to Doherty.<sup>3</sup>

### Theories of Counseling

Doherty maintained that the bias present in practically all counseling theories goes back to the ancient Greek and medieval philosophers.<sup>4</sup> She discerned two main themes that have existed through the ages of philosophical thought and are present in the philosophical foundation of counseling theory. The first theme is that the male is the prototype of humanity, and that the female is understood in relationship to him. The second theme is that a dichotomy exists between the cognitive and affective aspects of human functioning. Cognitive behavior is ascribed principally to men and affective behavior is usually assumed to be dominant in women.

Many theories of counseling have been formally reported in the published literature. Allport classified them into three general categories:

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<sup>1</sup>Zytowski, "Toward a Theory."

<sup>2</sup>J. L. Holland, "Some Guidelines for Reducing Systematic Biases in the Delivery of Vocational Services," Measurement and Evaluation in Guidance 6 (1974): 210-18.

<sup>3</sup>M. A. Doherty, "Sexual Bias in Personality Theory," The Counseling Psychologist 4 (1973): 68.

<sup>4</sup>Ibid.





1. Man: A Reactive Being
2. Man: A Reactive Being in Depth
3. Man: A Being in the Process of Becoming<sup>1</sup>

For the purposes of this review, Allport's scheme was used.

Allport stated that the trouble with our current theories is not so much that they are wrong, but that they are incomplete. The feminist might add that they are conceived primarily for men and only adapted to women.<sup>2</sup> Using McClelland's achievement motive theory and Kagan's developmental theory as examples, Doherty pointed out that as long as psychologists continue to generalize to women from definitions or constructs developed in research on men, they will fail to develop a psychology appropriate to understand humans who can be either men or women.<sup>3</sup> Beyond such general albeit profound criticism, only a few published analyses of feminine bias in counseling theories exist.

#### Man as a Reactive Being

Various behavioral counseling techniques are used in schools. Behaviorists consider personality to be a collection of learned habits. Humans have no choice in their actions, since they have been conditioned to behave in a certain way.<sup>4</sup> In a monograph entitled Training

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<sup>1</sup>G. W. Allport, "Psychological Models for Guidance," Harvard Educational Review 32 (Fall 1962): 372-81.

<sup>2</sup>Ibid., p. 379.

<sup>3</sup>Doherty, "Sexual Bias."

<sup>4</sup>B. F. Skinner, Beyond Freedom and Dignity (New York: Random House, 1971).



the Woman to Know Her Place, Bem and Bem described how a girl is conditioned to avoid success and academic challenge and to become passive, dependent, emotional, submissive, and domestic as a result of differential reinforcement dispensed by parents, relatives, teachers, neighbors, institutions, and society in general.<sup>1</sup> By the time a girl reaches senior high school, independent, intellectual, and aggressive responses have been extinguished. As a result of functional autonomy she chooses less challenging classes, avoids science and math, and if she prepares for a career, it will probably be a career that caters to those habits and values shaped by the world in which she lives.

No significant literature related to bias in behavioral counseling theory as it applies specifically to the female client has yet been published. However, despite the absence of literature on the subject, application of existing theory is not difficult. And Doherty's criticism, noted above, loses some of its force since behavioristic principles have wide applicability, to all animals regardless of species or gender. The principal criterion for the formation of counseling goals is that "It must be a goal desired by the client."<sup>2</sup> Women arrive at the counselor's office with a set of preconditioned perceptual and cognitive habits that lead them to choose less challenging courses of study and occupations. So, although the behaviorist counselor does not directly discriminate against the female client,

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<sup>1</sup>Bem and Bem, Training the Woman.

<sup>2</sup>J. D. Krumboltz and C. E. Thoresen, Behavioral Counseling (New York: Holt, Rinehart and Winston, 1969), p. 1.



there is no attempt to use behavior modification techniques to broaden a woman's horizon unless she herself requests it.

### Man as a Reactive Being in Depth

Psychoanalysis has long attracted the scorn of feminists. Their wrath is directed toward all aspects of psychoanalysis that pertain to women, but especially to those aspects that derive from the repressive Viennese culture at the turn of the century.

The attack on the sexist views of Freud, Jung, Adler, Erickson, and other analysts has been so widespread and well publicized that it is not necessary to do more than refer briefly to some aspects of the theories that are most offensive to the feminists. Horney, Thompson, Sherman, Deutsch, and Millet examined in detail these theories as they relate to women.<sup>1</sup> Simply pondering analytic concepts like penis envy, the Oedipus complex, and Freud's phrase that "anatomy is destiny"<sup>2</sup> makes argument nearly futile. Despite his genius, Freud gave the twentieth century feminist a theory that could easily be attacked as sexist. In 1925, Freud wrote:

[Girls] notice that the penis of a brother or playmate, strikingly visible and of large proportions, and at once recognize

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<sup>1</sup>K. Horney, Feminine Psychology (London: Routledge and K. Paul, 1967); C. M. Thompson, On Women, ed. M. R. Green (New York: New American Library, 1971); J. Sherman, On the Psychology of Women: A Survey of Empirical Studies (Springfield, Illinois: Charles C. Thomas, 1971); H. Deutsch, Psychology of Women: A Psychoanalytic Interpretation (New York: Grune and Stratton, 1944); K. Millett, Sexual Politics (New York: Doubleday, 1970).

<sup>2</sup>S. Freud, "Femininity," in New Introductory Lectures on Psychoanalysis (1933), tr. J. Strachey (New York: Norton, 1964).



it as the superior counterpart of their own small and inconspicuous organ, and from that time forward fall a victim to envy for the penis.<sup>1</sup>

To determine if this passage is fact or fantasy is not the task at hand; rather, the purpose is to look briefly for a bias that might arise from that theory when subscribed to by a counselor. In his lecture entitled "Femininity," Freud referred to "the boy's superior equipment . . . her inferior clitoris, . . . genital deficiency . . . original sexual inferiority." In the same lecture he stated that penis envy was the foundation of his feminine psychology.<sup>2</sup>

Many individuals on both sides of the issue plead their cases with a greater or lesser degree of logic. Mitchell, a classical analyst, presented a passionate defense of Freud.<sup>3</sup> Referring to the point in question, she stated,

Victorian women had good cause to envy men their privileged status--it was the social benefits they clamoured for, not a penis. Freud accepted his society's faith that women were inferior and went on to state that any woman who could not adjust was neurotic, so must be cured/adjusted accordingly.<sup>4</sup>

She maintained that Freud's work was not a recommendation of a patriarchal society, but an analysis of one. However, she conceded that feminists

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<sup>1</sup>S. Freud, "Some Psychological Consequences of the Anatomical Distinctions Between the Sexes" (1925), in Collected Papers, Vol. V, ed. J. Riviere (London: Hogarth Press, 1956).

<sup>2</sup>Freud, "Femininity," pp. 126 and 132.

<sup>3</sup>J. Mitchell, Psychoanalysis and Feminism (New York: Vintage Books, 1974), p. 326.

<sup>4</sup>Ibid., p. 401.





. . . condemn his analysis on the grounds of its biological determinism and lament that he did not see the reality of social causation that was staring him in the face. There is justification for this attack only in so far as Freud often gave up on this question when he reached the "biological bedrock" that underlay his psychoanalytic investigation.<sup>1</sup>

A counselor who subscribes to Freud's theories is likely to treat women differently than men.

### Man as a Being in the Process of Becoming

The third force in psychology includes humanistic and existential psychologists. As in the case of the behaviorists, no body of literature exists that examines existential, phenomenological, or humanistic theories of counseling as they relate to the female client. Humanistic psychologists have been spared the attacks suffered by Freud, Erickson, and other psychoanalytic theorists, and some have even been championed by the feminists.

Some feminists find comfort in humanist theory because it emphasizes becoming a unique human being rather than a stereotyped woman who conforms to all society's conventions. Some humanists, such as Maslow,<sup>2</sup> deal with aspects of feminine psychology that are tangentially related to counseling theories, but neither feminist nor psychologist has analyzed how humanistic counseling theories may be biased in favor of or against women.

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<sup>1</sup>Ibid., p. 326.

<sup>2</sup>A. Maslow, "Self-Esteem (Dominance Feelings) and Sexuality in Women," Journal of Social Psychology 16 (1942): 259-94.



In summary, psychoanalytic theories show the most obvious bias against females. Behavioristic theories show neither positive nor negative bias toward women, but they do offer an explanation of how women grew into the situation in which they now find themselves. Humanism as a general category of theories tends to be the most positive toward women, since humanistic theories stress individual differences and potentialities.

### The Vocational Counseling of Women

Some research has been done that specifically relates to behavior, knowledge, and attitudes of counselors toward women regardless of their theoretical orientation. This section examines that research and begins by considering the most general studies about counseling women and ends with studies that deal most specifically with vocational counseling.

Broverman and her colleagues found a double standard of mental health among therapists.<sup>1</sup> Using 122 bipolar items, they asked therapists to describe a healthy, mature, and socially competent (1) adult (sex unspecified); (2) adult man; and (3) adult women. It was found that descriptions of the healthy man and healthy adult coincided, whereas a healthy female coincided with terms that would have indicated an unhealthy and immature adult. Terms such as passive, easily influenced, and very emotional were used to describe the mature, socially competent female. In later studies, the researchers found

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<sup>1</sup>I. Broverman et al., "Sex-Role Stereotypes and Clinical Judgments of Mental Health," Journal of Consulting and Clinical Psychology 34 (1970): 1-7.



that these stereotypes existed not only among therapists, but across groups differing in sex, age, marital status, and education. Furthermore, they found that therapists felt the differentiation and strong sex-role identity contributed to good mental health.<sup>1</sup>

Recently Maslin and Davis replicated the Broverman research using counselors-in-training for subjects.<sup>2</sup> Essentially, their results indicated the same multiple standards of mental health as shown in Broverman's study, except that female counselors-in-training held relatively androgynous views.

Bem established the foundation for research showing that an androgynous personality is healthier than either the personality of the masculine male or the feminine female.<sup>3</sup> She cited several empirical studies that have indicated:

High femininity in females consistently correlates with high anxiety, low self-esteem, and low self-acceptance. And although high masculinity in males has been related to better psychological adjustment during adolescence, it is often accompanied during adulthood by high anxiety, high neuroticism, and low self-acceptance.<sup>4</sup>

Furthermore, Bem showed that feminine women find it difficult to be independent and assertive, and that masculine males are less playful, less responsive to warmth, and more rigid in their sexual behavior.

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<sup>1</sup>I. Broverman et al., "Sex-Role Stereotypes: A Current Appraisal," Journal of Social Issues 28 (1972): 59-77.

<sup>2</sup>A. Maslin and J. L. Davis, "Sex-Role Stereotyping as a Factor in Mental Health Standards Among Counselors in Training," Journal of Counseling Psychology 22 (1975): 87-91.

<sup>3</sup>S. L. Bem, "Fluffy Women and Chesty Men," Psychology Today 9 (September 1975): 58-62.

<sup>4</sup>Ibid., p. 59.



Androgynous personalities, on the other hand, are more flexible, creative, playful, and able to express a wider range of emotion and purposive behavior than misogynous persons of either sex. Perhaps Bem's work is just the beginning of another phase of the politics of mental health. However, the androgynous personality will most certainly be a frequent subject of discussion during the next few years.

Pringle found that client sex, counselor sex, and client behavior all had a significant effect on the outcomes of counseling.<sup>1</sup> She found that when clients exhibited behavior that was sex-appropriate by traditional sex-role norms, male counselors tended to evaluate clients by the clients' success in coping with the environment and female counselors tended to evaluate clients by the clients' feelings about themselves. When clients' behaviors were not sex-appropriate, male and female counselors reversed their orientations toward clients. That is, female counselors evaluated clients in relation to their success in coping with their environment, whereas male counselors evaluated them in relation to their feelings about themselves. In addition, male counselors were also found to be more supportive of dependence and high achievement in female clients. Female counselors tended to reveal their own values to clients and act more directly than male counselors.

Pringle maintained that female deviance in the direction of male norms has been more accepted and less punished by society than

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<sup>1</sup>M. B. Pringle, "The Responses of Counselors to Behaviors Associated With Independence and Achievement in Male and Female Clients" (Ph.D. dissertation, University of Michigan, 1973). ERIC # ED 071 008.





male deviance in the direction of female norms. She referred to the research by McClain,<sup>1</sup> who concluded that although female counselors were more emotionally stable, assertive, conscientious, venturesome (i.e., socially bold), trusting, self-assured, and liberal than other adult females, male counselors tended to have traditional feminine values (i.e., they were sensitive, dependent, trusting, placid, practical, conservative, group dependent, and relaxed).

All counselors had a significantly greater desire to change the behavior of the low-achieving male client than that of the low-achieving female client. However, female counselors indicated a significantly greater desire than male counselors to change the behavior of dependent female clients and of high-achieving clients of either sex. Although counselors preferred not to evaluate their clients, when they did, male counselors evaluated male clients as being healthier than female clients. Male counselors were directly and negatively responsive to stereotypic images of sex-appropriate behavior.

Hawley found a significant relationship between the careers women choose and their beliefs regarding men's views of the feminine ideal.<sup>2</sup> Women preparing for traditionally feminine careers believed that significant men in their lives dichotomized attitudes and behaviors into male and female categories. Women preparing for nontraditional careers did not perceive this, but seemed far more concerned

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<sup>1</sup>E. W. McClain, "Is the Counselor a Woman?" Personnel Guidance Journal 46 (January 1968): 444-48.

<sup>2</sup>P. Hawley, "Perceptions of Male Models of Femininity Related to Career Choice," Journal of Counseling Psychology 19 (1972): 308-13.



with male approval than those entering traditional careers. Only one-tenth of those preparing for nontraditional careers said they would pursue their present career goals over the objection of significant men in their lives.

Abramowitz and his colleagues found that, on the basis of their test protocols, nonliberal examiners attributed significantly greater psychological maladjustment to the leftist, politically active female client than to her male counterpart.<sup>1</sup> In more recent research using a very small sample, he found that, on the basis of a short interview and psycho-educational records, relatively traditional counselors imputed greater maladjustment to female medical school aspirants than to male aspirants.<sup>2</sup>

Using a different experimental method, Schlossberg and Petrofessa arrived at the same conclusion, namely "that counselor bias exists against women entering a masculine occupation."<sup>3</sup> Coached female clients (who supposedly could not decide whether to enter engineering, a masculine occupation, or a feminine occupation such as teaching) were interviewed by counselors-in-training. Biased statements made by the counselors were catalogued and analyzed;

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<sup>1</sup>S. I. Abramowitz et al., "The Politics of Clinical Judgement: What Nonliberal Examiners Infer About Women Who Do Not Stifle Themselves," Journal of Consulting and Clinical Psychology 41 (1973): 385-91.

<sup>2</sup>S. I. Abramowitz et al., "Comparative Counselor Inferences Toward Women With Medical School Aspirations," Journal of College Student Personnel 16 (March 1975): 128-30.

<sup>3</sup>N. K. Schlossberg and J. J. Pietrofesa, "Counselor Bias and the Female Occupational Role" (Detroit: Wayne State University, 1970). ERIC # CG 006 056.



81.3 percent of the biased statements were against women, and only 18.7 percent were in favor of them. Female counselors displayed as much bias as did their male counterparts. Although Schlossberg and Petrofessa's study is clearly significant research, it had the limitation of using a student population rather than practicing professional counselors.

In similar research, Thomas and Stewart used a sample of 62 volunteer practicing school counselors in suburban St. Paul, Minnesota.<sup>1</sup> They divided the counselors into groups and showed them three videotapes: an introductory tape, a tape of an interview with a client who chose deviate career goals, and an interview with a client who chose a conforming career goal. The counselors assessed the client on a list of 42 adjectives, evaluated the degree to which they felt the career objective was appropriate for the client, assessed the degree to which they felt the client was in need of additional counseling, and suggested two additional career choices that would be appropriate for the client to consider.

Female counselors gave higher acceptance scores to both deviate and conforming clients than did male counselors. The authors also found that male counselors showed increased acceptance as they became more experienced; the opposite was true of female counselors. Regardless of their sex, counselors rated conforming goals as more appropriate than deviate goals. Counselors also rated female clients with deviate career goals to be more in need of counseling than those

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<sup>1</sup>A. Thomas and W. Stewart, "Counselor Response to Female Clients With Deviate and Conforming Career Goals," Journal of Counseling Psychology 18 (1971): 352-57.



with conforming goals. Experienced counselors perceived either type of career goal to be appropriate, whereas inexperienced counselors perceived the conforming goals to be significantly more appropriate than the deviate career goals. The Thomas and Stewart study is well designed and forms a good foundation for the present research, which may reaffirm their findings.<sup>1</sup>

Hipple's research attempted to assess and compare the perceptions high school counselors and college freshmen hold of the female sex role by using the MAFERR Inventory of Feminine Values. After reviewing the literature he stated, "The literature seems to indicate that counselors subscribe to traditional views regarding the value of careers for women."<sup>2</sup> His statistical rejection of this conclusion has been refuted because of poor methodology used in collecting his data.<sup>3</sup>

Naffziger also studied counselor attitudes toward women's roles.<sup>4</sup> She found that women described their ideal woman as one who is more extra-family oriented than the ideal projected by men. Women also projected the ideal woman as being more responsible for the success of the marriage, although they also were more accepting of

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<sup>1</sup> Ibid.

<sup>2</sup> J. L. Hipple, "Perceptual Differences in the Concepts of the Ideal Woman," The School Counselor 22 (January 1975): 181.

<sup>3</sup> T. J. Donahue, "Erroneous Data?" The School Counselor 22 (1975): 306.

<sup>4</sup> C. C. Naffziger, "A Survey of Counselor-Educators' and Other Selected Professionals' Attitudes Toward Women's Roles" [Ph.D. dissertation, University of Oregon] (Ann Arbor, Michigan: University Microfilms, 1972, No. 72-956).





working mothers than were males. Men suggested that career women are less attractive than noncareer women, although men supported the ideal woman who would argue against authority. Naffziger found no significant differences among counselors of various ages, although many significant differences existed between male and female counselors.

Bingham and House contributed two research studies dealing with high school counselors and female clients. The first was a 49-item, true-false test to examine the counselors' accuracy of information about women in the labor force.<sup>1</sup> They found that male counselors were less accurately informed than females about the occupational status of women. The authors stated, "The apparent misinformation in this case is a function of negative attitudes, of response tendencies tuned to deny the obvious information."<sup>2</sup> They claimed the misinformation was the result of selective perception on the part of both male and female counselors. The ready availability of relevant information about women suggests that the problem is attitudinal.

In their second report on the attitudes of counselors, Bingham and House used an attitudinal questionnaire about women.<sup>3</sup> The unvalidated questionnaire yielded a large quantity of data, some of which were self-contradictory. The authors found that the counselors

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<sup>1</sup>W. C. Bingham and E. W. House, "Counselors View Women and Work: Accuracy of Information," Vocational Guidance Quarterly 21 (1973): 262-68.

<sup>2</sup>Ibid., p. 267.

<sup>3</sup>W. C. Bingham and E. W. House, "Counselors' Attitudes Toward Women and Work," Vocational Guidance Quarterly 22 (1973): 16-23.



generally expressed more positive than negative attitudes toward women and work and concluded that female counselors might better serve female clients than male counselors.

### Summary

In reviewing the literature on prejudice, Schlossberg and Pietrofessa stated, "A great deal has been written about prejudice and its relationship to personality disorder; but little has been written about bias and its effects in the helping relationship."<sup>1</sup> Present theories about prejudice are incomplete; no researcher has thus far pieced together the fragments from economic, historical, social-cultural, psychological, and phenomenological theories into a single coherent theory that adequately describes prejudice in humans. Until this is done, a thorough understanding of the nonmalicious and/or unconscious bias toward women is impossible.

Counselors are no better and no worse than other people in respect to bias against females. They simply take on our society's ubiquitous cultural bias, which is present in the schools, in the labor force, and in some psychological theories.

In schools one finds teachers who treat girls differently than boys, forming their behavior into the properly sex-role-stereotyped mold. Textbooks portray more boys than girls; when girls are portrayed, they are consistently shown to be inept, passive, weak, domestic, and preoccupied with frivolities. The curriculum leads girls into such fields as home economics, secretarial studies, and

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<sup>1</sup>Schlossberg and Pietrofessa, "Counselor Bias," p. 49.



the fine arts, whereas boys are channeled into science, mathematics, and vocational training. Extra-curricular activities likewise are designed to encourage girls to be passive spectators while boys are active competitors. Staffing patterns reinforce stereotypes--males are administrators and custodians; females are secretaries and cooks.

Standardized educational achievement tests, occupational literature, and vocational interest inventories--the major tools of the counselor--are also biased against women. Vocational interest inventories have been the subject of heated debate during the last few years because they tend to cause a female to limit her occupational horizons, and to choose traditionally low-status, low-paying, sex-stereotyped occupations. For the most part, bias in achievement tests has been ignored. Yet there is evidence that achievement tests, too, are biased by presenting male subject matter and thereby inferring that the girl who succeeds is unfeminine.

The labor market into which the counselor guides young women is also biased. More than 40 percent of today's labor force consists of women, most of whom are concentrated in low-paying, dead-end jobs. Although the average woman worker's educational level is identical to the average male's (12.4 years), women's median earnings are only three-fifths that of men. The plight of women in the labor force has been steadily worsening over the past 50 years.

Besides social pressures and discrimination in hiring and promotion practices, many women experience internal conflicts relating to their place in the world of work. No adequate theory of career development for women exists, and young women and adolescent girls



generally lack of work orientation. Women face role conflict about being both mother and worker. Like men, women worry about failure; but, in addition, many women are anxious about success, apparently because it is considered unfeminine. Such conflicts occasionally lead a woman to seek the help of a counselor or psychotherapist, whose theories of personality or personal behavior may also have assimilated the bias.

Many psychological theories are theories about men. These theories are sometimes modified to account for women. Cognitive and affective behaviors are frequently dichotomized; cognitive behavior is ascribed to the male, whereas affective behavior is assumed to be dominant in the female. Psychoanalytic theory is usually considered to be the most sexist because of its Victorian origins and concepts, such as penis envy and Oedipus complex. Behaviorist theories are relatively nonsexist, although they explain some of the socialization process that causes many women to avoid success and achievement. Humanistic theories, on the other hand, generally respect the unique individuality of each person, and therefore have not been accused by feminists of being sexist.

Counselors and psychotherapists hold a view of the mature, socially competent, mentally healthy female that is diametrically opposed to the view they hold of a mature, socially competent, mentally healthy adult (sex unspecified) or adult male. Counselors-in-training exhibited the same attitudes. "Psychologists expect





women to be more passive and dependent than men."<sup>1</sup> Women who are assertive, analytic, and achievement oriented are considered by therapists to be unhealthy. Male counselors are generally more supportive of high achievement and dependence in female clients than are female counselors. Male counselors are also more directly and negatively responsive to stereotyped, sex-appropriate vocational behavior than are female counselors.

The counselor's sex is an element that may elicit specific behavior which the counselor is helpless to prevent, since the counselor's sex may be a stimulus to the client's own sex-biased behavior. What women think men believe has a significant effect on their vocational behavior. This is especially true when the man is a significant male in a client's life, as a counselor occasionally is. Ninety percent of the women who chose to follow nontraditional careers claimed they would not pursue their career goals over the objection of the significant men in their lives.

Nonliberal counselor-examiners attributed significantly greater psychological maladjustment to the leftist, politically active female client than to her male counterpart. Likewise, traditional counselors attributed greater maladjustment to female medical school aspirants than to male aspirants. In fact, it has been clearly demonstrated that counselors are biased against female clients who choose to follow nontraditional occupations.

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<sup>1</sup>American Psychological Association, "Report of the Task Force," p. 1.



However, male and female counselors do not always react in the same way to their female clients. The female counselor is more accepting of and is more knowledgeable about the role of women in the labor market. She tends to be more extra-family oriented, is assertive in making her own values known, and is more accepting of the concept of a working mother. Male counselors tend to encourage high achievement aspirations and female dependency. They consider career women less attractive to men, but support women who argue against authority. Male counselors tend to react directly and negatively toward sex-stereotypic behavior in clients of either sex.

There is some research that supports the belief that age has an effect on the amount of bias; some research also supports a sex-by-age interaction. As women get older they tend to reject deviate career goals more strongly. As male counselors get older, they tend to accept and encourage women who choose challenging careers.

Some studies of prejudice have shown that education has a mollifying effect on prejudice, one that can be passed to the next generation. No study has demonstrated a relationship between a counselor's educational level and the amount of bias shown. At least one study has demonstrated that males with more counseling experience tend to show more acceptance of deviate career goals for women than do male counselors with less experience. For females the reverse seems to be true. More experienced female counselors tend to show less acceptance of deviate goals than do less experienced female counselors.



Regardless of their sex or age, counselors rated sex-stereotyped career goals more appropriate than deviate career goals. They also perceived clients who chose deviate goals to be more in need of counseling than identical persons who chose conforming goals. In short, one could say that counselors as a group are like other members of their society--biased against women--and that bias is apparent in their counseling.



## CHAPTER III

### METHODOLOGY

Previous studies have indicated that school counselors may discriminate against females. This study was an attempt to learn whether high school counselors do have a predisposition to discriminate against women in career selection and to discover those personality traits and environmental factors that influence the intensity of this predisposition in school counselors if it does, in fact, exist. In this chapter five aspects of the methodology are described: (1) the population and sampling method, (2) the instrument used to measure unobtrusively a counselor's predisposition to discriminate against females in career selection, (3) the procedure for collecting the data, (4) the design of the study, and (5) the hypotheses that were tested.

#### Population and Sample

The population in this study included all senior high school counselors in the state of Michigan. This population was carefully described in 1970, and there is nothing to suggest that its composition was significantly different in 1974-75.<sup>1</sup>

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<sup>1</sup>P. E. Bader, J. Carlson, and T. M. Urbick, Michigan School Counselor Survey (Lansing: Michigan School Counselor Association, 1970).





According to the 1970 descriptive study, almost half of the approximately two thousand senior high school counselors in Michigan were female. The counselors had a near normal age distribution; 66 percent were between the ages of 30 and 50. Approximately 96 percent held a master's degree and 45 percent had graduate training beyond the master's degree; 92 percent received their graduate training in Michigan. Seventy-five percent of the counselors had ten years or less of counseling experience. More than half were affiliated with local and state professional organizations, but only one-fourth belonged to the American Personnel and Guidance Association, the national professional organization for school counselors.

The sample for this study consisted of three hundred randomly selected senior high school counselors in Michigan. Stratification of the sample was based upon the demographic location of the school district in which the counselor was employed. School districts were divided into three classifications: (1) Greater Detroit, (2) middle-sized cities, and (3) small cities and rural areas.

For the purpose of this study, Greater Detroit included any school district that lay, at least partially, within the area north of Sibley Road, east of Huron River Drive or Newburgh Road, and south of Eighteen Mile or Long Lake Road. A middle-sized city was defined as a metropolitan, incorporated governmental unit that serves at least 25,000 people and was not located within the boundaries of Greater Detroit. These cities were: Ann Arbor, Burton, Battle Creek, Bay City, East Lansing, Flint, Grand Rapids, Holland, Jackson, Kalamazoo, Lansing, Midland, Muskegon, Pontiac, Portage, Port Huron,



Saginaw, Wyoming, and Ypsilanti. Any school district that lay at least partially within the limits of these cities was considered to belong to the middle-sized city level. All other school districts fell into the third category--small cities and rural areas.

The populations of the three demographic areas were respectively 3.5 million (Macomb and Wayne Counties), 1.4 million, and 4.0 million.<sup>1</sup> Three hundred counselors in a population of 8.9 million would be a ratio of one counselor per 30,000 persons. So, 118 counselors were selected from metropolitan Detroit schools, 135 came from rural schools, and 47 came from the middle-sized cities.

The names of all senior high school counselors listed in the 1974-1975 Directory of Elementary and Secondary Public School Counselors were sequentially numbered, beginning with one.<sup>2</sup> Randomization was achieved by using Snedecor's table of random numbers,<sup>3</sup> beginning with the number 4460, which was randomly chosen. Because there were only 1903 senior high school counselors in Michigan, any time a number higher than 1903 occurred, it was discarded. The name of the counselor corresponding to each successive random number was placed in a column under the demographic area in which the counselor worked. After each demographic area reached its proportionate number, no more names were added to the list. When random numbers turned up

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<sup>1</sup>Michigan Manual, 1973-1974 (Lansing: Michigan Department of Administration, 1974), pp. 387ff.

<sup>2</sup>Directory of Elementary and Secondary Public School Counselors (Lansing: Michigan Department of Education, 1975), p. 86.

<sup>3</sup>G. W. Snedecor, Statistical Methods, 5th ed. (Ames, Iowa: Iowa State University Press, 1965), p. 532.



more names belonging to that group, the names were discarded. After all three demographic stratification groups reached their proportionate numbers, the selection of the three hundred counselors was complete. A description of the sample, based on their returns, is included with the results in Chapter IV.

### Instrumentation

The primary instrument developed for this study utilized a case study approach. Its purpose was to collect data that could be used to assess the degree to which counselors are predisposed to choose for females lower paying jobs that require less education and more supervision than those chosen for males. It was assumed that any question on this topic that was put directly to counselors would yield only data of dubious validity, since many studies in social psychology have demonstrated that people do not always act in a manner consistent with answers they give on paper-and-pencil instruments designed to assess attitudes. Using an indirect approach that does not refer directly to the subject under investigation helps circumvent many of the problems associated with any attempt to predict human behavior. The case study approach used in this study is an indirect and less obvious method of collecting data regarding attitudes.

Several problems became apparent when developing the instrument. The questionnaire had to be short, easy, interesting, and nonthreatening in order to elicit an adequate number of responses. Each case study had to sound equally plausible for both male and female counselors and present specific concrete data, while allowing



for a wide range of career choices. A method had to be devised for rating careers according to salary, educational prerequisites, and amount of supervision required. The prejudicial implications of responses could not be readily apparent to respondents. In addition, the test had to be both valid and reliable.

Many versions and drafts of the six case studies were developed, edited, and refined. Ten school counselors and researchers tried them and offered suggestions. The case studies were constructed in such a way that each case study subject could be either male or female. Data presented included measures of ability, achievement, interest, socio-economic background, values, personality traits, and social pressures that might influence career choice. All case studies were designed so that no single career or group of careers would be an obvious choice for a particular case study subject. The level selected for such factors as intelligence and ability tended to be near the median so that a wide variation among occupational choices was possible.

Two forms of the questionnaire were developed. On Form A the sex designation of the subject was assigned to each case study by the flip of a coin. Cases one, four, and six were male, and cases two, three, and five were female. Form B used the same case studies as Form A, but in each case the subjects were given the opposite sex designation from those in Form A. On Form B cases one, four, and six were female and cases two, three, and five were male. All of the information in the case studies on Forms A and B was identical. Only the name of the case study subject and the gender of the pronouns were changed. The final versions were short and inviting. Form A of





the questionnaire can be found in Appendix A and Form B can be found in Appendix B.

### Developing the Occupation List

In order to translate each possible career choice into a number so that comparability could be achieved, a seven-point scale was developed for each of the three dependent variables, i.e., remuneration, education, and supervision. The three methods used to devise the scales are described in the following sections.

Coefficient of remuneration.--The coefficient of remuneration is the number assigned to an occupation which indicates on a seven-point scale the approximate wage earned by a person engaged in that occupation. A coefficient of one indicates the lowest wage, and a coefficient of seven indicates the highest wage. An occupation's coefficient of remuneration was based on the salaries reported in the 1973-74 edition of the Occupational Outlook Handbook. The annual salary range for each coefficient was:

1. Below \$5,000
2. \$5,000 to \$7,999
3. \$8,000 to \$10,999
4. \$11,000 to \$13,999
5. \$14,000 to \$16,999
6. \$17,000 to \$19,999
7. \$20,000 and above



The Occupational Outlook Handbook<sup>1</sup> is the best single source of salary information in the United States. However, it does not always use precisely the same format in reporting salaries for all occupations. Job remuneration is reported either as an hourly rate, a weekly wage, or an annual salary. Salaries vary among geographic regions, among demographic locations, between small and large companies, and between government and civilian agencies. In addition, occupational title is not always an accurate indicator of the specific work in which an individual within the occupation is involved. Different individuals with the same classification may be doing different work and receiving different salaries. Salaries can also vary with the working conditions or the amount of experience and education an individual brings to the job. It is therefore difficult to state precisely the amount of remuneration that is typical for a given occupation. Using a salary range rather than an average helps alleviate this problem, but does not completely eliminate the problem.

After first converting all forms of wages to annual salaries based on 52 40-hour weeks, one of several methods was used to determine the coefficient of remuneration, depending on the information available. First, the national average salary range was used, if given. If it was not given, the federal government salary range or average was used. If neither the federal nor the national salary range was listed, the range selected was based on the highest and lowest salary quoted. Then, the average salary of experienced workers was chosen.

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<sup>1</sup>U.S. Department of Labor, Occupational Outlook Handbook (Washington, D.C.: Bureau of Labor Statistics, 1974-75 ed.).



Next, the average or range of union workers' salaries was used. Finally, if none of the above salary descriptions was mentioned in the Occupational Outlook Handbook, the occupation was assigned a coefficient of remuneration based on other salary information in the Handbook or on wage information from a national professional organization associated with that occupation. A list of occupations used in this study along with their coefficients of remuneration can be found in Appendix E.

Coefficient of education.--The coefficient of education was the number assigned to an occupation which indicates, on a seven-point scale, the usual amount of education or training required to engage in that occupation. A coefficient of one indicates an occupation with the least amount of education required, and a coefficient of seven indicates an occupation that requires the maximum prerequisite education. The coefficient of education for an occupation was also determined by using job descriptions from the Occupational Outlook Handbook. The coefficients are shown on the following scale:

1. No education required
2. Less than a high school education required
3. High school diploma usually required
4. High school diploma required, or significant on-the-job training or vocational training
5. Apprenticeship or associate degree required
6. Bachelor's degree required
7. Graduate degree required



A list of the occupations used in this study along with their coefficients of education can be found in Appendix F.

Coefficient of supervision.--The coefficient of supervision is the number assigned to an occupation which indicates, on a seven-point scale, the approximate amount of supervision individuals engaged in that occupation normally receive. A coefficient of one denotes the type of occupation that is most carefully supervised, and a coefficient of seven indicates an occupation that receives minimal direct supervision. An occupation's degree of supervision was based on the amount of authority, responsibility, and judgment exercised by a worker in that occupation. At the lower end of the continuum were the workers who are completely supervised and have practically no authority, responsibility, or opportunity to make judgments in their work. This type of work usually consists of routine tasks. At the other end of the scale were people like chief executives, who are responsible for all aspects of an organization, who must frequently make judgments and decisions, and who hold direct or indirect authority over all employees. The supervisory nature of an occupation was measured only in relation to other employees in the same organization, and not in relation to customers, clients, patients, or consultants. The coefficients were classified according to the following scale:

1. Completely supervised--a person who supervises no one and is completely supervised, while doing routine tasks.
2. Closely supervised--a person who supervises no one, but is closely supervised.





3. Loosely supervised--a person who supervises no one, but may exercise judgment in his job which is loosely supervised.
4. Semi-autonomous or a free agent--a person who supervises no one, and is not regularly supervised by anyone.
5. Partially supervisory--a person who supervises a small number of employees.
6. Primarily supervisory--a person who supervises a large number of employees and maintains responsibility for their work.
7. Supervisory--a person who directs an institution or business.

The coefficients of supervision for each occupation used in this study are listed in Appendix C.

The coefficient of supervision for an occupation was determined by computing the mean numerical judgment score of six experts in the vocational guidance and career education field. Two experts in the vocational guidance field were professors at a university, two were employment counselors at the Michigan Employment Security Commission, and two were high school technical, industrial, and business education coordinators.

Each expert was sent a letter of explanation, a description of the process of choosing a career rating, and a blank rating scale (Appendix C). After all six experts returned their ratings, the scores were averaged. The mean score was rounded off, and became the coefficient of supervision.

Three occupations--accountant, architect, and automobile sales manager--were inadvertently left off the original list sent to the experts. In a follow-up letter (Appendix C) the experts were asked to rate these three occupations and any occupations in which their



rating was two or more points from the mean of the other experts. Of approximately 350 individual ratings, only nine were two or more points away from the mean rating of the other five experts on a given career. Four of these apparently erroneous ratings were made by the same person. The experts were not told that they were rating some of the careers for a second time. Still, seven of the nine second ratings were nearer the mean of the other five experts than the first rating. In general, the supervisory ratings by the experts showed a surprisingly high consistency (see Appendix C).

Occupation list construction.--Although an open-ended questionnaire would have been preferable, it was impractical to rate all possible occupational choices on the three dependent variable scales. Since no satisfactory method of rating all U.S. occupations seemed feasible, a forced-choice instrument had to be devised. Approximately 60 common occupations were selected from the Occupational Outlook Handbook. Occupational titles were selected without regard to the case studies, since the case studies were designed to produce only vague indications of career choice which would permit the participants to choose any one of a number of suitable occupations. Occupations were selected in such a manner that they would form a continuum from low to high on all three variables--remuneration, education, and supervision.

In the labor market, salaries and educational level tend to occur in a normal distribution. A curve describing the supervisory levels of occupations would not resemble a normal distribution, since



there are many workers and few supervisors. By using a list of careers with a horizontal linear distribution on each of the three variables in this study, the tendency of regression toward the mean is inhibited, thus increasing potential variance. By limiting the number of careers and forcing an even distribution on each variable, differences in salary, education, and supervision among careers were accentuated. The regression line was made as nearly flat as possible by assigning four occupations to each of the 21 coefficients and discarding the remaining occupational titles. Occupational titles were eliminated from the list in the following manner.

After approximately 60 common occupations had been classified according to the three variables, the list was reduced by removing occupations which contained sexist terminology, such as clergyman, policeman, or charwoman. Occupations with coefficients of remuneration, education, and supervision that were highly intercorrelated were also dropped. An attempt was made to arrange the final list of occupations in such a way that four occupations were listed under each of the seven coefficients for each of the three dependent variables. The final list of 28 occupations and their coefficients on each of their three scales are included in Appendix G.

### Score Formation

The coefficient of remuneration is on a seven-point integral scale. Education and supervision scales are ordinal scales, although they will be treated in this study as integral scales. Although treating the latter two as integral scales violates the assumption of



additivity, this minor violation will not have a significant effect on the results of the study. If education and supervision were less flexible entities, an integral scale could be developed; most likely, it would have coefficients similar to those assigned using these ordinal scales.

Each coefficient was found by computing the sum of the three female case study subjects' scores on each questionnaire and subtracting it from the sum of the three male case study subjects' scores on the same questionnaire. It was assumed that an adjustment factor would be necessary in order to eliminate the variation resulting from the use of more than one test form. Its derivation was based on the data and is described in Appendix H.

### Validity and Reliability

The best method of measuring an attitude is a debatable point among social scientists. Every approach to attitude measurement has its limitations. Self-reporting techniques, indirect tests, objective tasks, direct observation techniques, and psychological reaction techniques have all been used to measure attitudes. Each method has proponents and opponents. No method has been shown to be the best way to accurately measure attitudes, although the use of multiple-indicator approaches to measurement seems to be in vogue at the present time.

This study used an indirect test of counselor attitudes.

Kidder and Campbell stated that indirect tests

. . . utilize and illustrate psychological laws to a greater degree than direct attitude tests, and are thus more characteristic of measurement in the successful sciences wherein





yesterday's crucial experiments are today's routine measurement procedures.<sup>1</sup>

In the same article the authors listed seven suppositions about indirect tests. According to Kidder and Campbell,

Indirect tests are:

1. less affected by experimental manipulation of demand characteristics
  2. less susceptible to manipulation of evaluation apprehension
  3. less likely to be reactive measures by the main and interaction effects of testing
  4. less susceptible to placebo and hawthorne effects
  5. less affected by instructions to "fake" a good impression
  6. less modified by the requirement to sign one's name
  7. less affected by the role setting of test administration.
- . . . The plausible facades of indirect attitude tests effectively prohibit self-defense and permit testing in many administrative settings where attitude scores might otherwise be unobtainable.<sup>2</sup>

After thoroughly reviewing the literature, the authors concluded that while indirect measures are useful, there is no research which shows that indirect testing yields better results than direct appraisal or another method of attitude measurement.

Since this study deals with an area in which little previous research has been done, the validity of the instrument had to be based primarily on face or construct validity. Nevertheless, concurrent and predictive validity were also considered.

Construct validity.--After surveying all major validity studies of global personality predictions, Cronbach concluded that "Structured tests, or performance tests which are very near to working

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<sup>1</sup>L. H. Kidder and D. T. Campbell, "The Indirect Testing of Social Attitudes," in Attitude Measurement, ed. G. F. Sommers (Chicago: Rand McNally, 1971), p. 329.

<sup>2</sup>Ibid., p. 335.



samples of the criterion task have considerable validity."<sup>1</sup> The instrument used in this study was both highly structured and involved a task quite similar to a counselor's work in vocational guidance. These two factors alone established the content validity of the test.

By approaching the problem indirectly, the instrument avoided the pitfall of eliciting socially acceptable answers that were not correlated with the individual's behavior. Attitudes regarding occupations suitable for girls were inadvertently revealed while the counselors struggled with the specific problem of occupational choice for a case study subject. The coefficients of occupations were weighted so that the statistical analysis highlighted differences between careers chosen. Since attention was focused on a problem that did not appear to be primarily related to sex of the case study subject, the choice of a career could be made without the counselor's judgment being strongly influenced by contemporary social pressures.

Another pitfall of the construct validity of the instrument dealt with sex-stereotyped careers. An airline pilot is usually viewed as a male, whereas the stewardess is usually seen as a female; the doctor is a male, the nurse a female; the principal is a male, the teacher a female; the executive is a male, the secretary a female. Sex-role stereotyping of occupations is so pervasive in our culture that any random list of common occupations would necessarily contain a large number of stereotyped occupations. Since stereotyped careers exist, and since the questionnaire purported to reflect reality, the

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<sup>1</sup>L. J. Cronbach, Essentials of Psychological Testing, 2nd int'l ed. (Tokyo: John Weatherhill, Inc., 1966), pp. 582ff.



original set of occupations was chosen without regard to the sex stereotype of the occupations, but with regard to their prevalence in the labor market and chosen to assure that there was equal representation of the entire range of each dependent variable. Sexist terminology was absent except in cases in which both male and female terminology was included, e.g., waiter and waitress.

Careers from the original list of occupations were also eliminated without regard to their sex-role stereotype. Occupations were eliminated because they were difficult to classify, or because their coefficients on one or more of the three dependent variables were too frequently represented. Thus, the sex stereotypes of occupations that appear in the questionnaire were thought not to be significantly different from the sex stereotypes of occupations throughout the labor market.

Bem and Bem reported that

One-third of all working women are concentrated in only seven jobs: secretary, retail sales clerk, household worker, school teacher, bookkeeper, waitress and nurse. . . . An additional one-third are found in twenty-nine occupations. . . . Seventy-eight percent (78%) of all working women--as compared to forty percent (40%) of working men--are employed as clerical workers, service workers, factory workers, and sales clerks. . . . Only four million women (15% of all women workers) are classified as professional or technical workers, and even this figure is misleading, for the single occupation of noncollege teacher absorbs nearly half of these women and an additional twenty-five percent are nurses. . . . Fewer than one percent of all women workers fill those positions which to most Americans, connote "professional."<sup>1</sup>

Eight of the 36 occupations that account for two-thirds of the female work force in this country were represented among the 28

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<sup>1</sup>Bem and Bem, Training the Woman, p. 29.



occupations used in this study: bookkeeper, file clerk, head cook, registered nurse, sales clerk, school teacher, secretary, and waitress. Three of the eight (38 percent) were professional or managerial careers: head cook, registered nurse, and school teacher. Female-stereotyped occupations on the list therefore presented a larger percentage of favorably sex-stereotyped careers (38 percent) than actually occur in the labor market (15 percent). Therefore the list of careers can not only be considered valid, but it also presents a conservative test on the three dependent variables because the occupation list contains proportionately more female sex-stereotyped careers, which pay higher salaries and require more education and less supervision, than actually occur in the labor market.

Considering the structured nature of the test, its simulation of a task closely related to the counselor's work, its indirect approach, and the composition of the occupational choice list, the construct validity of the test was judged to be satisfactory for this study.

Concurrent validity.--No normed test could be used to estimate concurrent validity, because no test has sufficient validity to warrant its use as a model.

Any direct measure of this underlying attitude has dubious validity because the current cultural climate, brought about by the feminists, would influence the respondents and likely make paper-and-pencil instruments of this type invalid. Most counselors would know the "right" answers when asked questions about the career aspirations of girls. When recording their views on a survey form, they would





tend to give socially acceptable answers, even though their behavior may be contrary to their stated views.

The indirect measure of this attitude was therefore thought to be superior to any direct measure. No valid instrument which examines attitudes toward women in the labor market exists that could be used to establish concurrent validity.

Predictive validity.--Predictive validity was important for this study only insofar as it affected the variance in scores of subgroups such as young counselors or male counselors. It was not intended that scores of individual counselors would be used to predict counselor bias.

If the test were to attempt to select counselors with discriminatory attitudes toward women, predictive validity would have considerable import. If the test were lengthened and normed, a chauvinism coefficient could have been derived by adding the mean dependent variable coefficients for male subjects and dividing them by the mean dependent variable scores for female case study subjects. However, such a project was beyond the scope of this research.

Predictive validity is important, however, because the instrument purported to measure an underlying cultural attitude of a particular group of people. Research in this field is inadequate to establish the relationship between a counselor's personality traits and his or her job performance in the area of vocational guidance of females. This study examines the relationship between certain personality variables and the counselor's attitude toward a female's occupational role. Although predictions based on a theory of counselor



bias toward women will not be possible at the conclusion of the study, actuarial prediction of counselor behavior may be possible if the secondary hypotheses prove to be statistically significant.

Since the task involved was quite similar to the actual work of the school counselor, it may be inferred that the predictive validity was quite high for groups of counselors, but not for individual counselors.

Reliability.--The reliability of the instrument could not be determined in traditional ways because of certain unique aspects of the test. The split-half method was not appropriate because the test questions were already split into male and female questions and the questionnaire was too short to subdivide further. The brevity of the test was compensated for by using a large sample. The instrument was not intended to be a reliable index of individual predisposition, but rather to measure the tendency of subgroups to behave in certain ways.

Parallel-form reliability was not a satisfactory method because Form A and Form B differed only in the gender of the case study subjects. After having taken one form of the test, an individual would recognize that it unobtrusively measured sex stereotypes as soon as the alternate form was seen. Thus the alternate-form scores would be invalid.

The test-retest method would be a satisfactory method of measuring reliability, but was not used because it would be impractical. It was difficult to obtain responses from counselors once.



It would be very difficult to get practicing counselors to respond to the same questionnaire a second time.

Tests that examine attitudes of groups are more likely to be reliable if they are well constructed than are tests that purport to measure individual attitudes. Therefore it would not be improper to assume reliability, or infer reliability from construct validity.

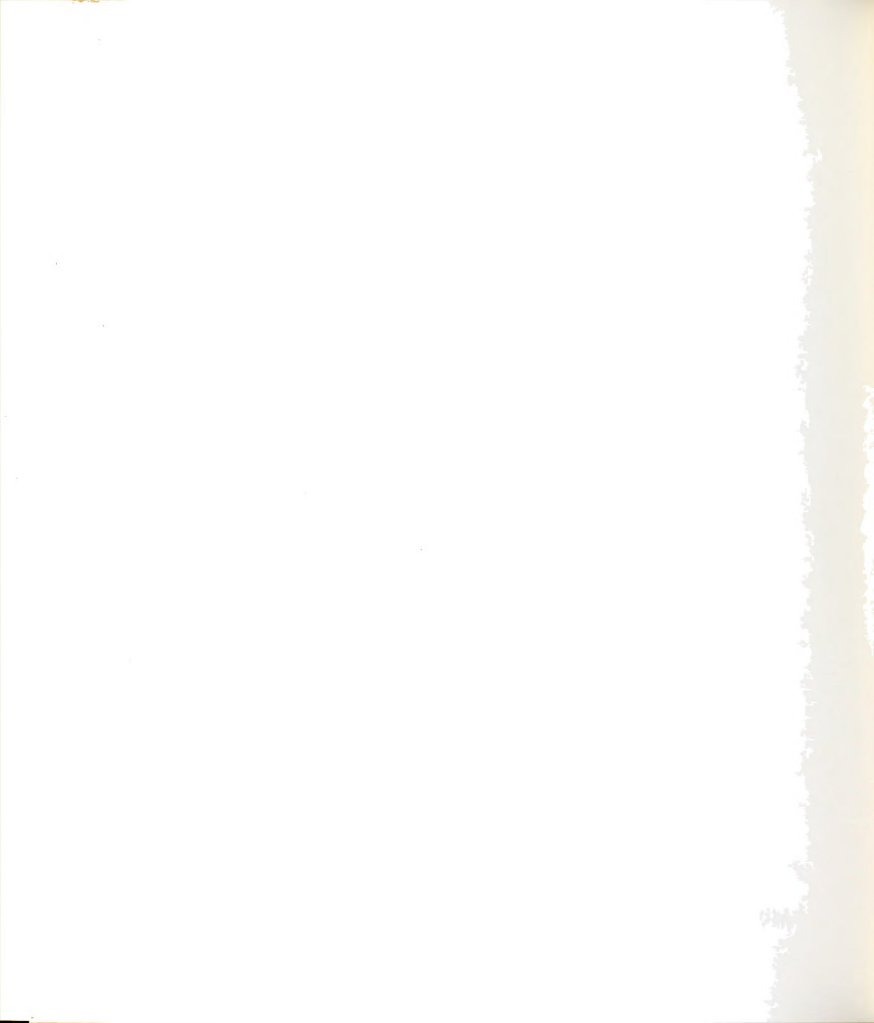
#### Collection of the Data

In mid-February 1975, a letter and questionnaire were sent to all subjects. Those who did not respond to the first letter were sent a second letter and questionnaire in mid-March. A third letter and questionnaire were mailed in April. Since enough questionnaires remained outstanding, a fourth letter was sent in May. Copies of the letters can be found in Appendix D.

#### Design and Analysis

The data for this study were the responses of three hundred randomly selected senior high school counselors in Michigan to six case studies and a personal data sheet. Each response to a case study yielded a weighted score on each of three dependent variables (salary, education, and supervision). The weighted scores of female case study subjects were summed and subtracted from the sum of the weighted scores of the male case study subjects on each of the three dependent variables for each respondent.

After a careful review of the related literature, the independent variables selected were those thought to be closely associated with attitude formation and included the counselor's sex, age,



professional rating, socioeconomic background, and marital status. Data dealing with the independent variables were gleaned from the personal data sheet accompanying the case study questionnaire. Professional rating and socioeconomic background were defined on pages 5 and 6 of this dissertation.

A repeated measures design was used because of the nature of the data. The data were analyzed in three phases: major hypotheses, secondary hypotheses, and interaction effects.

#### Phase I: Major Hypotheses

To test each of the three major hypotheses, a dependent t test was performed using all of the responses according to the following design:

	Remuneration	Education	Supervision
All counselors			

#### Phase II: Secondary Hypotheses

Seven secondary hypotheses were tested using a one-way univariate analysis of variance according to the following design:

Variable	Remuneration	Education	Supervision
Level I			
Level II			
Level III <sup>a</sup>			

<sup>a</sup>Level III was used only when testing hypotheses with three independent variables.





### Phase III: Tests for Interaction

Two-way univariate analyses of variance were performed to test potentially significant first-level interaction effects. These tests used the following design, or a slight variation of it, when variable II contained only two levels:

Variable I	Variable II	Remuneration	Education	Supervision
Level I	Level I			
	Level II			
	Level III <sup>a</sup>			
Level II	Level I			
	Level II			
	Level III <sup>a</sup>			

<sup>a</sup>Level III was used only when testing hypotheses with three independent variables.

A confidence interval of .05 was used in testing all hypotheses. However, when using this confidence level in a descriptive study in which there is little previous research, one should be wary of choosing a confidence interval that might cause a hypothesis to be rejected when it should be accepted. Even though a statistical test may not reach the .05 level of confidence, it may still be worthy of further research.

### Statistical Hypotheses

To make the statistical tests of significance, testable null hypotheses were formed from the substantive hypotheses listed in



Chapter I. The hypotheses were tested in three phases--major hypotheses, secondary hypotheses, and interaction effects.

#### Phase I: Major Hypotheses

- Hypothesis 1: There is no difference between the remuneration of occupations chosen by senior high school counselors for female case study subjects and those chosen for male case study subjects.
- Hypothesis 2: There is no difference between the educational requirements of occupations chosen by senior high school counselors for female case study subjects and those chosen for male case study subjects.
- Hypothesis 3: There is no difference between the level of supervision of occupations chosen by senior high school counselors for female case study subjects and for male case study subjects.

#### Phase II: Secondary Hypotheses

##### Hypothesis 4: Sex of the Counselor

- 4a: There is no difference in the salary level of occupations chosen for male and female case study subjects by male and by female counselors.
- 4b: There is no difference in the prerequisite educational level of occupations chosen for male and for female case study subjects by male and by female counselors.
- 4c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by male and by female counselors.

##### Hypothesis 5: Male Counselor's Marital Status

- 5a: There is no difference in the salary level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.
- 5b: There is no difference in the prerequisite educational level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.



- 5c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.

Hypothesis 6: Age of the Counselor

- 6a: There is no difference in the salary level of occupations chosen for male and female case study subjects by counselors who are less than 40 years old and counselors who are 40 years old or older.
- 6b: There is no difference in the prerequisite educational level of occupations chosen for male and female case study subjects by counselors who are less than 40 years old and counselors who are 40 years old or older.
- 6c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by counselors who are less than 40 years old and counselors who are 40 years old or older.

Hypothesis 7: Demographic Location

- 7a: There is no difference in the salary level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, or rural areas.
- 7b: There is no difference in the prerequisite educational level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, or rural areas.
- 7c: There is no difference in the supervisory level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, or rural areas.

Hypothesis 8: Counselor Professionalism

- 8a: There is no difference in the salary level of occupations chosen for male and female case study subjects by highly professional counselors and by other counselors.

- 8b: There is no difference in prerequisite educational level of occupations chosen for male and female case study subjects by highly professional counselors and by other counselors.
- 8c: There is no difference in supervisory level of occupations chosen for male and female case study subjects by highly professional counselors and other counselors.
- 8d: The number of professional organizations to which a counselor belongs has no effect on the salary level of occupations chosen for male and female case study subjects.
- 8e: The number of professional organizations to which a counselor belongs has no effect on the prerequisite educational level of occupations chosen for male and female case study subjects.
- 8f: The number of professional organizations to which a counselor belongs has no effect on the supervisory level of occupations chosen for male and female case study subjects.
- 8g: The educational level attained by a counselor has no effect on the variation in the salary level of occupations chosen for male and female case study subjects.
- 8h: The educational level attained by a counselor has no effect on the prerequisite educational level of occupations chosen for male and female case study subjects.
- 8i: The educational level attained by a counselor has no effect on the supervisory level of occupations chosen for male and female case study subjects by highly professional counselors and other counselors.

Hypothesis 9: Socioeconomic Background

- 9a: The socioeconomic background of a counselor has no effect on the variation in the salary level of occupations chosen for male and female case study subjects.
- 9b: The socioeconomic background of a counselor has no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.



- 9c: The socioeconomic background of a counselor has no effect on the variation in supervisory level of occupations chosen for male and female case study subjects.
- 9d: The level of education attained by a counselor's mother has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9e: The level of education attained by a counselor's mother has no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9f: The level of education attained by a counselor's mother has no effect on the variation in supervisory level of occupations chosen for male and female case study subjects.
- 9g: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9h: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9i: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in the supervisory level of occupations chosen for male and female case study subjects.
- 9j: The educational level attained by a counselor's father has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9k: The level of education attained by a counselor's father has no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9l: The level of education attained by a counselor's father has no effect on the supervisory level of occupations chosen for male and female case study subjects.





### Hypothesis 10: Counselor Realism

- 10a: Whether counselors consider themselves realists or idealists has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 10b: Whether counselors consider themselves realists or idealists has no effect on the variation in pre-requisite educational level of occupations they chose for male and female case study subjects.
- 10c: Whether counselors consider themselves realists or idealists has no effect on the variation in supervisory level of occupations they chose for male and female case study subjects.

### Phase III: Tests for Interactions

Tests for first-level interactions that seem to be logically plausible will be made. The hypotheses for these interactions are stated in their null form in Chapter IV.

### Summary

This study attempted to determine whether high school counselors possessed a predisposition to discriminate against females when choosing occupations. An attempt was also made to discover personality traits and environmental factors associated with the intensity of this predisposition. A random sample of three hundred counselors in senior high schools throughout Michigan was chosen to receive a case study questionnaire and personal data sheet specifically designed for this study. The purpose of the questionnaire was to measure the counselor's predisposition to consider lower paying occupations that require less prerequisite education and more supervision for females than for males.



The main instrument consisted of six case studies containing personal, social, and educational information about the subject, who was presented to some counselors as a male and to other counselors as a female. There was also a list of 28 occupations, each weighted on a seven-point scale for salary, prerequisite educational level, and level of required supervision. A short, straightforward personal data sheet on the back of the case study questionnaire asked the respondents to supply information related to the independent variables: sex, marital status, age, professional background, and socioeconomic background.

The data were first collected in mid-February 1975. Follow-up letters were sent to nonrespondents in March, April, and May. The data were then categorized and analyzed using a one-way univariate analysis of variance for each hypothesis. Variables that showed statistically significant results, or seemed promising, were tested using a two-way univariate analysis of variance to determine if an interaction effect was present.

Thirty-nine hypotheses were tested in their null form. The three major null hypotheses stated that there was no difference in the remuneration, education, or supervision levels of occupations that counselors chose for male case study subjects and female case study subjects. The secondary null hypotheses stated that the sex, marital status, age, education, professionalism, and socioeconomic background of a counselor had no effect on the amount of difference in the remuneration, education, and supervision levels of occupations chosen for male and female case study subjects by high school counselors.



## CHAPTER IV

### ANALYSIS OF THE DATA

In this chapter the analyses of the data are presented. As stated in Chapter I, the main purpose of the study was to determine whether high school counselors have a predisposition that may influence their vocational counseling with female clients. A second purpose of this study was to discover any correlates that influence the strength of this predisposition if it did, in fact, exist.

Three hundred randomly selected high school counselors were asked to choose appropriate occupations for three male and three female case study subjects. Responses were quantified and weighted on each of three dependent variables. The sum of the female scores was subtracted from the sum of the male scores to obtain a coefficient of remuneration, a coefficient of education, and a coefficient of supervision. Responses were analyzed using a one-way multivariate analysis of variance for each hypothesis.

The data and analysis procedures are presented here in seven sections: (1) The Sample, (2) Questionnaire Responses, (3) Score Adjustment, (4) Main Hypotheses, (5) Secondary Hypotheses, (6) Interaction Effects, and (7) Summary.



### The Sample

The sample consisted of 228 randomly selected Michigan high school counselors. Of those who returned their questionnaires, 40 percent were female. The ages of the respondents were approximately normally distributed. Three percent did not have a master's degree; 36 percent held a master's degree; 12 percent had at least 10 graduate credits beyond a master's degree; 40 percent had at least 30 credit hours of coursework beyond a master's degree; and 9 percent held advanced graduate degrees. Seventeen percent were not affiliated with any professional organization; 27 percent belonged to one organization, 20 percent to two professional organizations, and 36 percent to three or more professional organizations.

For the most part, these data are consistent with the 1970 data cited in Chapter III, which described the same population from which the sample was drawn. Two minor differences were found. There were slightly fewer women and slightly more members of professional organizations in the sample than in the population as depicted in the 1970 survey.

### Questionnaire Responses

Of the 300 subjects, 259 (86 percent) returned the questionnaires. Of these, 227 (76 percent of the sample) completed their questionnaires in such a way that they could be used for all or nearly all of the tests. The 32 useless questionnaires were either not deliverable as addressed, only partially completed, or blank with a comment.





In the last category, the four reasons most frequently cited for not completing the questionnaire were: (1) Not enough data were presented in the questionnaire to make a decision; (2) Counselors do not, and should not, "choose appropriate careers" for their clients; (3) The questions were too personal; and (4) The questionnaire was not anonymous. A few individuals simply stated that they did not want to participate in the study.

#### Score Adjustment

While compiling the data, two facts became obvious: (1) Male case study subjects usually received higher scores than female case study subjects; and (2) Computed scores on Form A questionnaires were higher than computed scores on Form B questionnaires. Apparently two major sources of variance in the scores consistently occurred: one from the sex of the case study subject and the other from the form of the test.

Only the variance due to the sex of the case study subject was of interest. Since the variance due to test form contributed to error variance and thereby reduced the power of the statistical tests, that variance was removed by adjusting the scores. Computed scores on Form A questionnaires were consistently higher than computed scores on Form B questionnaires. The adjustment process, slightly oversimplified here, consisted in finding the average difference between Forms A and B and adding it to the computed score of all respondents who received Form B of the questionnaire. This process then made scores on Form B essentially equivalent to scores on Form A of the questionnaire.



The actual adjustment process followed this general principle, but was mathematically more complex because a different adjustment factor had to be calculated for each of the three dependent variables, and reversal of the sex of the case study subjects on half of the questionnaires had to be taken into consideration. A thorough mathematical explanation of the adjustment process is found in Appendix H.

Analysis of the data was completed in three phases: Major Hypotheses, Secondary Hypotheses, and Interactions.

#### Phase I: Major Hypotheses

The three main hypotheses were first tested using the multivariate analysis of variance statistical technique. The null hypothesis for the multivariate analysis of variance was:

There is no difference between the remuneration, education, or supervision levels of occupations chosen by senior high school counselors for female case study subjects and similar levels in occupations chosen for male case study subjects.

The F-ratio for the multivariate test of equality of mean vectors was 35.26, for  $N = 228$  with three degrees of freedom, and 224 degrees of freedom for error. The null hypothesis was rejected at the .05 level of confidence and beyond. In fact, the P value for this test was .0001. The three major null hypotheses were also rejected individually beyond the .05 level of confidence using univariate analyses of variance.

Since acceptance of the null hypothesis on the basis of an F test automatically accepts the null hypothesis for all pairs of



means,<sup>1</sup> it would seem appropriate to use a dependent t test in analyzing and reporting the three major hypotheses. This test is simple to report and is easily understood. The reported means are the mean scores for all respondents. The t tests were performed to find whether the means were significantly different from zero.

Null Hypothesis 1: There is no difference between the remuneration of occupations chosen by senior high school counselors for female case study subjects and the remuneration of those chosen for male case study subjects.

Analysis of the data yielded the following results:

N	Means	Standard Deviation	Degrees of Freedom	<u>t</u>	P
228	2.29	3.94	227	8.78	.0001

The null hypothesis was rejected beyond the .05 level of confidence. Counselors chose higher paying occupations for male case study subjects than for female case study subjects.

Null Hypothesis 2: There is no difference between the educational requirements of occupations chosen by senior high school counselors for female case study subjects and the educational requirements of those chosen for male case study subjects.

Analysis of the data yielded the following results:

N	Means	Standard Deviation	Degrees of Freedom	<u>t</u>	P
228	.84	3.94	227	3.23	.0015

The null hypothesis was rejected beyond the .05 level of confidence. Counselors chose careers with a higher educational prerequisite for male case study subjects than for female case study subjects.

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<sup>1</sup>J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill, 1965), p. 276.



Null Hypothesis 3: There is no difference between the level of supervision found in occupations chosen by senior high school counselors for female case study subjects and that of occupations chosen for male case study subjects.

Analysis of the data yielded the following results:

N	Means	Standard Deviation	Degrees of Freedom	<u>t</u>	P
228	2.01	3.32	227	9.11	.0001

The null hypothesis was rejected beyond the .05 level of confidence. Counselors chose jobs requiring less supervision for male case study subjects than for female case study subjects.

#### Phase II: Secondary Hypotheses

The purpose of the seven secondary hypotheses was to discover personality traits and environmental factors associated with the intensity of the predisposition revealed by the three major hypotheses. Seven independent variables were considered: sex, marital status, age, demographic location, professionalism, socioeconomic background, and self-perceived realism.

The secondary hypotheses are numbered 4 through 10, and the results of testing each are reported in the following section using the same format. In each case the three null hypotheses related to each variable are stated. These are followed by a table of means and standard deviations, a table showing the statistical analysis, and a statement indicating whether the null hypotheses were rejected or accepted. As stated in Chapter III, a null hypothesis was considered rejected only at or beyond the .05 level of confidence.





### Sex of the Counselor

Hypothesis 4: Female high school counselors are likely to discriminate against females less than are male counselors.

#### Null Hypotheses:

- 4a: There is no difference between the remuneration of occupations chosen for male and female case study subjects by male and female counselors.
- 4b: There is no difference in the prerequisite educational level of occupations chosen for male and for female case study subjects by male and female counselors.
- 4c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by male and female counselors.

The null hypotheses related to the sex of the counselor were accepted. There was no statistically significant difference in the salary level, educational level, or supervisory level of occupations chosen for male and female case study subjects by male and female counselors. The sex of the counselor alone does not seem to have an effect on the career selections made for female case study subjects vis-à-vis male case study subjects.



Table 4.1.1.--Table of means and standard deviations for comparing male and female counselors.

		Sex of Counselor	
		Male	Female
N	228	138	90
M E A N S	Remuneration	2.31	2.26
	Education	1.07	.50
	Supervision	2.07	1.91
S D	Remuneration	3.62	4.38
	Education	3.76	4.22
	Supervision	3.29	3.40

Table 4.1.2.--Analysis of variance table for comparing male and female counselors.

		MS	df	F	P	Reject
Remuneration	Sex	.17	1			
	Error		226	.01	.92	No
Education	Sex	17.95	1			
	Error		226	1.15	.28	No
Supervision	Sex	1.34	1			
	Error		226	.12	.73	No



Male Counselors With  
Wives Who Work

Hypothesis 5: Male high school counselors whose spouses are employed are more likely to select the same kinds of careers for both female and male case study subjects than are male counselors who are single or whose spouses are not employed.

Null Hypotheses:

- 5a: There is no difference in the salary level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.
- 5b: There is no difference in the prerequisite educational level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.
- 5c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by male counselors whose spouses are employed and other male counselors.

All three null hypotheses related to the employment status of wives of male counselors were accepted. There was no statistically significant difference in the salary level, educational level, or supervisory level of occupations chosen for male and for female case study subjects by male counselors whose spouses were employed and single male counselors or male counselors whose spouses were not employed.



Table 4.2.1.--Table of means and standard deviations for comparing male counselors with wives who work with other male counselors.

		Marital Status		
		Single	Spouse Employed	Spouse Not Employed
N	137	9	79	49
M E A N S	Remuneration	2.17	2.02	2.89
	Education	2.89	.63	2.06
	Supervision	2.89	1.56	2.42
S D	Remuneration	3.61	3.78	3.36
	Education	3.66	3.68	3.76
	Supervision	3.16	3.33	3.23

Table 4.2.2.--Analysis of variance table for comparing male counselors with wives who work with other male counselors.

		MS	df	F	P	Reject
Remuneration	M. Status	11.56	2	.88	.42	No
	Error	13.11	134			
Education	M. Status	28.17	2	2.05	.13	No
	Error	13.74	134			
Supervision	M. Status	13.30	2	1.23	.29	No
	Error	10.78	134			



### Age of the Counselor

Hypothesis 6: Older high school counselors are more likely than younger counselors to choose lower paying occupations that require less education and more supervision for female case study subjects than for male case study subjects.

### Null Hypotheses:

- 6a: There is no difference in the salary level of occupations chosen for male and female case study subjects by counselors who are less than 40 years old and counselors who are 40 or older.
- 6b: There is no difference in the prerequisite educational level of occupations chosen for male and female case study subjects by counselors who are less than 40 and counselors who are 40 or older.
- 6c: There is no difference in the supervisory level of occupations chosen for male and female case study subjects by counselors who are less than 40 years old and counselors who are 40 or older.

In each case the null hypotheses related to age of the counselor were accepted. There was no statistically significant difference in the salary, educational level, or supervisory level of occupations chosen for male and for female case study subjects by counselors of different age groups.



Table 4.3.1.--Table of means and standard deviations for comparing counselors of different age groups.

		Age	
		40 and Under 40	Over 40
N	228	109	119
M E A N S	Remuneration	2.12	2.44
	Education	1.17	.54
	Supervision	1.72	2.26
S  D	Remuneration	4.31	3.55
	Education	4.42	4.45
	Supervision	3.45	3.22

Table 4.3.2.--Analysis of variance table for comparing counselors of different age groups.

		MS	df	F	P	Reject
Remuneration	Age	5.73	1	.37	.54	No
	Error	15.49	226			
Education	Age	22.42	1	1.44	.23	No
	Error	15.54	226			
Supervision	Age	16.53	1	1.50	.22	No
	Error	11.05	226			



Demographic Location  
of Counselor

Hypothesis 7: High school counselors who are employed in rural school systems tend to choose lower paying jobs that require less education and more supervision for female case study subjects than for male case study subjects.

Null Hypotheses:

- 7a: There is no difference in the salary level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, and rural areas.
- 7b: There is no difference in the prerequisite educational level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, or rural areas.
- 7c: There is no difference in the supervisory level of occupations chosen for male and for female case study subjects by counselors who practice in high schools located in Greater Detroit, cities over 25,000 in population, or rural areas.

Hypothesis 7a was accepted in its null form. The demographic location of the school in which a counselor works did not have an effect on the amount of remuneration of occupations chosen for male and female case study subjects. However, since this hypothesis was accepted at the .0576 level of confidence it deserves further research. In this study remuneration and education of occupations used in the questionnaire are correlated,  $r = .59$ .



Hypothesis 7b was rejected in its null form. The demographic location of the school in which a counselor works did have an effect on the prerequisite education required for occupations chosen for female and male case study subjects. Counselors in cities chose occupations for female case study subjects that required more education than those occupations chosen for the identical case studies with male subjects. Counselors who work in schools in Greater Detroit chose occupations for females that required more education than counselors who worked in rural schools, but both groups of counselors chose occupations that required more education more frequently for males than for females.

Hypothesis 7c was accepted in its null form. There was no statistically significant difference in the supervisory level of occupations chosen for female and male case study subjects by counselors who worked in different demographic locations.





Table 4.4.1.--Table of means and standard deviations for comparing counselors who work in various demographic locations.

		Demographic Location		
		Detroit	Cities	Rural
N	225	81	38	106
M E A N S	Remuneration	2.15	1.13	2.86
	Education	.82	-.52	1.39
	Supervision	2.05	1.11	2.36
S D	Remuneration	3.83	3.96	3.87
	Education	3.74	3.57	4.15
	Supervision	3.13	3.44	3.35

Table 4.4.2.--Analysis of variance table for comparing counselors who work in various demographic locations.

		MS	df	F	P	Reject
Remuneration	Location	43.31	2	2.89	.0576	No
	Error	14.97	222			
Education	Location	50.96	2	3.33	.0377	Yes
	Error	15.30	222			
Supervision	Location	22.05	2	2.04	.1332	No
	Error	10.84	222			



### Professional Status of Counselors

Hypothesis 8: High school counselors who are highly professional are less likely than other counselors to choose lower paying occupations that require a less sophisticated educational background and more supervision for female case study subjects than for male case study subjects.

### Null Hypotheses for Professional Level:

- 8a: There is no difference in the salary level of occupations chosen for male and female case study subjects by highly professional counselors and those chosen by other counselors.
- 8b: There is no difference in prerequisite educational level of occupations chosen for male and female case study subjects by highly professional counselors and those chosen by other counselors.
- 8c: There is no difference in supervisory level of occupations chosen for male and female case study subjects by highly professional counselors and those chosen by other counselors.

All three hypotheses were accepted in their null form. Highly professional counselors did not differ from other counselors in the kinds of careers they chose for male and female case study subjects.



Table 4.5.1.--Table of means and standard deviations for comparing highly professional counselors with all other counselors.

		Professionalism	
		Highly Professional	Other Counselors
N	228	56	172
M E A N S	Remuneration	2.70	2.16
	Education	.79	.86
	Supervision	2.43	1.87
S D	Remuneration	3.10	4.16
	Education	3.82	4.00
	Supervision	3.35	3.32

Table 4.5.2.--Analysis of variance table for comparing highly professional counselors with all other counselors.

		MS	df	F	P	Reject
Remuneration	Professional	12.29	1	12.29	.37	No
	Error	15.46	226			
Education	Professional	.21	1	.01	.91	No
	Error	15.64	226			
Supervision	Professional	13.47	1	1.21	.27	No
	Error	11.06	226			



Since the hypotheses were accepted in their null form, the components of professionalism were also analyzed. First, the membership in professional organizations was tested:

Null Hypotheses for Membership in Professional Organizations:

- 8d: The number of professional organizations to which a counselor belongs has no effect on the salary level of occupations chosen for male and female case study subjects.
- 8e: The number of professional organizations to which a counselor belongs has no effect on the prerequisite educational level of occupations chosen for male and female case study subjects.
- 8f: The number of professional organizations to which a counselor belongs has no effect on the supervisory level of occupations chosen for male and female case study subjects.

All three null hypotheses were accepted. The number of professional organizations to which a counselor belongs had no effect on the kinds of occupations counselors chose for male and female case study subjects.





Table 4.6.1.--Table of means and standard deviations for comparing counselors belonging to zero to six professional organizations.

		Number of Organizations						
		0	1	2	3	4	5	6
N	228	38	61	46	37	21	14	11
M E A N S	Remuneration	2.95	2.39	1.19	2.85	2.79	1.07	2.77
	Education	1.47	.65	.68	.84	.74	.23	1.07
	Supervision	2.38	1.54	1.43	2.46	2.73	1.75	3.02
S D	Remuneration	4.07	4.43	4.12	3.42	3.74	3.30	3.37
	Education	4.68	3.83	4.01	3.13	4.18	4.05	3.57
	Supervision	3.24	3.32	3.81	2.96	2.91	3.30	3.88

Table 4.6.2.--Analysis of variance table for comparing counselors belonging to zero to six professional organizations.

		MS	df	F	P	Reject
Remuneration	Organizations	18.68	6	1.20	.31	No
	Error	15.58	214			
Education	Organizations	3.15	6	.20	.98	No
	Error	16.02	214			
Supervision	Organizations	10.94	6	.96	.45	No
	Error	11.36				



The second component of professionalism that was tested dealt with the amount of counselor training a counselor possessed.

Null Hypotheses for Educational Level:

- 8g: The educational level attained by a counselor has no effect on the variation in the salary level of occupations chosen for male and female case study subjects.
- 8h: The educational level attained by a counselor has no effect on the prerequisite educational level of occupations chosen for male and female case study subjects.
- 8i: The educational level attained by a counselor has no effect on the prerequisite educational level of occupations chosen for male and female case study subjects.

All three hypotheses were accepted in their null form. Counselor education had no effect on the kinds of careers counselors chose for male and female case study subjects.



Table 4.7.1.--Table of means and standard deviations for comparing counselors with various educational backgrounds.

		Counselor's Educational Level				
		Less Than MA	MA	MA+10	More Than MA + 10	Doctorate
N	228	6	83	28	91	20
M E A N S	Remuneration	3.17	1.78	1.96	2.62	3.10
	Education	1.60	.62	.87	.83	1.55
	Supervision	1.90	1.68	2.02	2.31	2.02
S D	Remuneration	1.63	4.31	4.43	3.54	3.68
	Education	2.77	4.13	3.56	4.00	3.98
	Supervision	2.48	3.50	3.23	3.24	3.52

Table 4.7.2.--Analysis of variance table for comparing counselors with various educational backgrounds.

		MS	df	F	P	Reject
Remuneration	Education	13.13	4	.85	.50	No
	Error	15.49	223			
Education	Education	4.41	4	.28	.89	No
	Error	15.77	223			
Supervision	Education	4.30	4	.38	.82	No
	Error	11.20	223			



### Socioeconomic Levels of Counselors

Hypothesis 9: High school counselors who have a higher socioeconomic background are more likely than other counselors to choose similar careers for male and female case study subjects.

#### Null Hypotheses:

- 9a: The socioeconomic background of a counselor has no effect on the variation in the salary level of occupations chosen for male and female case study subjects.
- 9b: The socioeconomic background of a counselor has no effect on the variation in the prerequisite educational level of occupations chosen for male and female case study subjects.
- 9c: The socioeconomic background of a counselor has no effect on the variation in the supervisory level of occupations chosen for male and female case study subjects.

All three null hypotheses related to the counselor's socioeconomic background were accepted. A counselor's socioeconomic background had no effect on either the salary, educational, or supervisory level of occupations they chose for male and female case study subjects.

Since the socioeconomic background apparently had no effect on the kinds of careers chosen, it was thought that perhaps the components of the socioeconomic background might individually have a statistically significant effect. The counselor's mother's educational level was tested (Hypotheses 9d-9f), then the father's educational level was tested (Hypotheses 9g-9i), and finally, the family economic conditions under which a counselor grew up were tested (Hypotheses 9j-9l).





Table 4.8.1.--Table of means and standard deviations for comparing counselors with various socioeconomic backgrounds.

		Socioeconomic Status		
		Low	Average	High
N	228	60	133	35
M E A N S	Remuneration	1.73	2.55	2.27
	Education	.80	.78	1.15
	Supervision	2.14	1.97	1.91
S D	Remuneration	3.74	4.11	3.51
	Education	3.51	4.13	4.04
	Supervision	3.13	3.47	3.20

Table 4.8.2.--Analysis of variance table for comparing counselors with various socioeconomic backgrounds.

		MS	df	F	P	Reject
Remuneration	SES	13.63	2	.88	.42	No
	Error	15.46	225			
Education	SES	1.94	2	.12	.88	No
	Error	15.69	225			
Supervision	SES	.78	2	.07	.93	No
	Error	11.17	225			



Null Hypotheses for the Counselor's Mother's Educational Level:

- 9d: The level of education attained by a counselor's mother has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9e: The level of education attained by a counselor's mother has no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9f: The level of education attained by a counselor's mother has no effect on the supervisory level of occupations chosen for male and female case study subjects.

The educational background of a counselor's mother had an effect on the remuneration and supervision levels of occupations counselors chose for females and males. Generally, the means of all three variables followed a normal curve. Counselors whose mothers had an above-average or below-average education chose occupations for female case study subjects that paid higher salaries and required less supervision than counselors whose mothers had an average amount of formal education. The educational level of the counselor's mother had no statistically significant effect on the educational prerequisite of occupations chosen for male and female case study subjects.

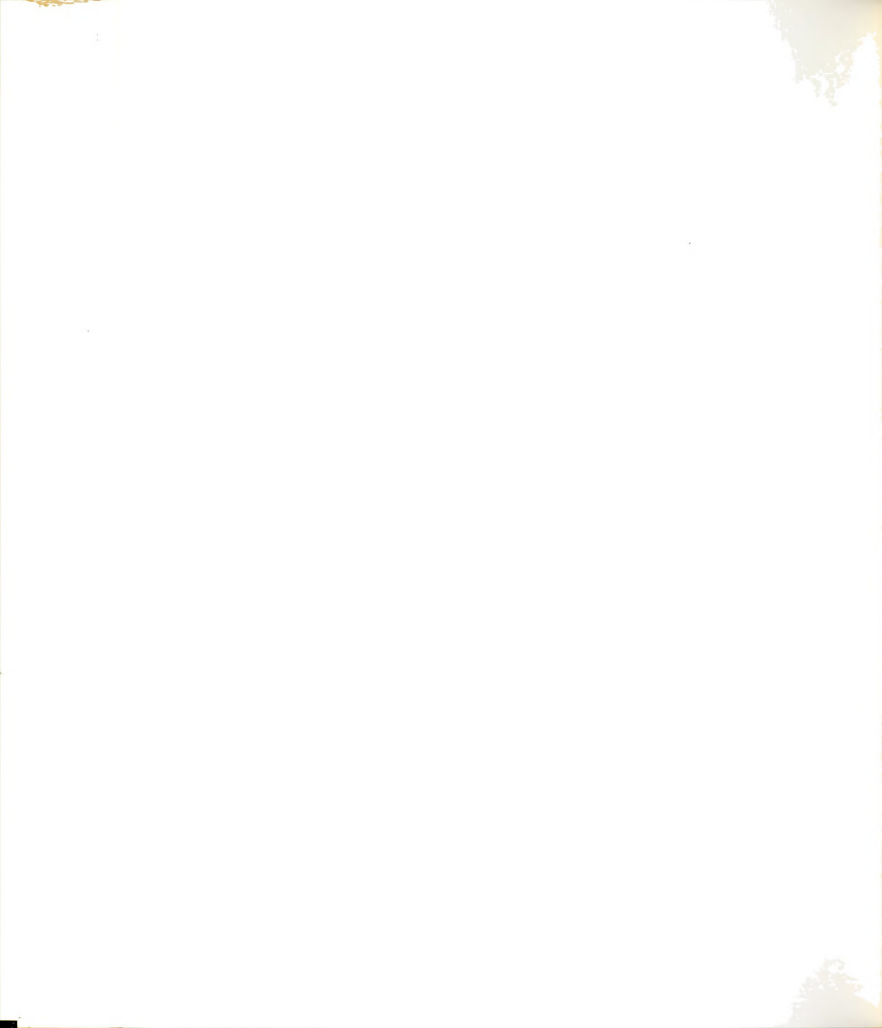


Table 4.9.1.--Table of means and standard deviations for comparing counselors whose mothers had different educational levels.

		Mother's Educational Level		
		Below Average	Average	Above Average
N	228	57	112	59
M E A N S	Remuneration	1.27	2.83	2.25
	Education	.12	1.31	.65
	Supervision	1.15	2.64	1.63
S D	Remuneration	2.83	4.50	3.52
	Education	2.87	4.34	3.99
	Supervision	3.03	3.59	2.82

Table 4.9.2.--Analysis of variance table for comparing counselors whose mothers had different educational levels.

		MS	df	F	P	Reject
Remuneration	Mother's Ed.	86.88	1	3.03	.05	Yes
	Error	15.17	225			
Education	Mother's Ed.	97.64	1	1.83	.16	No
	Error	15.46	225			
Supervision	Mother's Ed.	100.75	1	4.42	.01	Yes
	Error	10.75	225			



Next the hypotheses for the counselor's father's educational level were examined.

Null Hypotheses for Counselor's Father's Educational Level:

- 9g: The educational level attained by a counselor's father has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9h: The level of education attained by a counselor's father has no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9i: The level of education attained by a counselor's father has no effect on the variation in supervisory level of occupations chosen for male and female case study subjects.

All three null hypotheses were accepted. The counselor's father's educational level had no effect on the remuneration, education, or supervision of occupations chosen for female and male case study subjects.

The mother's and father's educational level were correlated  $r = .42$  when one takes into consideration all responses.



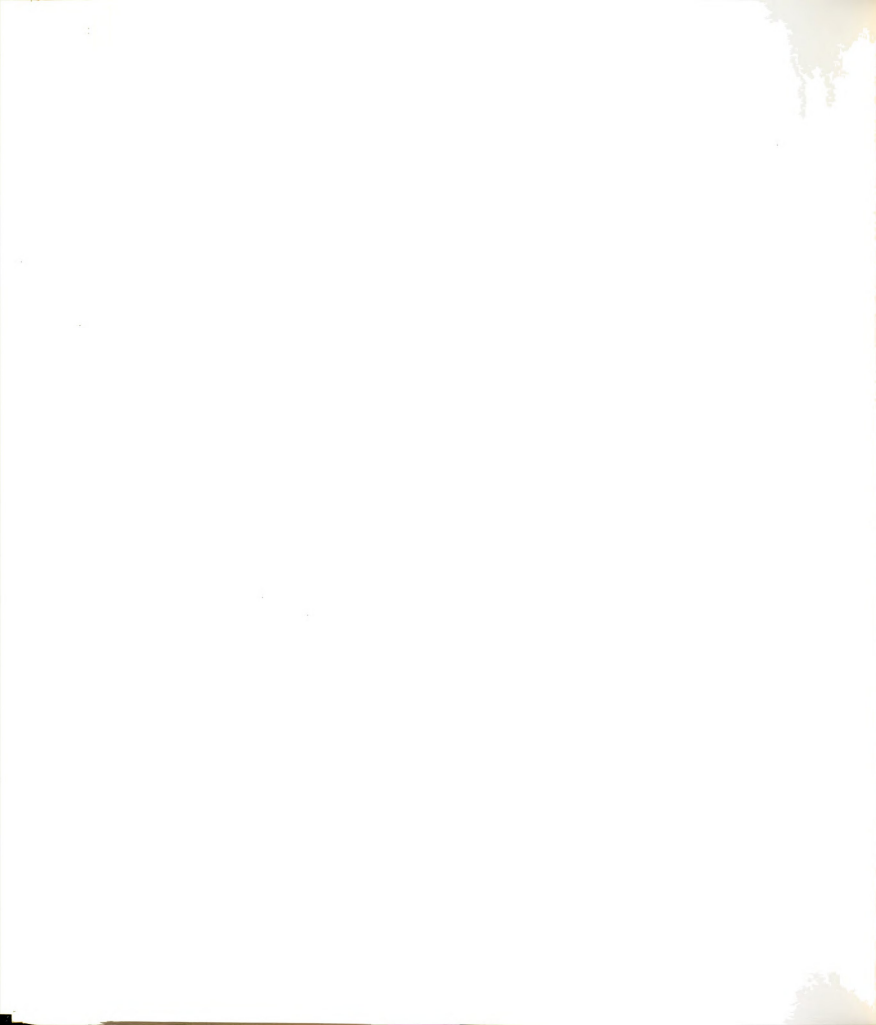


Table 4.10.1.--Table of means and standard deviations for comparing counselors whose fathers had different educational levels.

		Father's Educational Level		
		Below Average	Average	Above Average
N	228	73	102	53
M E A N S	Remuneration	2.01	2.90	1.53
	Education	.89	1.49	-.25
	Supervision	1.97	2.68	.83
S D	Remuneration	4.25	5.16	4.28
	Education	4.76	5.57	5.74
	Supervision	4.45	4.76	4.47

Table 4.10.2.--Analysis of variance table for comparing counselors whose fathers had different educational levels.

		MS	df	F	P	Reject
Remuneration	Father's Ed.	37.25				
	Error	21.96	225	1.70	.19	No
Education	Father's Ed.	52.52				
	Error	28.81	225	1.82	.16	No
Supervision	Father's Ed.	59.58				
	Error	21.14	225	2.82	.06	No



Economic level of counselors' families was examined next.

Null Hypotheses for Economic Level of Counselors' Families:

- 9j: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 9k: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in prerequisite educational level of occupations chosen for male and female case study subjects.
- 9l: The economic circumstances of a counselor's family during the counselor's youth have no effect on the variation in the supervisory level of occupations chosen for male and female case study subjects.

All three null hypotheses were accepted. The economic background of a counselor had no effect on the remuneration, educational level, or supervisory level of an occupation chosen for female or male case study subjects.



Table 4.11.1.--Table of means and standard deviations for comparing counselors with varying economic backgrounds.

		Family Economic Background		
		Below Average	Average	Above Average
N	229	51	153	25
M E A N S	Remuneration	.29	.15	.28
	Education	.22	.04	.17
	Supervision	.26	.25	.25
S D	Remuneration	.45	.48	.44
	Education	.49	.55	.49
	Supervision	.42	.58	.45

Table 4.11.2.--Analysis of variance table for comparing counselors with varying economic backgrounds.

		MS	df	F	P	Reject
Remuneration	Economic Background	.02	2	.10	.90	No
	Error	.22	226			
Education	Economic Background	.58	2	2.06	.13	No
	Error	.29	226			
Supervision	Economic Background	.28	2	1.33	.27	No
	Error	.21	226			



Self-Perception of Counselors

Hypothesis 10: Counselors who consider themselves idealists are more likely to choose similar occupations for girls and boys than counselors who consider themselves realists.

Null Hypotheses:

- 10a: Whether counselors consider themselves realists or idealists has no effect on the variation in salary level of occupations chosen for male and female case study subjects.
- 10b: Whether counselors consider themselves realists or idealists has no effect on the variation in prerequisite educational level of occupations they chose for male and female case study subjects.
- 10c: Whether counselors consider themselves realists or idealists has no effect on the variation in supervisory level of occupations they chose for male and female case study subjects.

All three null hypotheses were accepted. Whether the counselor considered himself or herself a realist or an idealist had no effect on the remuneration, education, or supervision levels of occupations chosen for female and male case study subjects.

Table 4.12.1.--Table of means and standard deviations for comparing counselors who consider themselves realists with those who consider themselves idealists.

		Self-Perception	
		Realistic	Idealistic
N	210	166	44
M E A N S	Remuneration	2.40	2.57
	Education	.89	1.08
	Supervision	2.13	1.96
S  D	Remuneration	3.96	3.82
	Education	3.96	4.35
	Supervision	3.33	3.37

Table 4.12.2.--Analysis of variance table for comparing counselors who consider themselves realists with those who consider themselves idealists.

		MS	df	F	P	Reject
Remuneration	Realist/ Idealist	1.01				
	Error	15.47	208	.07	.80	No
Education	Realist/ Idealist	1.32				
	Error	16.32	208	.08	.78	No
Supervision	Realist/ Idealist	.91				
	Error	11.16	208	.08	.78	No





### Phase III--Interactions

Ten combinations of the seven secondary independent variables were tested to determine if a first-level interaction occurred. A test for an interaction effect was not performed unless an interaction seemed somewhat likely to occur. Sex, age, and parental educational background were considered key variables. In all, 30 interaction hypotheses were tested, beginning with demographic location and the counselor's mother's educational level.

#### Hypothesis 11: Location by Mother's Education

- 11a: Demographic location and the counselor's mother's educational level will not interact on the salary level of occupations counselors chose for female and male case study subjects.
- 11b: Demographic location and the counselor's mother's educational level will not interact on the educational level required for occupations counselors chose for female and male case study subjects.
- 11c: Demographic location and the counselor's mother's educational level will not interact on the supervisory level required for occupations counselors chose for female and male case study subjects.

No interaction occurred between the demographic location and the counselor's mother's educational level, on remuneration or education of occupations, but a significant interaction did occur when testing supervision. The interaction between the demographic location and the counselor's mother's educational level is pictured in Figure 4.1.



Table 4.13.1.--Table of means for interaction between demographic location and mother's education.

		Location								
		Detroit			Cities			Rural		
		Mother's Educ.			Mother's Educ.			Mother's Educ.		
		Low	Ave.	High	Low	Ave.	High	Low	Ave.	High
N	225	21	44	16	14	19	5	21	47	38
M E A N S	Remuneration	1.21	2.59	2.13	1.86	.97	-3.00	1.21	3.78	2.63
	Education	.43	1.34	-.11	.86	-1.07	-.80	-.29	2.28	1.07
	Supervision	2.27	2.34	.98	1.13	1.36	.80	.25	3.51	2.11

Table 4.13.2.--Analysis of variance table for interaction between demographic location and counselor's mother's education.

		MS	df	F	P	Reject
Remuneration	Interaction	18.82	4	1.26	.29	No
	Error	14.98	207			
Education	Interaction	16.80	4	1.10	.36	No
	Error	15.22	207			
Supervision	Interaction	24.62	4	2.39	.05	Yes
	Error	10.32	207			

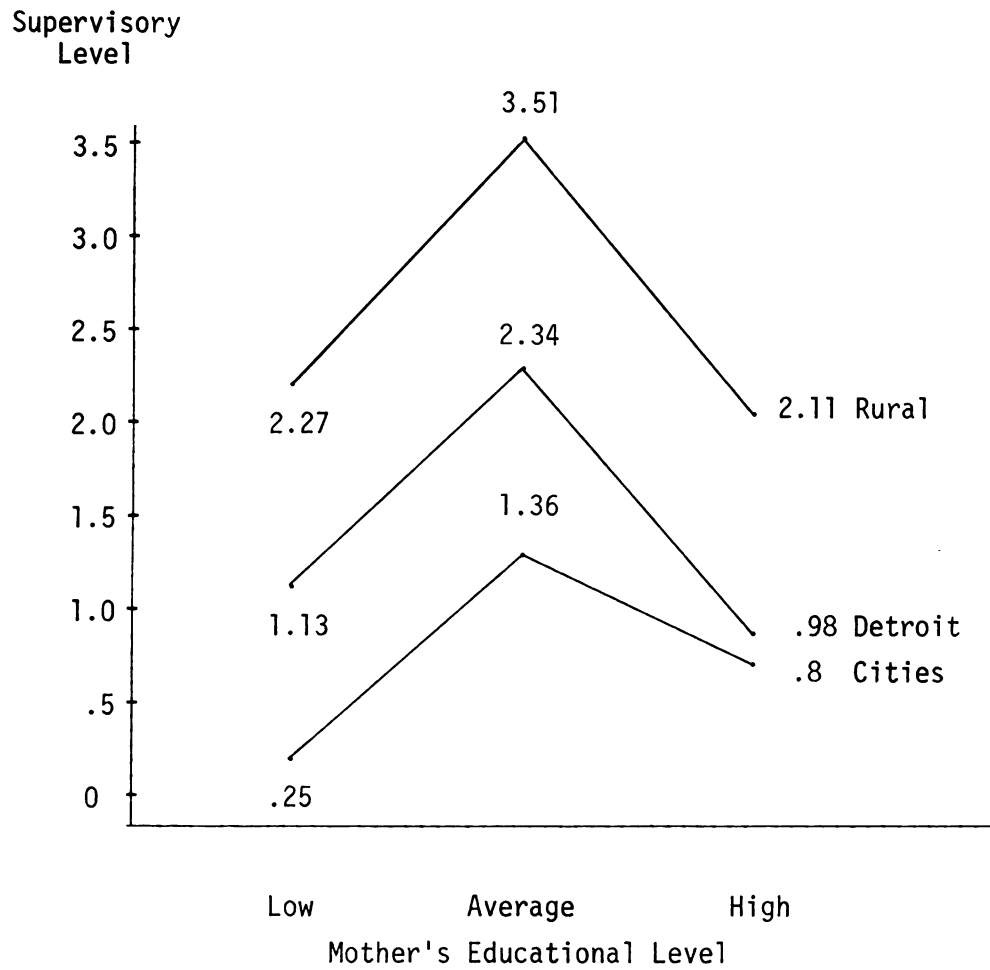


Figure 4.1.--Interaction between the counselor's mother's educational level and demographic location.



Counselors whose mothers had little formal education showed a wide disparity in the supervisory levels of occupations chosen for case study subjects. The scores varied depending on the location of the counselor's place of work. Those who worked in rural schools and whose mothers had little formal education chose occupations for female case study subjects that were highly supervised. Counselors in Detroit schools whose mothers had little formal education chose careers for females that tended to be relatively unsupervised. Counselors who worked in city schools whose mothers had little formal education chose occupations for female case study subjects that were not as closely supervised as those chosen by counselors in rural schools, but more closely supervised than those chosen by counselors who worked in Detroit schools.

Hypothesis 12: Sex and Socioeconomic Background

- 12a: Counselor sex and socioeconomic background will not interact on the salary level of occupations counselors chose for female and male case study subjects.
- 12b: Counselor sex and socioeconomic background will not interact on the educational level of occupations counselors chose for female and male case study subjects.
- 12c: Counselor sex and socioeconomic background will not interact on the supervisory level of occupations counselors chose for female and male case study subjects.

No statistically significant interaction occurred between the sex of the counselor and the counselor's socioeconomic background on any of the three dependent variables.

Table 4.14.1.--Table of means for interaction between sex and socioeconomic background.

		Sex					
		Male			Female		
		Socioeconomic Background			Socioeconomic Background		
		Low	Average	High	Low	Average	High
N		35	87	16	16	66	8
M E A N S	Remuneration	2.3	2.4	1.6	2.0	2.2	3.4
	Education	1.5	.91	.91	.43	.10	3.8
	Supervision	2.8	1.9	1.3	2.0	1.7	3.4

Table 4.14.2.--Analysis of variance table for interaction between sex and socioeconomic background.

		MS	df	F	P	Reject
Remuneration	Interaction	9.4	2	.61	.54	No
	Error	15.4				
Education	Interaction	36.8	2	2.60	.07	No
	Error	14.1				
Supervision	Interaction	14.3	2	1.29	.28	No
	Error	11.7				





Hypothesis 13: Sex by Age

- 13a: Sex of the counselor and age of the counselor will not interact on the salary level of occupations counselors chose for male and female case study subjects.
- 13b: Sex of the counselor and age of the counselor will not interact on the educational level required for occupations counselors chose for female and male case study subjects.
- 13c: Sex of the counselor and age of the counselor will not interact on the supervisory level required for occupations counselors chose for male and female case study subjects.

The F ratio for the multivariate test of equality of mean vectors was equal to 6.7661 with 3 degrees of freedom and 214 degrees of freedom for error, resulting in a P of less than .003. So, if one were to consider the three variables as a single variable, such as less desirable occupations, this test would reject the null hypothesis beyond the .0003 level of confidence.

A graphic representation of the interaction of sex and age on remuneration (Figure 4.2) and supervision (Figure 4.3) shows the inverted effect that was hypothesized by Pringle.

Older female counselors chose careers for female case study subjects that paid least and required the least amount of prerequisite education, and older male counselors chose careers for female case study subjects that paid the highest salaries compared to male case study subjects. Young male counselors chose careers for female case study subjects that required more prerequisite education than any of the other three groups of counselors.

Table 4.15.1.--Table of means for interaction between sex and age.

		Age			
		40 and Under 40		Over 40	
		Sex		Sex	
		Male	Female	Male	Female
N	228	71	38	67	52
M E A N S	Remuneration	2.56	2.02	1.26	2.98
	Education	2.13	0.0	-.63	1.31
	Supervision	1.92	2.22	1.35	2.32

Table 4.15.2.--Analysis of variance table for interaction between sex and age.

		MS	df	F	P	Reject
Remuneration	Interaction	78.68	1	5.24	.02	Yes
	Error	15.00	216			
Education	Interaction	243.3	1	17.04	.00	Yes
	Error	14.28	216			
Supervision	Interaction	8.33	1	.77	.38	No
	Error	10.81	216			

Remuneration

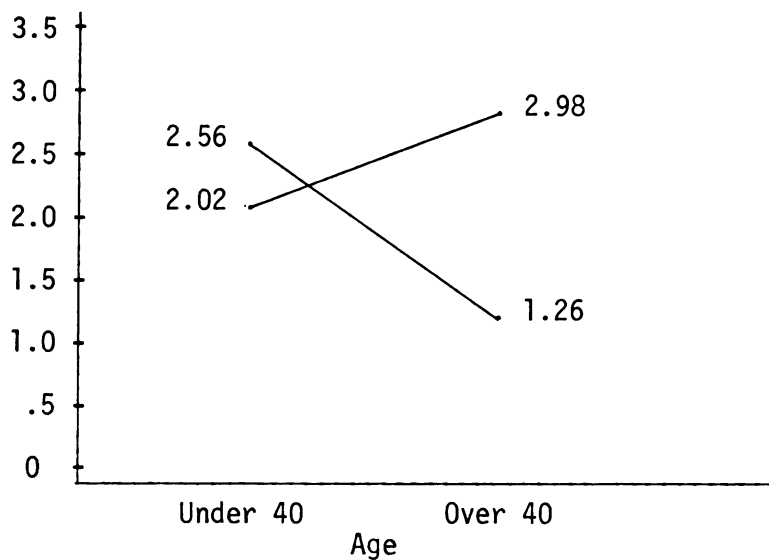


Figure 4.2.--Interaction between age and sex of counselors on remuneration of occupations chosen for male and female case study subjects.

Education

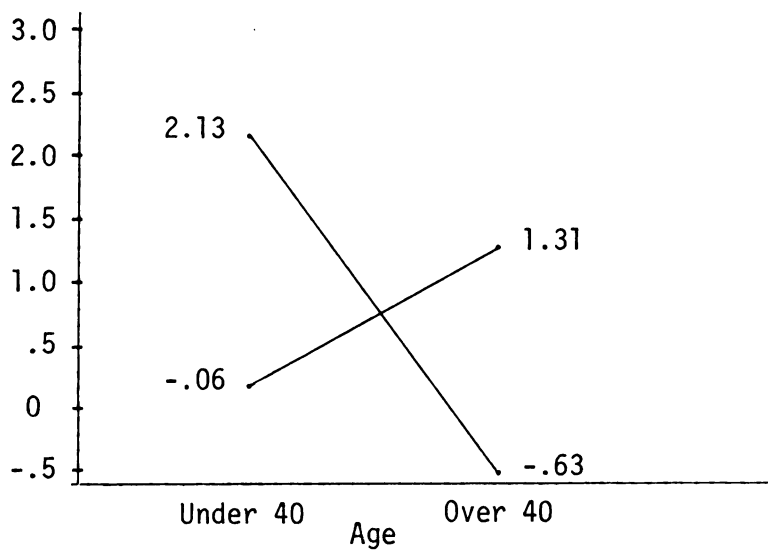


Figure 4.3.--Interaction between age and sex of counselors on the prerequisite educational level of occupations chosen for male and female case study subjects.



Hypothesis 14: Counselor Sex and Mother's Education

- 14a: Counselor sex and mother's educational level will not interact on the salary level of occupations counselors chose for male and female case study subjects.
- 14b: Counselor sex and mother's educational level will not interact on the educational level required for occupations counselors chose for male and female case study subjects.
- 14c: Counselor sex and mother's educational level will not interact on the supervisory level required for occupations counselors chose for male and female case study subjects.

No statistically significant interaction occurred between the counselor's sex and the mother's educational level. However, mean scores varied a great deal on each of the three dependent variables.

Hypothesis 15: Interaction of Counselor's Sex and Father's Educational Level

- 15a: Counselor sex and counselor's father's educational level will not interact on the salary level of occupations chosen for female case study subjects in relation to male case study subjects.
- 15b: Counselor sex and counselor's father's educational level will not interact on the educational level of occupations chosen for female and male case study subjects.
- 15c: Counselor sex and counselor's father's educational level will not interact on the supervisory level of occupations chosen for female and male case study subjects.

No statistically significant interactions occurred between the counselor's sex and the counselor's father's educational level on either of the three dependent variables.

Table 4.16.1.--Table of means for interaction between counselor's sex and mother's education.

		Mother's Education					
		Below Average	Average	Above Average	Below Average	Average	Above Average
		Sex			Sex		
		Male			Female		
N	228	138			90		
M E A N S	Remuneration	1.65	3.10	1.47	.38	2.43	3.10
	Education	.52	1.82	.15	-.82	.55	1.21
	Supervision	1.55	2.84	1.08	.21	2.34	2.25

Table 4.16.2.--Analysis of variance table for interaction between counselor's sex and mother's education.

		MS	df	F	P	Reject
Remuneration	Interaction	34.36	2	2.29	.10	No
	Error	15.00	216			
Education	Interaction	30.06	2	2.11	.12	No
	Error	14.28	216			
Supervision	Interaction	22.46	2	2.08	.13	No
	Error	10.81	216			





Table 4.17.1.--Table of means for interaction between counselor's sex and father's education.

		Father's Education					
		Below Average	Average	Above Average	Below Average	Average	Above Average
		Sex			Sex		
		Male			Female		
N	228	45	61	32	28	41	21
M E A N S	Remuneration	1.70	2.84	2.16	2.50	2.55	1.36
	Education	.68	1.71	.38	1.21	.26	0
	Supervision	1.58	2.76	1.43	2.54	2.02	.86

Table 4.17.2.--Analysis of variance table for interaction between counselor's sex and father's occupation.

		MS	df	F	P	Reject
Remuneration	Interaction	10.81	2	.73	.48	No
	Error	14.74	216			
Education	Interaction	17.43	2	1.20	.30	No
	Error	14.56	216			
Supervision	Interaction	18.10	2	1.66	.19	No
	Error	10.92	216			

Hypothesis 16: Sex of Counselor and Organizational Membership

- 16a: Counselor sex and membership in professional organizations will not interact on the salary level of occupations chosen for male and female case study subjects.
- 16b: Counselor sex and counselor membership in professional organizations will not interact on the educational level of occupations chosen for female and male case study subjects.
- 16c: Counselor sex and counselor membership in professional organizations will not interact on the supervisory levels of occupations chosen for male and female case study subjects.

No statistically significant interaction occurred between counselor sex and organizational membership.

Hypothesis 17: Counselor's Age and Father's Educational Level

- 17a: Counselor age and counselor's father's educational level will not interact on the salary level of occupations chosen for female and male case study subjects.
- 17b: Counselor age and counselor's father's educational level will not interact on the educational level of occupations chosen for female and male case study subjects.
- 17c: Counselor age and counselor's father's educational level will not interact on the supervisory level of occupations chosen for female and male case study subjects.

A statistically significant interaction occurred between the counselor's age and the counselor's father's educational level in relation to the remuneration levels of occupations chosen for male and female case study subjects. The interaction on this variable is graphically depicted in Figure 4.4. No statistically significant interaction occurred in relation to the educational level or supervisory level of occupations chosen by counselors for male and female case study subjects.

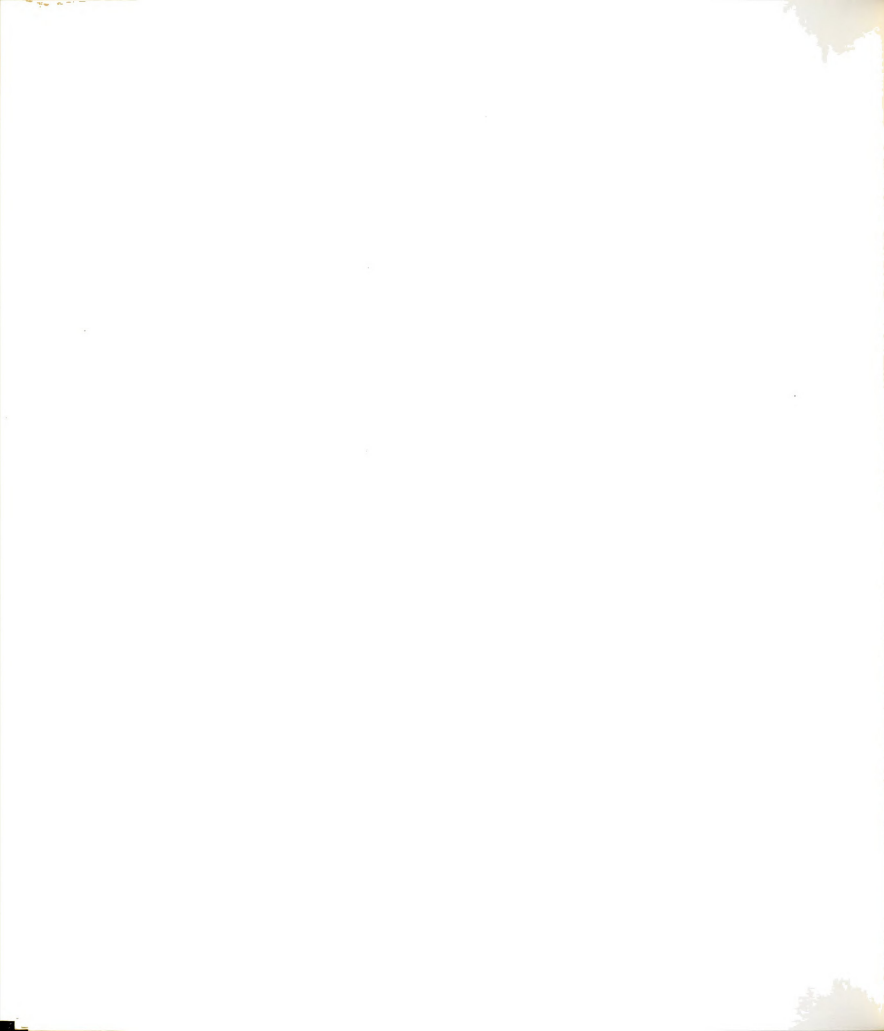


Table 4.18.1.--Table of means for interaction between counselor's sex and membership in professional organizations.

		Sex													
		Male							Female						
		Number of Memberships							Number of Memberships						
		0	1	2	3	4	5	6	0	1	2	3	4	5	6
N	228	26	40	26	24	7	8	7	12	21	20	13	14	6	4
M E A N S	Remuneration	2.7	2.5	.9	3.4	1.8	1.9	2.2	3.4	2.1	1.6	1.9	3.3	.0	3.8
	Education	1.9	1.1	.8	1.0	-1.1	1.2	1.1	.6	-.3	.5	.6	1.7	-.3	1.0
	Supervision	2.5	1.4	1.6	2.9	2.9	1.9	2.7	2.1	1.8	1.2	1.7	2.7	1.5	3.5

Table 4.18.2.--Analysis of variance table for interaction between counselor's sex and membership in professional organizations.

		MS	df	F	P	Reject
Remuneration	Interaction	18.68	6	1.20	.31	No
	Error	15.58	214			
Education	Interaction	3.15	6	.20	.98	No
	Error	16.02	214			
Supervision	Interaction	10.94	6	.96	.45	No
	Error	11.36	214			

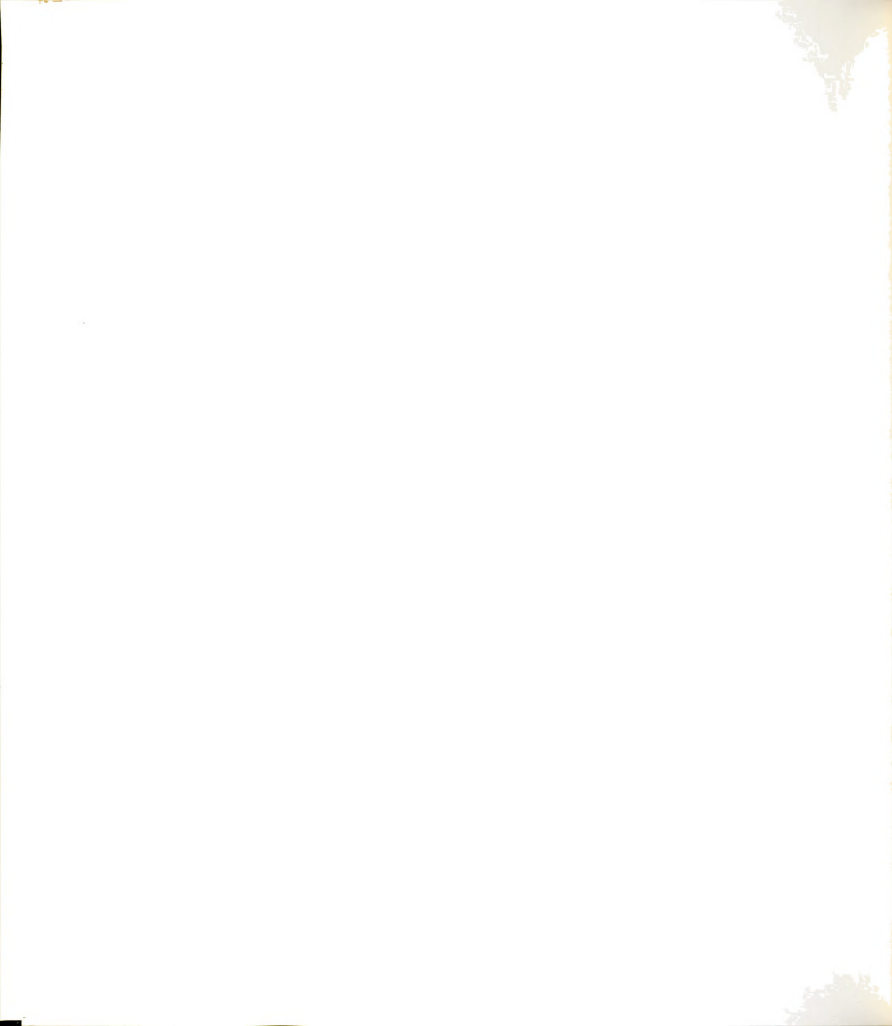


Table 4.19.1.--Table of means for interaction between counselor's age and father's educational level.

		Age					
		40 and Under 40			Over 40		
		Father's Education			Father's Education		
		Below Average	Average	Above Average	Below Average	Average	Above Average
N	228	29	44	52	50	28	25
M E A S U R E M E N T S	Remuneration	2.88	1.43	1.83	3.66	1.89	1.78
	Education	1.94	.19	1.20	1.06	.31	.14
	Supervision	2.17	1.81	1.85	3.11	1.04	1.38

Table 4.19.2.--Analysis of variance table for interaction between counselor's age and father's educational level.

		MS	df	F	P	Reject
Remuneration	Interaction	12.59	2	4.25	.02	Yes
	Error	14.74	216			
Education	Interaction	19.25	2	1.32	.27	No
	Error	14.56	216			
Supervision	Interaction	18.84	2	1.72	.18	No
	Error	10.92	216			



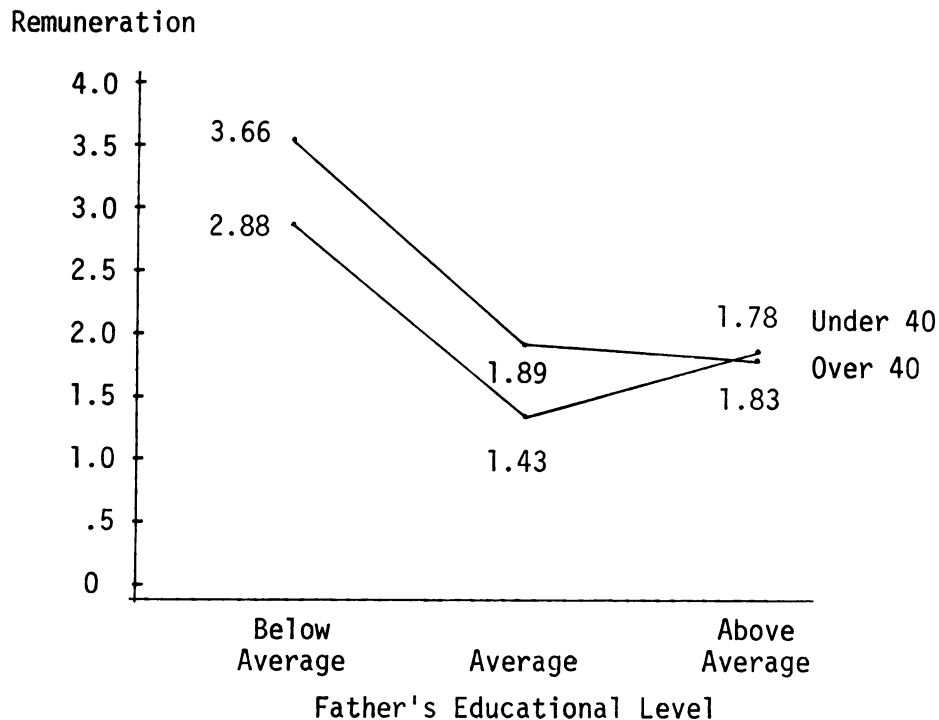


Figure 4.4.--Interaction between counselor's age and father's educational level.

Hypothesis 18: Counselor's Age and Mother's Educational Level

- 18a: Counselor age and counselor's mother's educational level will not interact on the salary level of occupations counselors chose for female and male case study subjects.
- 18b: Counselor age and counselor's mother's educational level will not interact on the educational level of occupations counselors chose for male and female case study subjects.
- 18c: Counselor age and counselor's mother's educational level will not interact on the supervisory level of occupations counselors chose for female and male case study subjects.

No statistically significant interaction occurred between counselor age and counselor's mother's educational level on any of the three dependent variables.



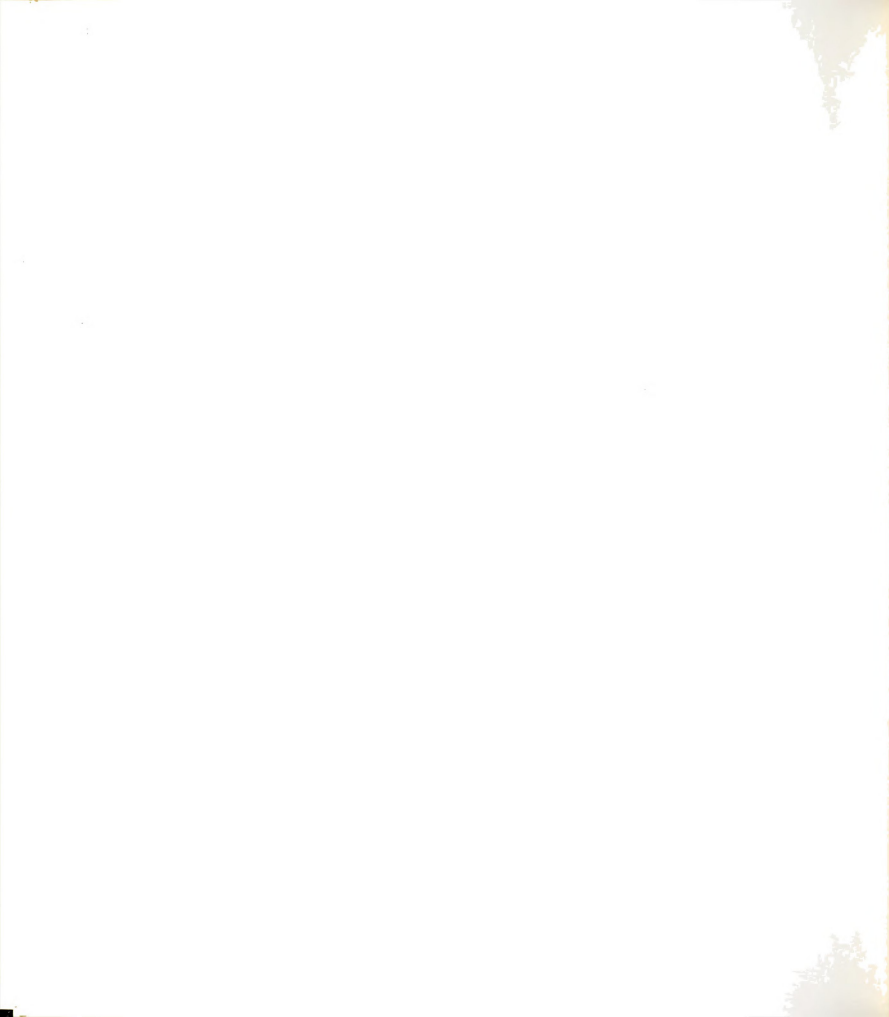


Table 4.20.1.--Table of means for interaction between counselor's age and mother's education.

		Age					
		40 and Under 40 Mother's Education			Over 40 Mother's Education		
		Below Average	Average	Above Average	Below Average	Average	Above Average
N	225	23	33	53	57	31	28
M E A S U R E S	Remuneration	1.33	1.44	2.54	3.08	2.08	2.43
	Education	.73	-.22	1.90	.79	.30	1.05
	Supervision	.73	1.57	2.35	2.97	1.45	1.84

Table 4.20.2.--Analysis of variance table for interaction between counselor's age and mother's education.

		MS	df	F	P	Reject
Remuneration	Interaction	4.21	2	.28	.76	No
	Error	14.98	207			
Education	Interaction	20.44	2	1.34	.26	No
	Error	15.22	207			
Supervision	Interaction	2.87	2	.28	.76	No
	Error	10.32	207			



Hypothesis 19: Counselor Age and Educational Level

- 19a: Counselor age and educational level will not interact on the salary level of occupations counselors chose for female and male case study subjects.
- 19b: Counselor age and educational level will not interact on the educational level of occupations counselors chose for female and male case study subjects.
- 19c: Counselor age and educational level will not interact on the supervisory level of occupations counselors chose for female and male case study subjects.

No statistically significant interaction occurred between the counselor's age and educational level on any of the three dependent variables.

Hypothesis 20: Counselor Sex and Educational Level

- 20a: Counselor sex and educational level will not interact on the salary level of occupations counselors chose for female and male case study subjects.
- 20b: Counselor sex and educational level will not interact on the educational level of occupations counselors chose for female and male case study subjects.
- 20c: Counselor sex and educational level will not interact on the supervisory level of occupations counselors chose for female and male case study subjects.

No statistically significant interaction occurred between a counselor's sex and educational level on any of the three dependent variables.

Summary

A summary of the findings is found in Table 4.23.1, on the following page.

Table 4.21.1.--Table of means for interaction between a counselor's age and educational level.

		Age									
		Under 40					40 and Over 40				
		Educational Level					Educational Level				
		BA	MA	MA +10	MA +30	EdS PhD	BA	MA	MA +10	MA +30	EdS PhD
N	228	5	53	19	28	4	1	30	9	63	16
M E A N S	Remuneration	3.5	1.5	1.8	1.7	1.9	2.2	3.0	2.4	-1.0	4.3
	Education	2.1	-.8	.7	.5	1.2	.2	1.7	.4	2.3	1.4
	Supervision	2.7	-2.2	1.6	1.6	2.1	1.8	1.7	2.6	.3	2.5

Table 4.21.2.--Analysis of variance table for interaction between a counselor's age and educational level.

		MS	df	F	P	Reject
Remuneration	Interaction	23.9	4	1.5	.19	No
	Error	15.4	218			
Education	Interaction	3.4	4	.2	.93	No
	Error	15.9	218			
Supervision	Interaction	10.3	4	.9	.46	No
	Error	11.2	218			



Table 4.22.1.--Table of means for interaction between a counselor's sex and educational level.

		Sex									
		Male					Female				
		Educational Level					Educational Level				
		BA	MA	MA +10	MA +30	EdS PhD	BA	MA	MA +10	MA +30	EdS PhD
N	228	3	45	13	63	14	3	38	15	28	6
M E A N S	Remuneration	1.5	3.9	4.9	3.2	3.5	2.0	4.8	4.1	4.2	4.3
	Education	2.3	3.6	3.4	4.0	3.9	3.3	4.6	3.8	4.1	4.4
	Supervision	1.2	3.5	3.3	3.2	3.5	3.7	3.5	3.1	3.3	3.4

Table 4.22.2.--Analysis of variance table for interaction between a counselor's sex and educational level.

		MS	df	F	P	Reject
Remuneration	Interaction	3.8	4	.24	.62	No
	Error		218			
Education	Interaction	8.3	4	.52	.47	No
	Error		218			
Supervision	Interaction	1.3	4	.12	.73	No
	Error		218			

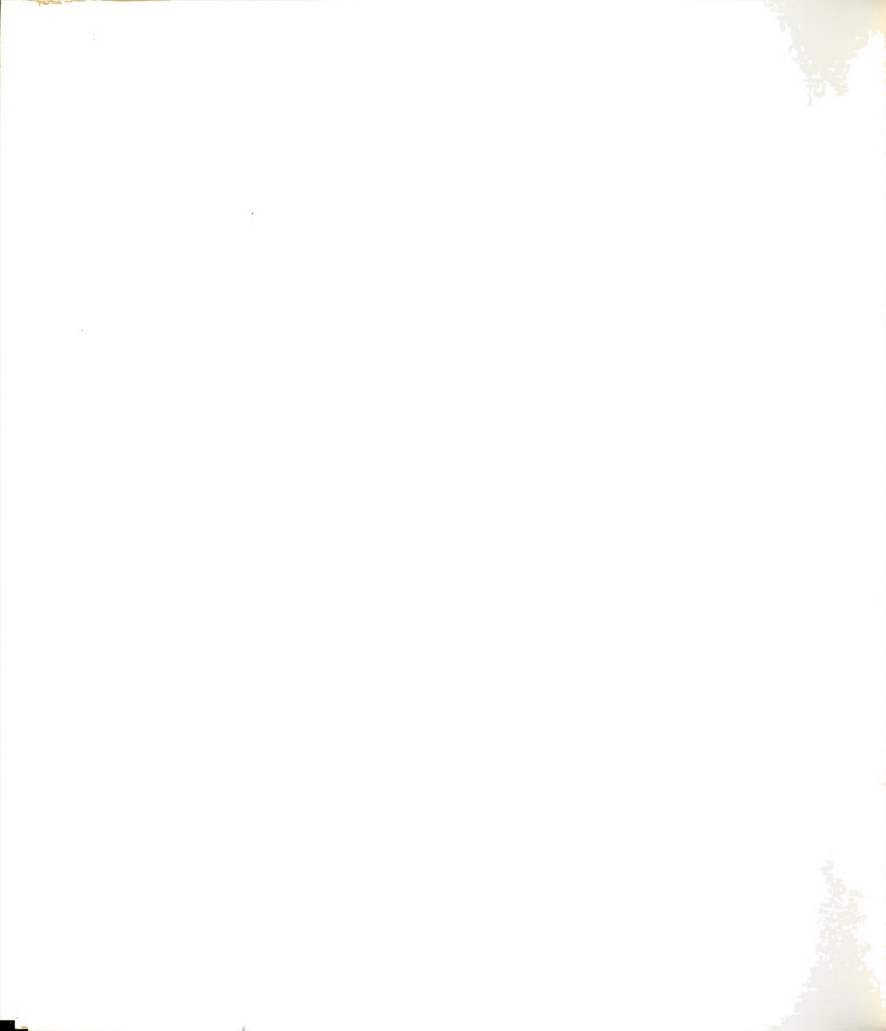




Table 4.23.1.--Summary of the findings.

Hypothesis	Factor	Remuneration	Education	Supervision
<u>Phase I--Major Hypotheses:</u>				
1	All Counselors	Yes <sup>a</sup>		
2	All Counselors		Yes	
3	All Counselors			Yes
<u>Phase II--Secondary Hypotheses:</u>				
4	Sex	No <sup>a</sup>	No	No
5	Wife's Employment Status	No	No	No
6	Age	No	No	No
7	Demographic Location	No	Yes	No
8	Professionalism	No	No	No
8d-f	Organizational Membership	No	No	No
8g-i	Educational Level	No	No	No
9	SES Background	No	No	No
9d-f	Mother's Educ. Level	Yes	No	Yes
9g-i	Father's Educ. Level	No	No	No
9j-l	Economic Background	No	No	No
10	Realists and Idealists	No	No	No
<u>Phase III--Interactions:</u>				
11	Location by Mother's Educ.	No	No	Yes
12	Sex by SES Background	No	No	No
13	Sex by Age	Yes	Yes	No
14	Sex by Mother's Educ.	No	No	No
15	Sex by Father's Educ.	No	No	No
16	Sex by Org. Membership	No	No	No
17	Age by Father's Educ.	Yes	No	No
18	Age by Mother's Educ.	No	No	No
19	Age by Educational Level	No	No	No
20	Sex by Education	No	No	No

<sup>a</sup>Yes = reject the null hypothesis; No = accept the null hypothesis.



## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Background

Women in the United States are faced with many institutional and social obstacles to self-actualization. Counselors are involved with human development, and become concerned when barriers are placed in the developmental paths of their clients. An area of concern to those in the counseling profession today is the possibility that they may be personally detrimental to the self-actualization of their female clients.

A review of the literature showed that bias against females is often a cultural trait that permeates many aspects of a society. This has been clearly demonstrated by several researchers. Bias against females was shown to be in schools, in religious institutions, and in the labor market. Counselors appear to be neither better nor worse than other people in respect to bias against females. As is probably true for all other segments of their society, they seem to assimilate the ubiquitous cultural norms of society.

In elementary and secondary schools one often finds teachers who treat girls differently than boys, unconsciously shaping their behavior to fit a sex-role-stereotyped mold. Most textbooks refer to boys much more often than girls. Even where girls are portrayed, they are consistently shown as inept, passive, weak, and interested



primarily in domestic activities. The curriculum exerts a subtle influence on young women to enter a limited number of occupations such as home economics, secretarial studies, and fine arts. Boys are subtly encouraged to select programs leading to careers in science, mathematics, and the professions. Athletic programs in schools tend to encourage girls to be passive spectators and boys to be active competitors. Even school staffing patterns reinforce sex-role stereotypes--males are administrators and science teachers, whereas females are secretaries and elementary teachers.

The labor market for which schools prepare young women continues its long tradition of providing lower paying jobs for women which offer little opportunity for advancement. More than 40 percent of today's labor force consists of women, most of whom hold such positions. Although the average female worker's educational level is identical to that for the average male (12.4 years of formal schooling), the median wage for women is only three-fifths of that for men.

Besides social pressures regarding their choice of a career and discrimination in hiring and promotion, many women have internal psychological conflicts related to their position in the world of work. Horner has shown that most women see success as a male characteristic.<sup>1</sup> Like men, women worry about failure, but in addition, many women are anxious about success, because success is considered unfeminine. Some women are also upset by a conflict between their

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<sup>1</sup>M. S. Horner, "Toward an Understanding of Achievement-Related Conflicts in Women," Journal of Social Issues 28 (1972): 157-76.

roles as a mother and as a worker. Such conflicts occasionally lead women to seek help from professional counselors.

A review of the literature indicates that no theory of career development exists that adequately explains female career development. Instead, theories of career development, like theories of counseling, usually seek to understand the female in relation to the male.

Theories of counseling dichotomize cognitive and affective behavior. Cognitive behavior is more often ascribed to the male, whereas affective behavior is usually assumed to be dominant in the female. Psychoanalytic theory is considered to be the most sexist because of its Victorian origins and concepts such as penis envy and Oedipus complex. Behavioristic theories are relatively nonsexist, although they do go into detail regarding the socialization process, which causes many women to avoid success and achievement. Humanistic theories, on the other hand, generally respect the unique individuality of each person and, therefore, have not been accused of being sexist in the literature.

It has been demonstrated by Broverman and her associates that counselors and psychotherapists often hold a view of the mature, socially competent, and mentally healthy adult female that is the opposite of that which they hold of a mature, socially competent, and mentally healthy adult male.<sup>1</sup> Psychologists expect women to be more passive and dependent than men. In a second study she showed that clinicians considered women to be healthy even if they were less

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<sup>1</sup>I. Broverman et al., "Sex-Role Stereotypes and Clinical Judgments of Mental Health," Journal of Consulting and Clinical Psychology 34 (1970): 1-7.

independent, less adventurous, less objective, less aggressive, less competitive, more submissive, more easily influenced, and more excitable in minor crises than males.<sup>1</sup>

In general, psychologists expect women to be more passive and dependent than men. Counselors-in-training exhibit the same attitudes. Pringle found that male counselors were generally more supportive of high achievement in female clients, but they were also supportive of dependence.<sup>2</sup>

In summary, a careful review of the literature related to vocational counseling with women reveals that counselors in general, like other members of their society, are biased against women, and this bias is apparent in their counseling.

#### Purpose of the Study

The purpose of this study was to determine if high school counselors, when considering careers for female students, have a pre-disposition toward occupations that pay less, require less education, and need more supervision than careers considered for male students. In addition, an attempt was made to ascertain if certain personal characteristics of school counselors and selected environmental variables are also correlated with such a predisposition. It was felt that a study of this type was important in order to heighten counselor

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<sup>1</sup>I. Broverman et al., "Sex-Role Stereotypes: A Current Appraisal," Journal of Social Issues 28 (1972): 70.

<sup>2</sup>M. Pringle, "The Responses of Counselors to Behaviors Associated With Independence and Achievement in Male and Female Clients" (Ph.D. dissertation, University of Michigan, 1973). ERIC # ED 071 008.

awareness that such a condition may exist and to provide data useful for the improvement of both in-service and university-based counselor education programs.

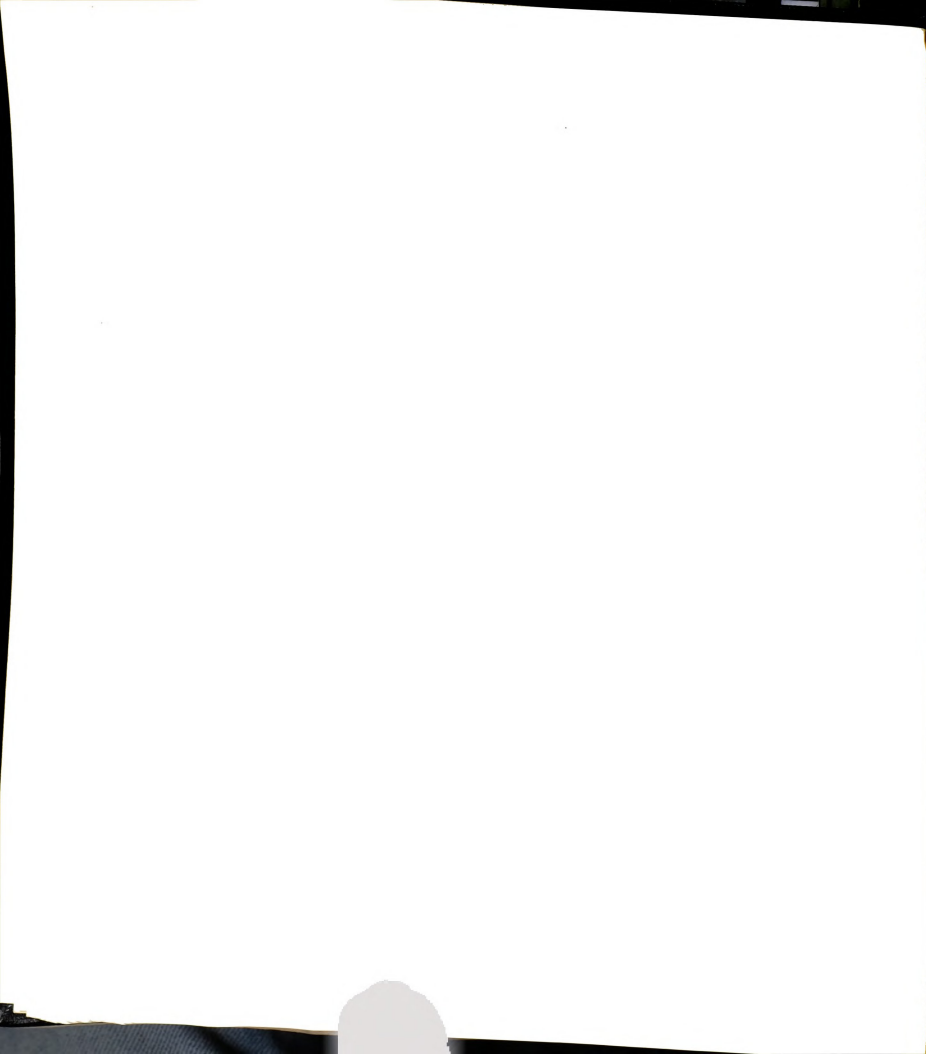
### Design of the Study

A random sample of three hundred counselors in senior high schools throughout Michigan was asked to analyze six specially prepared case studies. The personal characteristics of the student described in each case study could describe either a male or a female. Two forms of the case study questionnaire were developed. The six case studies were identical on both forms. However, in Form A, case study subjects one, four, and six were designated as males and case studies two, three, and five were designated as females. Form B case study subjects were assigned the opposite sex designations; i.e., subjects one, four, and six were presented as females and cases two, three, and five were presented as males.

In addition, participants were given a list of 28 occupations, each of which possessed weighted coefficients on a seven-point scale for salary, for level of prerequisite education, and for level of supervision. An occupation's remuneration coefficient and education coefficient were determined by using information from the Occupational Outlook Handbook. The coefficient of supervision was determined by the mean rating of six experts in the fields of vocational guidance and vocational education.

On a short personal data sheet, printed on the back of the case study questionnaire, respondents were also asked to provide





information regarding their sex, marital status, age, professional training and experience, and socioeconomic background.

A respondent's score on each of the three dependent variables of salary, education, and supervision was determined by computing the sum of the coefficients of the occupations chosen for the three female case study subjects and subtracting it from the sum of the coefficients of the occupations chosen for the three male case study subjects. Scores were adjusted to assure that test forms were equivalent.

Since the tasks posed by the instrument were similar to tasks performed by school counselors, and since the questions did not seem directly related to the gender of the case study subjects, the instrument appeared to possess a high degree of construct validity. No valid standardized test now exists that could be used to determine concurrent validity satisfactorily, and since the instrument was not designed to predict individual behavior, predictive validity was only considered for counselors in general rather than for individuals.

The reliability of the test had to be inferred or assumed since none of the traditional methods of establishing reliability seemed either practical or satisfactory. Since the test was only used to measure the attitude of a group of counselors, and was not intended to be used to establish an index or score for each individual, the test seemed to be a reliable instrument for use in this study.

The data were collected over a four-month period. Seventy-six percent of the subjects completed usable questionnaires and data sheets. Another 10 percent of the questionnaires were returned, but not in usable form. The data were analyzed using a variety of

statistical tests, including multivariate analysis of variance, univariate analysis of variance, and dependent t tests.

### Hypotheses

Ten hypotheses were tested. The three main hypotheses were related to the central question: Would high school counselors choose lower paying jobs that required less education and more supervision for female case study subjects than for male case study subjects?

They were as listed below:

Hypothesis 1: High school counselors will select lower paying occupations for female case study subjects than for identical male case study subjects.

Hypothesis 2: High school counselors will select occupations that require less educational preparation for female case study subjects than for identical male case study subjects.

Hypothesis 3: High school counselors will select occupations that require more supervision for female case study subjects than for identical male case study subjects.

The seven secondary hypotheses stated that the sex, marital status, age, education, professionalism, socioeconomic background, and idealism of a high school counselor are all related to the differences, if they do exist, in the remuneration, education, and supervision levels of the occupations counselors chose for male case study subjects when compared to those chosen for the female subjects. The secondary hypotheses are as follows:

Hypothesis 4: Female high school counselors are likely to discriminate against females less than are male counselors.



- Hypothesis 5: Male high school counselors whose spouses are employed are more likely to select the same kinds of careers for female and male case study subjects than are male counselors who are single or whose spouses are not employed.
- Hypothesis 6: Older high school counselors are more likely than younger counselors to choose lower paying occupations that require less education and more supervision for female case study subjects than for male case study subjects.
- Hypothesis 7: High school counselors who are employed in rural school systems will tend to choose lower paying jobs that require less education and more supervision for female case study subjects than male case study subjects in contrast to counselors who work in city schools.
- Hypothesis 8: High school counselors who are highly professional are less likely than other counselors to choose lower paying occupations that require a less sophisticated educational background and more supervision for female case study subjects than for male case study subjects.
- Hypothesis 9: High school counselors who have a higher socioeconomic background are more likely than other counselors to choose similar careers for male and female case study subjects.
- Hypothesis 10: Counselors who consider themselves idealists are more likely to choose similar occupations for girls and boys than counselors who consider themselves realists.

### Summary of the Findings

A summary of all the findings is found in Table 4.23.1 on page 139. The results clearly demonstrated that the counselors in the study tended to choose lower paying occupations that are more highly supervised and require less prerequisite education for female case study subjects than for male subjects. The differences were statistically significant for all three variables.

It was also shown that the educational level of the counselor's mother had a statistically significant effect on the kinds of careers

that both male and female counselors chose for female case study subjects when compared to male case study subjects. A counselor, whether male or female, whose mother had an average amount of formal education, tended to choose careers for female case study subjects that paid less, required less education and more supervision than counselors whose mothers had either more or less than average formal education.

Differences in the kinds of careers counselors chose for male and female subjects were also related to the demographic location of the schools in which the counselor worked. Those who worked in schools located in cities over 25,000 in population, including metropolitan Detroit, tended to choose careers for female subjects that paid less and required less education than those chosen for male subjects. However, counselors from smaller cities and rural areas showed a statistically significant tendency to discriminate even more between male and female case study subjects on salary and education than the counselors who worked in the city schools.

When analyzed separately, neither the sex nor the age of the counselor alone appeared to have a statistically significant effect on the kinds of occupations chosen for females. However, there was a statistically significant interaction between them. The results indicated that male counselors over 40 years of age discriminated least against female case study subjects, followed by female counselors under 40, and male counselors under 40. Females over 40 years old exhibited the greatest discrepancy between the careers chosen for female and those chosen for male case study subjects. This finding supports tentative similar conclusions suggested in the literature.



The only other significant two-way interaction was found between the counselor's age and the level of his or her father's education. A male or female counselor under 40 years of age whose father had an average educational background was least likely to choose lower paying occupations for females, whereas the counselor who is over 40 and whose father had less formal education than most people was most likely to choose lower paying occupations for female case study subjects.

In brief, this study demonstrated that counselors tended to choose lower paying jobs that required less education and more supervision for female case study subjects than for identical male case study subjects. Female counselors over 40 exhibited the strongest predisposition to do this, whereas male counselors over 40 tended to discriminate least. Counselors who worked in schools situated in cities tended to discriminate less than counselors in rural schools. The amount of formal education attained by the counselor's mother and father was also related to this predisposition. Marital status, educational level, membership in professional organizations, and economic background had no statistically significant effect on counselor bias toward women.

Those findings that were statistically significant at the .05 level or beyond are listed in Table 5.1 on the following page.

### Conclusions

1. High school counselors in Michigan hold the same occupational biases toward women as the general population. The three main hypotheses were logically derived from the premise that people in the



Table 5.1.--Summary of significant findings.

Hypothesis	Factor	Remuneration			Education			Supervision		
		Mean	F	P	Mean	F	P	Mean	F	P
1 - 3	All counselors	2.29	77.09	.0001	.84	10.43	.0015	2.01	82.99	.0001
7	Location	2.15	2.89	.0576	.86	3.33	.0372	2.04	2.14	.1208
9a	Mother's educ.	2.29	3.03	.0469	.84	1.83	.1205	2.01	4.42	.0127
Interaction Analysis										
Sex by age		2.29	5.24	.0230	.84	17.04	.0001	2.01	.77	.3810
Age by father's education		2.29	4.25	.0156	.84	1.32	.2688	2.01	1.73	.1806



American culture hold negative occupational biases toward women, and that counselors, as part of that culture, hold the same biases. The review of the literature reinforced this conclusion since other studies of bias toward women showed that it is prevalent among parents, children, as well as in schools and the labor market.

2. Vocational counseling of female clients is performed as well by male counselors as by female counselors. When analyzed by sex, no statistically significant difference occurred in the kinds of occupations chosen for female and male case study subjects by male and female counselors. Although many older male counselors apparently are more willing to consider higher paying, supervisory, professional, and technical occupations for girls, and older female counselors are less willing to consider nontraditional careers for girls, the sex of the counselor does not in itself predispose a counselor to be an open, supportive guide to the world of work, or a restrictive guide who views the various roles in the labor market in stereotypic terms. This research does not support the assertion made by Bingham and House, Lerman, Brodsky and Holroyd, and others that female counselors should counsel girls.<sup>1</sup>

3. Neither counselor education programs nor membership in professional organizations effectively changes biases of high school

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<sup>1</sup>W. C. Bingham and E. W. House, "Counselors' Attitudes Toward Women and Work," Vocational Guidance Quarterly 22 (1973): 16-23; H. Lerman, "What Happens in Feminist Therapy?" in A. Brodsky, chair, "Feminist Therapy: In Search of a Theory" (Symposium presented to the American Psychological Association Convention, September 1974); A. Brodsky and J. Holroyd, co-chairs, "Report of the Task Force on Sex Bias and Sex-Role Stereotyping in Psychotherapeutic Practice" (Washington, D.C.: American Psychological Association, 1975). (Mimeographed.)

counselors against females. Neither membership in professional organizations nor the amount of training a counselor received had any statistically significant effect on the intensity of occupational bias shown toward female case study subjects. Even when these two hallmarks of the professional counselor were combined with counseling experience, no statistically significant relationship with the intensity of the bias could be found. Occupational bias toward females seems to be relatively immune to change under present methods of counselor training.

4. Counselors, at least subconsciously, encourage conformity to currently accepted sex roles in the labor market. Counselors in this study showed a marked tendency to choose different kinds of occupations for males than for females. Rather than focus their attention solely on the talents and interests of the case study subjects, they considered occupational choices which tended to reflect a world where women seldom work in a supervisory capacity, where women earn only three-fifths as much as men, and where women work in occupations where their formal education is not fully utilized.

#### Recommendations for Further Research

The conclusion that counselors are biased against women has been supported by this and previous research. However, counselors and psychologists need a more comprehensive and precise theory of bias in order to more easily understand and control or eliminate it. The need for a true theory of bias is most urgent if humankind is to



progress in the social sphere. Five recommendations based on the results of this study are:

1. Intervention strategies need to be developed that will eliminate or decrease sex bias in counselors. These strategies should focus both on the cognitive and affective aspects of bias. Counselor education programs should incorporate consciousness-raising activities for both counselors and their clients, as well as other intervention strategies. Practicing counselors should neither espouse nor reject feminist views in counseling, but counselors must understand themselves, as well as their attitudes, beliefs, and values, in order to counsel effectively without imposing their own values on the client. The unconscious acceptance of social norms that limit client growth and development is not compatible with counseling theory or practice, yet it does occur and must be pointed out both to counselors-in-training and practicing counselors.

2. A counselor profile should be developed to help employers ascertain whether or not a counselor is likely to be discriminatory against females. This study has shown that a counselor's family background, personality, and work environment are all related to the relative strength of the bias. Many other characteristics should also be examined to determine whether they too are correlated with this bias. These factors should include the number, sex, and constellation of siblings; race; authoritarianism; type of counselor training; risk-taking tendency; theoretical and philosophical orientation; and self-concept. Using actuarial and theoretical research methods, it should be possible to build a profile of the biased



counselor. A suitable test or survey should also be developed so that counselors may examine themselves to see if they are inclined to be biased against females.

3. Further research is needed on how age affects the development of bias toward women. Although age did not make a statistically significant difference in this study, it did interact with other variables such as sex and parental educational level. Further research is needed on how age affects the development of bias. Likewise, further research is needed to resolve the somewhat paradoxical relationship between parental level of education and bias. One could expect a straight-line relationship, but a more normal distribution was discovered in this study.

4. Although counselor idealism, demographic location, counseling experience, and the employment status of a male counselor's spouse were not statistically significant in this study, they are worthy of further study. The self-perceived idealism measure is probably not a valid test of idealism. The other variables listed above either approached significance or there have been contradictory findings in other studies of the same variable.

5. The influence of ethnic background on bias toward females should be examined. Minorities were included in the sample, but were not labeled. There is no evidence to indicate that their attitudes toward women are the same as white counselors with middle-class backgrounds. Of the three demographic areas, Detroit has the highest percentage of minorities, and counselors in Detroit demonstrated the least amount of negative bias.





Further research designed to document counselor bias toward women and discrimination against them may be redundant. Future research should be directed more specifically toward understanding the bias and developing methods to eliminate it.

### Discussion of the Data

It is abundantly clear that the high school counselors in this study tended to perceive occupations suitable for women mainly in terms of low pay, little prerequisite education, and much supervision. The data indicated that even though counselors sometimes chose occupations for females that required formal education, they seldom chose a career that paid a high salary or was supervisory in nature. This suggests that it was viewed as socially acceptable for women to have an education, as long as they stay in a dependent, supervised role.

Some of the original hypotheses in this study obviously utilized measures that were too gross. Socioeconomic background, as measured by economic conditions in youth, mother's educational level, and father's educational level, showed no statistically significant differences, yet the educational level of the counselors' parents yielded significant results when tested individually.

An objection frequently registered by the participating counselors, when asked to make a judgment about a client or a potential client, was that they do not judge counselees or make decisions for them. Nevertheless, these counselors do provide occupational information for counselees and decide which information is more appropriate to share. If counselors have a predisposition to choose



low-paying occupations that require little education and need more supervision for female case study subjects as shown in this research, it is likely that the counselor will more often choose literature that describes lower paying, nonsupervisory jobs requiring less education for female than for male clients. The predisposition detected in this study undoubtedly has an effect on the nature of counseling received by girls in spite of the objections raised by some counselors contacted in this study.

One of the curious findings of this study was that counselors whose mothers had more than an average formal education and counselors whose mothers had less than an average formal education tended to choose better paying jobs that required less supervision than counselors whose mothers had an average amount of formal education. One would not have expected the counselors whose mothers fell at opposite ends of the educational continuum to choose similar kinds of occupations for girls. Perhaps this pattern was related to whether a counselor's mother had worked.

Statistically we know that most women work out of economic necessity. We also know that the more formal education a woman has the more likely she is to work outside of the home. It seems probable, then, that women with an average education are the least likely to have work experience outside of the home.

Even though the results were statistically significant, the wrong question regarding the mother may have been asked. Hindsight now suggests that it would have been better to ask: "Does the

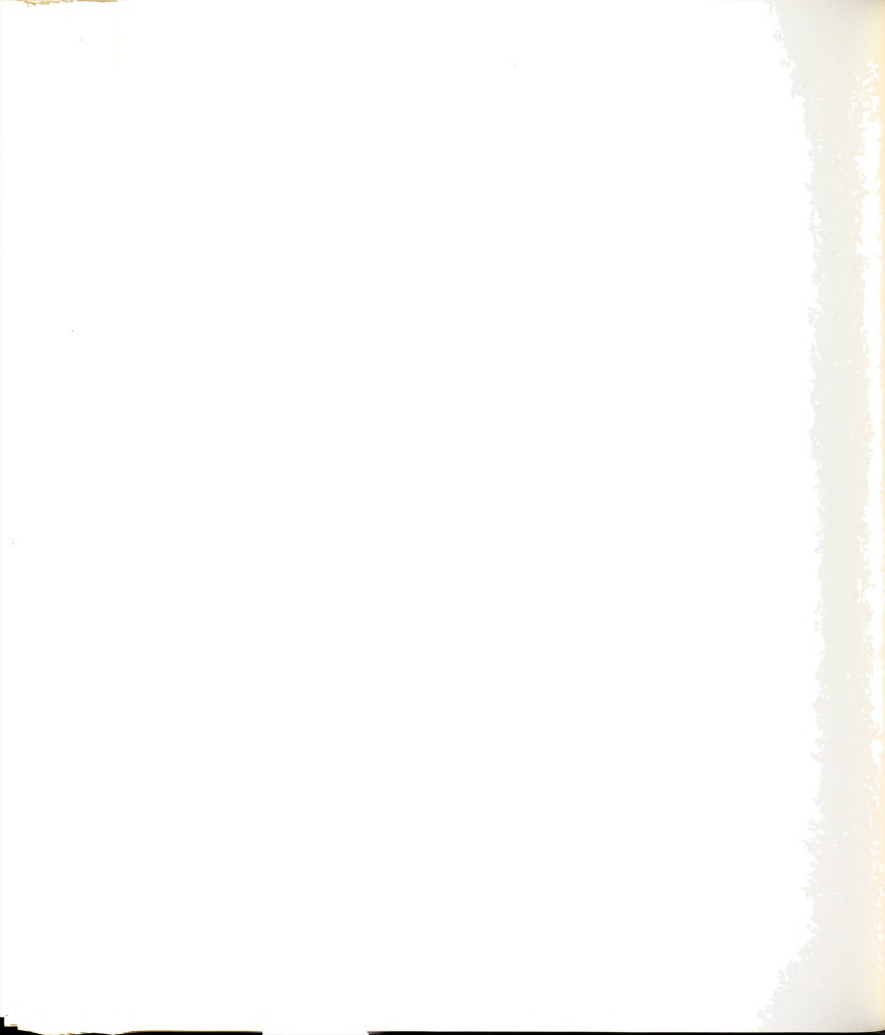


occupational history of the counselor's mother have an effect on the kinds of occupations a counselor is predisposed to consider when counseling a female client?"



## APPENDICES





APPENDIX A

FORM A OF QUESTIONNAIRE



## APPENDIX A

### FORM A OF QUESTIONNAIRE

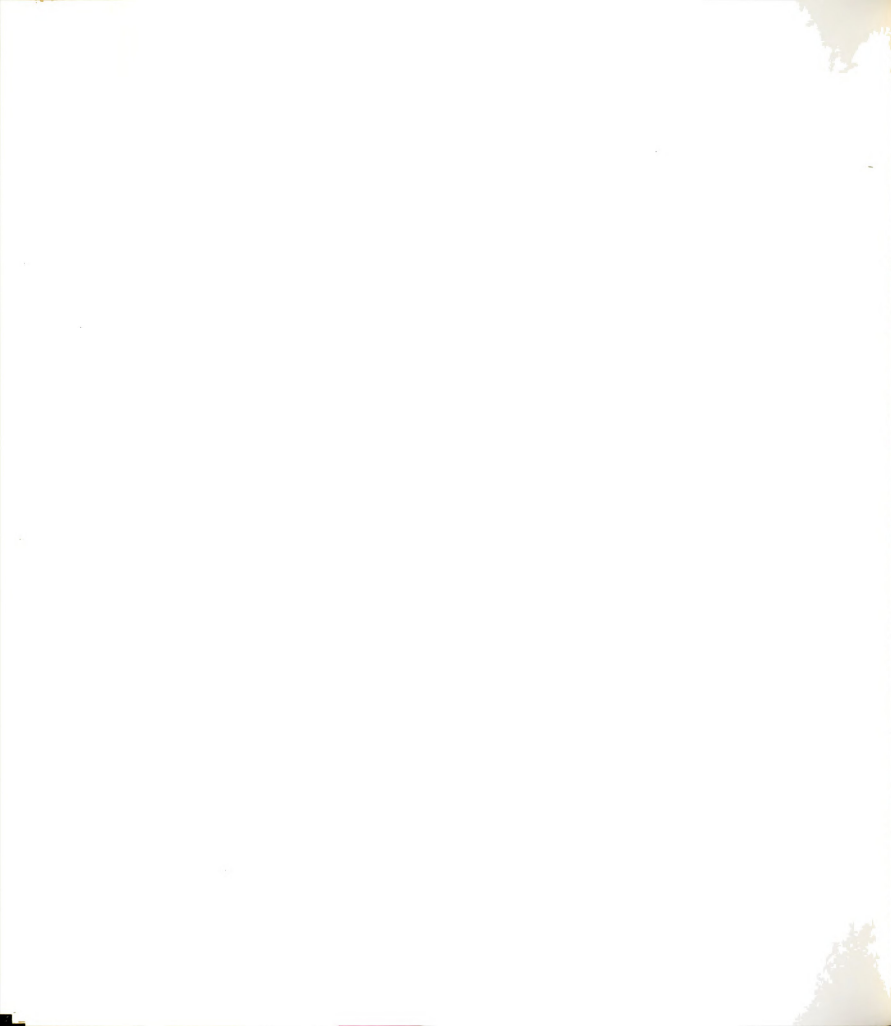
#### QUESTIONNAIRE

Air Traffic Controller	File Clerk	Secretary
Architect	Hair Stylist	Semiskilled Worker
Automobile Sales Manager	Head Cook	Service Station Attendant
Bookkeeper	Non-commissioned Officer in the Military	Skilled Worker
Carpenter	Physician	Small Business Owner- Manager
Certified Public Accountant	Registered Nurse	Supervisor/Foreman
City Manager	Sales Clerk	Unskilled Worker
Computer Programmer	School Teacher	Waiter
Corporation Executive	School Administrator	Waitress
Director of Personnel		Welder

#### DIRECTIONS:

From the occupations listed above, choose the career you feel is most appropriate for each of the subjects below. Write your choice on the enclosed data sheet.

1. Willie is a black "C" average student from a disadvantaged neighborhood. His nonverbal I.Q. is 112; his verbal I.Q. is 97. He is the best dancer in the school and has also done well in interscholastic athletics. He is a capable leader and has organized two extracurricular groups, practically without teacher supervision.
2. Ann is a gregarious young woman who enjoys working with people. She especially liked working as a volunteer in a hospital. She received 590 verbal and 460 math on the Scholastic Aptitude Test.
3. Rita is a better than average student whose best high school grades have been in biology, history, and art. She is good in abstract reasoning and spatial relations. Vocational interest survey indicate that she prefers to work with data rather than people or things.
4. John is a quiet person with few interests. His full scale I.Q. is 92. He doesn't want more out of life than a decent wage and being left alone.
5. Betty dislikes routine and wants to follow a socially relevant career. Her I.Q. is in the bright normal range, but she only scores at the 50th percentile on math, mechanical aptitude and spatial relations on the Differential Aptitude Test. She admires her father who is a medical doctor.
6. Joe is a bookworm who has a hard time getting along with his peers. He is interested and capable of any kind of academic work and enjoys theoretical work best.



On the basis of the limited information provided in the case studies, please write the one occupation you chose for each case study subject below:

Case #1 \_\_\_\_\_

Case #2 \_\_\_\_\_

Case #3 \_\_\_\_\_

Case #4 \_\_\_\_\_

Case #5 \_\_\_\_\_

Case #6 \_\_\_\_\_

Now please check the responses which most accurately describe you on each of the short answer questions on the back of this page.

Handwritten text, likely bleed-through from the reverse side of the page. The text is arranged in several lines and is mostly illegible due to fading and the quality of the scan. Some words like "the" and "and" are faintly visible.

## PERSONAL DATA SHEET

My age is:            I am:            I am:            Married respondents only:            My spouse is:           

           under 30            Male            Single            employed

           30 to 40            Female            Married            not employed

           40 to 50

           50 to 60 I hold:           

           over 60            less than an M.A.

I consider myself to be:            M.A.

           more of a realist            up to ten credits beyond an M.A.

           more of an idealist            ten or more credits beyond an M.A.

           an Ed.S., Ed.D., or Ph.D.

I am a member of the following organizations:           

           APGA and            Division(s) of APGA;            MPGA and            division(s) of MPGA;            Local Personnel and Guidance Association;            MEA or AFT:           

           APA, NSCA, or other professional organization not affiliated with APGA.

When I was growing up I considered my family to be:           

           poorer than most families

           about as well off as the average American family

           wealthier than most families

Compared with most Americans his age, my father attended:           

           fewer years of formal schooling

           about the same formal schooling

           more years of formal schooling

Compared with most Americans her age, my mother attended:           

           fewer years of formal schooling

           about the same amount of formal schooling

           more years of formal schooling

I have had approximately            years of counseling experience.

My job title is:           

I hold an M.A. in the field of:           

RETURN TO:  
Thomas J. D  
831 Morris  
Lansing, MI

RETURN TO:  
Thomas J. Donahue  
831 Morris Ave.  
Lansing, MI 48917





APPENDIX B

FORM B OF QUESTIONNAIRE



## APPENDIX B

### FORM B OF QUESTIONNAIRE

#### QUESTIONNAIRE

Air Traffic Controller	File Clerk	Secretary
Architect	Hair Stylist	Semiskilled Worker
Automobile Sales Manager	Head Cook	Service Station Attendant
Bookkeeper	Non-commissioned Officer in the Military	Skilled Worker
Carpenter	Physician	Small Business Owner- Manager
Certified Public Accountant	Registered Nurse	Supervisor/Foreman
City Manager	Sales Clerk	Unskilled Worker
Computer Programmer	School Teacher	Waiter
Corporation Executive	School Administrator	Waitress
Director of Personnel		Welder

#### DIRECTIONS:

From the occupations listed above, choose the career you feel is most appropriate for each of the subjects below. Write your choice on the enclosed data sheet.

1. Belinda is a black "C" average student from a disadvantaged neighborhood. Her nonverbal I.Q. on the Lorge Thorndike is 112; her verbal I.Q. is 97. She is the best dancer in the school and has also done well in interscholastic athletics. She is a capable leader and has organized two extracurricular groups, practically without teacher supervision.
2. John is a gregarious young man who enjoys working with people. He especially liked working as a volunteer in a hospital. He received 590 verbal and 460 math on the SAT.
3. Joe is a better than average student whose best high school grades have been in biology, history, and art. He is good in abstract reasoning and spatial relations. Vocational interest surveys indicate that he likes to work with data rather than people or things.
4. Betty is a quiet person with few interests. Her full scale I.Q. is 92. She doesn't want more out of life than a decent wage and being left alone.
5. Steve dislikes routine and wants to follow a socially relevant career. His I.Q. is in the bright normal range, but he only scores at the 50th percentile on math, mechanical aptitude and spatial relations on the DAT. He admires his father who is a medical doctor.
6. Ann is a bookworm who has a hard time getting along with her peers. She is interested and capable of any kind of academic work and enjoys theoretical work best.



On the basis of the limited information provided in the case studies, please write the one occupation you chose for each case study subject below:

Case #1 \_\_\_\_\_

Case #2 \_\_\_\_\_

Case #3 \_\_\_\_\_

Case #4 \_\_\_\_\_

Case #5 \_\_\_\_\_

Case #6 \_\_\_\_\_

Now please check the responses which most accurately describe you on each of the short answer questions on the back of this page.



## PERSONAL DATA SHEET

My age is:                      I am:                      I am:                      Married respondents only: My spouse is:  
      ☐ under 30                      ☐ Male                      ☐ Single                      ☐ employed  
      ☐ 30 to 40                      ☐ Female                      ☐ Married                      ☐ not employed  
      ☐ 40 to 50  
      ☐ 50 to 60                      I hold:  
      ☐ over 60                      ☐ less than an M.A.  
I consider myself to be:                      ☐ M.A.  
      ☐ more of a realist                      ☐ up to ten credits beyond an M.A.  
      ☐ more of an idealist                      ☐ ten or more credits beyond an M.A.  
    ☐ an Ed.S., Ed.D., or Ph.D.

I am a member of the following organizations:

☐ APGA and ☐ Division(s) of APGA; ☐ MPGA and ☐ division(s) of MPGA; ☐ Local Personnel and Guidance Association; ☐ MEA or AFT; ☐ APA, NSCA, or other professional organization not affiliated with APGA.

When I was growing up I considered my family to be:

☐ poorer than most families  
☐ about as well off as the average American family  
☐ wealthier than most families

Compared with most Americans his age, my father attended:

☐ fewer years of formal schooling  
☐ about the same formal schooling  
☐ more years of formal schooling

Compared with most Americans her age, my mother attended:

☐ fewer years of formal schooling  
☐ about the same amount of formal schooling  
☐ more years of formal schooling

I have had approximately  years of counseling experience.

My job title is: .

I hold an M.A. in the field of: .

RETURN TO:  
 Thomas J. Donahue  
 831 Morris Ave.  
 Lansing, MI 48917





APPENDIX C

LETTERS AND ENCLOSURES SENT TO  
VOCATIONAL GUIDANCE EXPERTS



## APPENDIX C

### LETTERS AND ENCLOSURES SENT TO VOCATIONAL GUIDANCE EXPERTS

Thomas J. Donahue  
831 Morris Avenue  
Lansing, MI 48197  
Tel: 489-4166 or 372-2020  
December, 1974

Thank you for consenting to assist me in my doctoral dissertation. I am attempting to rank-order a list of occupations from the most highly supervised to the most highly supervisory in nature. A definition of supervision is on a separate sheet for clarification.

If you would rank the 46 occupations and return the list to me in the stamped self-addressed envelope, it would assist me greatly. Please rank them in two stages. First write the names of the occupations on the attached sheet according to the seven categories listed in the definition.

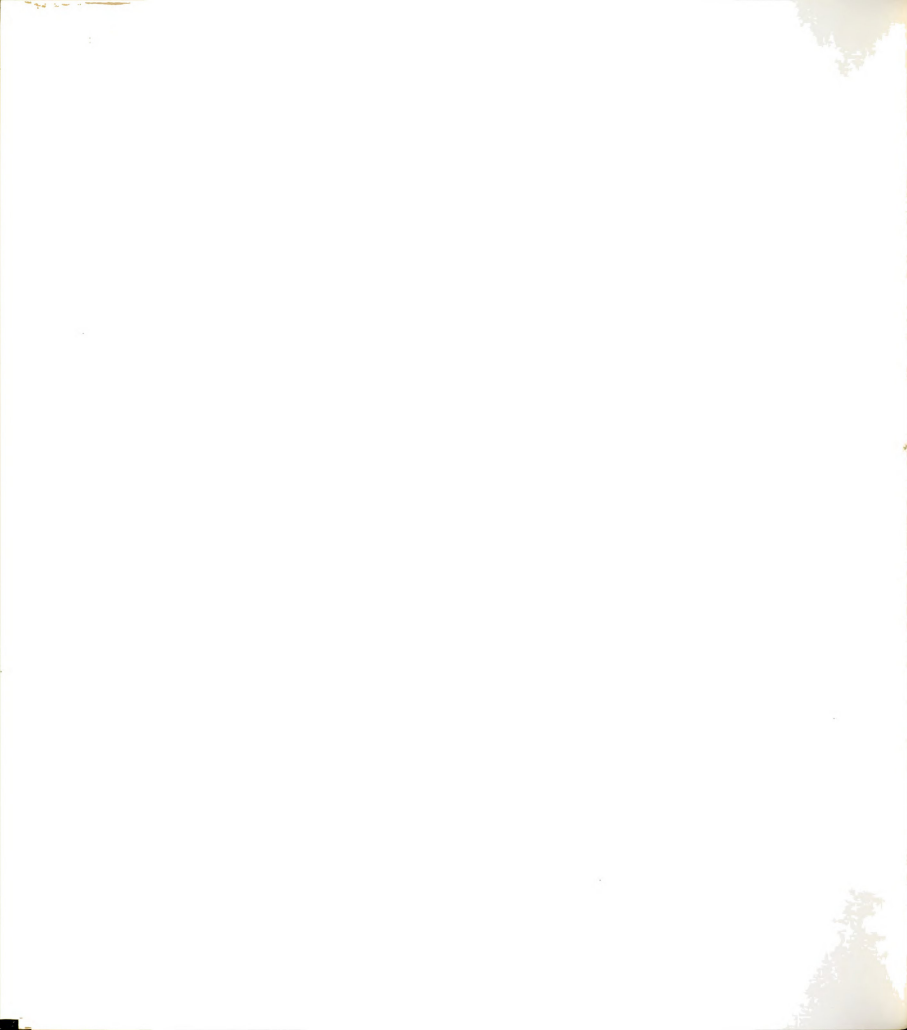
After all occupations have been ranked by category, find the occupation in each category which is the most closely supervised or least supervisory and put the number one (1) in front of it, and a two (2) in front of the next most supervised and so on until you rank all of the occupations in that category. When finished, all occupations will be ranked in seven categories.

If you would like a copy of the final ranking and/or a copy of the results of the study, please check the blank(s) below and return this letter with the ranked list. The final ranking should be completed in the first week of January, and thesis completed in August. Many thanks for your assistance. If you have any questions, please call.

Sincerely,

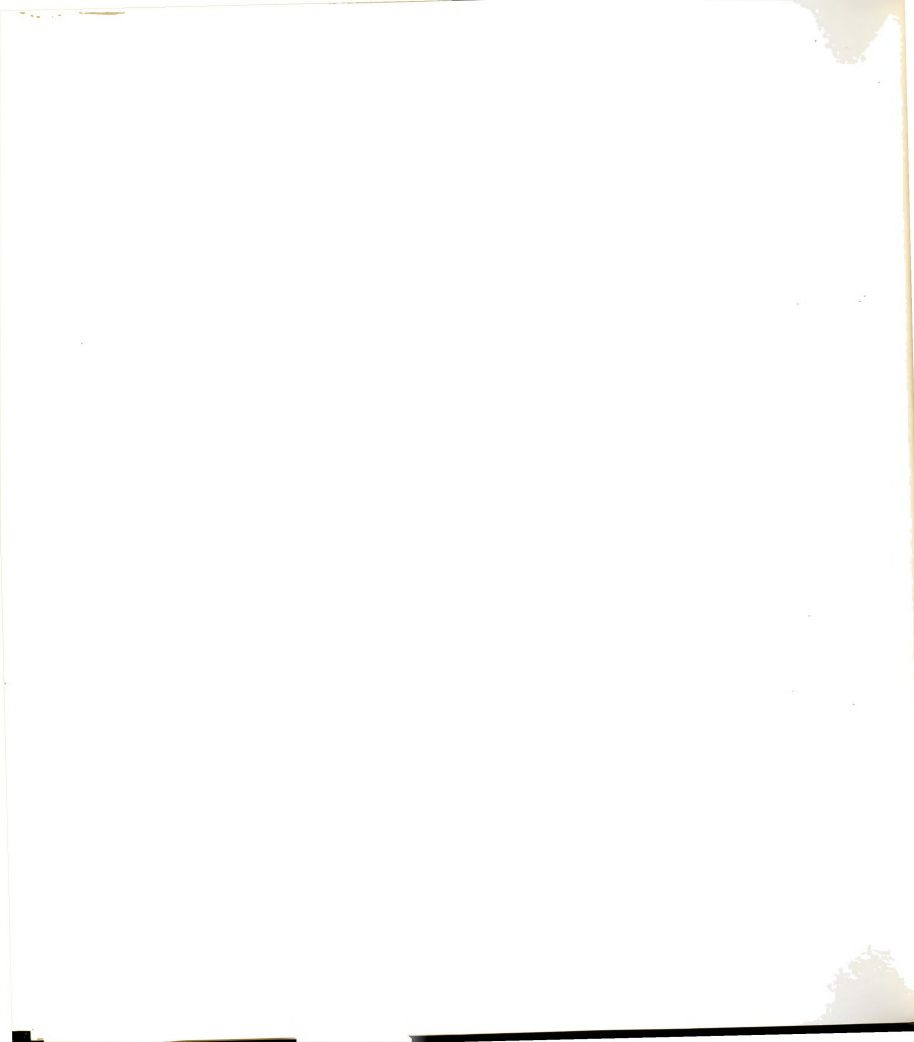
Thomas J. Donahue

- ☐ I would like a copy of the final rank.
- ☐ I would like a copy of the dissertation abstract.



OCCUPATIONS LIST

Air traffic controller	Military NCO
Architect	Minister/priest/rabbi
Bookkeeper	Nurse (registered)
Business machine service technician	Pharmacist
Carpenter	Plumber
Cashier	Psychologist (Ph.D.)
Certified public accountant	TV & radio service technician
City manager	Sales clerk
Corporation executive	School teacher
Director of personnel	School administrator
Draftsman	Secretary
Engineer	Semi-skilled worker
File clerk	Shoemaker
Firefighter	Skilled worker
Forklift operator	Small business owner-manager
Gas station attendant	Social worker
Lawyer	Supervisor/foreman
Hair stylist	Tailor/seamstress
Head cook	Telephone operator
Insurance actuary	Unskilled worker
Journalist-reporter	Waiter/waitress
Law enforcement officer	Welder
Physician	
Mail carrier	



DEFINITION FROM CHAPTER III

An occupation's degree of supervision is based on the amount of authority, responsibility, and judgment exercised in that occupation. Supervision is ranked on a scale from one to seven. At the lower end of the continuum is the individual who is completely supervised, has practically no authority, responsibility or opportunity to make judgments in his work, which usually consists of routine tasks. At the other end of the continuum is the chief executive who is responsible for all aspects of an organization, who must frequently make judgments and decisions, and holds direct or indirect authority over all employees. The supervisory nature of an occupation is measured only in relation to other employees in the same organization, and not in relation to customers, clients, patients, or consultants.

The coefficient of supervision for an occupation is the mean numerical judgment of six experts in the vocational education and career field. Two experts are professors at a university, two are employment counselors at the Michigan Employment Security Commission, and two are high school technical, industrial, and business coordinators. Each expert was asked to rank the occupation on a scale from one to seven according to the following scale:

1. Completely supervised--a person who supervises no one and is completely supervised, while doing routine tasks.
2. Closely supervised--a person who supervises no one, but is closely supervised.
3. Loosely supervised--a person who supervises no one, but may exercise judgment in his job which is loosely supervised.



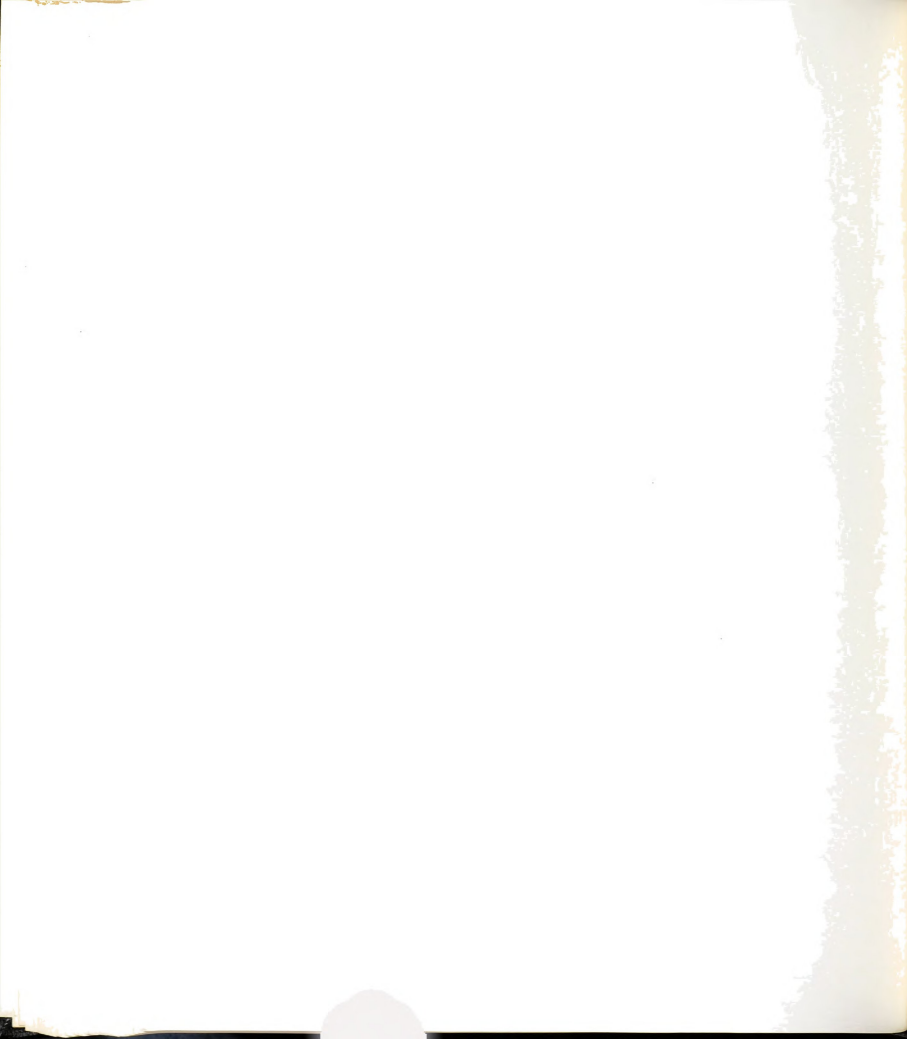


4. Semi-autonomous--a person who supervises no one, and is not closely supervised by anyone.
5. Partially supervisory--a person who supervises a small number of employees.
6. Primarily supervisory--a person who supervises a large number of employees and maintains responsibility for their work.
7. Totally supervisory--a person who directs an institution or business.



1	2	3	4	5	6	7
Completely Supervised	Closely Supervised	Loosely Supervised	Semi-Autonomous	Partially Supervisory	Primarily Supervisory	Totally Supervisory

Signature (optional)



Thomas J. Donahue  
831 Morris Avenue  
Lansing, MI 48917  
January 29, 1975

Dear \_\_\_\_\_:

I am still struggling with rating various careers by amount of supervision. I had to add some careers to the list and change others. Would you please rate the following careers for me?

Architect \_\_\_\_\_

Automobile Sales  
Manager \_\_\_\_\_

Certified Public  
Accountant \_\_\_\_\_

I would appreciate it if you would rate these occupations according to the attached scale and drop this letter in the mail to me using the enclosed envelope.

Thanks again,

Enclosures



OCCUPATIONS BY COEFFICIENT OF SUPERVISION  
WITH RATINGS OF SIX EXPERTS

<u>Coefficient</u>	<u>Occupation</u>	<u>E<sub>1</sub></u>	<u>E<sub>2</sub></u>	<u>E<sub>3</sub></u>	<u>E<sub>4</sub></u>	<u>E<sub>5</sub></u>	<u>E<sub>6</sub></u>
1	File clerk	1	1	1	1	3	1
1	Unskilled worker	1	1	1	1	2	1
2	Bookkeeper	2	3	1	3	3	2
2	Salesclerk	2	2	2	2	3	1
2	Semi-skilled worker	2	2	3	2	3	2
2	Service station attendant	3	2	1	2	3	1
2	Waiter/waitress	1	3	2	2	3	1
3	Carpenter	3	3	3	4	3	2
3	Hair stylist	4	3	3	4	3	2
3	Secretary	3	3	3	3	4	1
3	Skilled worker	3	3	4	3	4	4
3	Welder	3	2	2	2	4	4
4	Air traffic controller	3	4	4	4	4	4
4	Certified public acc't.	5	4	4	5	4	4
4	Computer programmer	3	4	3	3	4	4
4	School teacher	4	3	5	6	4	4
4	Architect	4	4	3	5	3	4
5	Head cook	6	6	5	5	5	5
5	Military NCO	5	5	5	6	3	5
5	Physician	5	5	6	5	5	6
5	Registered nurse	5	6	5	5	3	6
6	Automobile sales mgr.	6	6	5	5	5	6
6	Director of personnel	6	6	7	5	6	6
6	School administrator	7	6	6	6	7	6
6	Supervisor/foreman	6	5	5	6	6	6
7	City manager	5	7	7	7	7	6
7	Corporation executive	7	7	6	7	7	7
7	Owner/manager of a small business	7	7	5	7	7	6

Columns E<sub>1</sub> & E<sub>2</sub> = Estimates by MESCC counselors.

Columns E<sub>3</sub> & E<sub>4</sub> = Estimates by school technical, industrial, and  
business coordinators.

Columns E<sub>5</sub> & E<sub>6</sub> = Estimates by counselor educators at a university.





APPENDIX D

LETTERS TO SUBJECTS



## APPENDIX D

### LETTERS TO SUBJECTS

831 Morris Ave.  
Lansing, MI 48917  
February 18, 1975

Dear Colleague:

In order to complete some research of interest to our profession, I need some data which only you can supply. Your name was randomly chosen from a list of all secondary school counselors in Michigan. I would greatly appreciate your cooperation.

Please read the six short sketches on the back of this letter and choose a career objective from the list of occupations which you feel is most appropriate for each one. Write the career on the enclosed sheet. Since your time is limited, the case studies have been kept short. Do not be concerned about possible incomplete data or spend an excessive amount of time deliberating. When several careers on the list seem appropriate, narrow the choice down to one. There are no right or wrong answers. You may use a career more than once.

In addition to the six career selections, please check the appropriate responses on the personal data items. All information will be kept confidential. No information about individual counselors will be recorded or used, since this study only deals with groups of counselors as a professional category, and in no way compares one counselor with another.

If you know a colleague that has also received a questionnaire, please don't discuss it until after both of you have completed and returned it. If you wish to have a summary of the results of the study, please write your name and address on the enclosed 3 x 5 card and return it with the data sheet in the self-addressed stamped envelope. The entire task should take less than half an hour, if you don't deliberate excessively. Since the success of this study depends on your cooperation, please don't lay it aside for later, but do it now.

Gratefully,



Thomas J. Donahue



Thomas J. Donahue  
831 Morris Avenue  
Lansing, MI 48917

March 17, 1975

Dear Colleague,

About three weeks ago I asked you to complete a questionnaire by choosing a career for each of six short case studies and answering some questions about your background.

The purpose of this research is to determine if some counselors have a tendency to select certain kinds of occupations. This would be valuable information for our profession since in order to counsel effectively, we must understand our own conscious and unconscious tendencies.

The questionnaire is somewhat projective in nature and does not mean to imply that counselors choose occupations for their clients, nor that they are comfortable with the small amount of information which was included with each of the six cases. In short, your choice will reflect the tendencies of certain groups of counselors with a background similar to yours. No individual questionnaires will be analyzed and no counselor will be identified by name.

Because of methodological random sampling restrictions, I am unable to ask someone else to complete the questionnaire if you don't. If you would assist me and our profession by taking a few minutes to return the questionnaire, I would greatly appreciate it. If you wish to have a summary of the findings, return the enclosed 3 x 5 card with your name and address on it.

Sincerely,



Thomas J. Donahue



Thomas J. Donahue  
831 Morris Avenue  
Lansing, MI 48917

April 26, 1975

Dear Colleague:

You may recall that I am doing a study involving Michigan school counselors in which you were asked to participate. Although most counselors have returned the questionnaires sent in February and March, I have no record of receiving yours. In order to assure a valid study, each questionnaire is important. Because of sampling restrictions, I am unable to select another counselor to take your place. If you would take a few minutes to complete this questionnaire, I would greatly appreciate it.

I asked a few counselors who did not return the questionnaire about their reservations. The following may help clarify any reservations you might have:

- The study in no way assumes that, in practice, counselors would select careers for their clients.
- The brevity of the case studies is purposeful and is meant to give a "first impression." It is understood that in a real situation, much more information would be needed.
- No individual's questionnaire will be analyzed separately and no counselor will be identified by name. Identifying numbers on the envelope are used to follow up those who did not return their questionnaires.
- Six professors from Michigan State University have assisted in designing this study. They will also assist in the data analysis but will not see individual responses or know who was asked to participate in the study.
- Although I can not explain the study beforehand without the risk of distorting the returns in some way, I will send you a summary of the results when the study is completed if you write your address on the enclosed 3 x 5 card and return it to me.

Sincerely,

Thomas J. Donahue

TJD/bp





831 Morris Avenue  
Lansing, MI 48917

May 24, 1975

Dear Colleague,

This is a final request for your help in completing research, which is being conducted under the auspices of Michigan State University, and which I believe will be of value to the counseling profession. To date, 81% of the counselors selected have returned completed questionnaires, but more are needed to make the data as complete as possible.

Previous questionnaires were confidential. This questionnaire is both anonymous and confidential. The code letters on the questionnaire identify the demographic area of your school (D-greater Detroit, C-city over 40,000 in population; R-rural or suburban).

The short case studies are meant to give only a first impression, rather than a detailed report. Filling out this questionnaire in no way implies that you would choose occupations for clients in an actual situation.

If you would take out a few minutes to fill out at least the portions which do not offend you, I would greatly appreciate it.

Sincerely,

Thomas J. Donahue



## APPENDIX E

### OCCUPATIONS BY COEFFICIENT OF REMUNERATION



# APPENDIX E

## OCCUPATIONS BY COEFFICIENT OF REMUNERATION

<u>Coefficient</u>	<u>Occupation</u>	<u>Coefficient</u>	<u>Occupation</u>
1	Unskilled worker	4	Military noncommis- sioned officer
1	Waiter/waitress	4	Automobile sales manager
1	Service station attendant	5	Architect
1	Sales clerk	5	Carpenter
2	Head cook	5	Skilled worker
2	Bookkeeper	6	Air traffic controller
2	File clerk	6	School administrator
2	Secretary	6	Owner/manager of a small business
3	Hair stylist	6	Director of personnel
3	School teacher	7	Certified public accountant
3	Semi-skilled worker	7	City manager
3	Supervisor/foreman	7	Corporation executive
3	Welder	7	Physician
4	Programmer computer		
4	Registered nurse		



APPENDIX F

OCCUPATIONS BY COEFFICIENT OF EDUCATION





## APPENDIX F

### OCCUPATIONS BY COEFFICIENT OF EDUCATION

<u>Coefficient</u>	<u>Occupation</u>
1	Sales clerk
1	Service station attendant
1	Supervisor/foreman
1	Unskilled worker
1	Waiter/waitress
2	File clerk
2	Hair stylist
2	Head cook
2	Welder
3	Bookkeeper
3	Military NCO
3	Owner/manager of a small business
3	Semi-skilled worker
4	Computer programmer
4	Automobile sales manager
4	Secretary
5	Carpenter
5	Director of personnel
5	Registered nurse
5	Skilled worker
6	Architect
6	Air traffic controller
6	Certified public accountant
6	School teacher
7	City manager
7	Corporation executive
7	Physician
7	School administrator



APPENDIX G

OCCUPATIONS WITH COEFFICIENTS OF  
REMUNERATION, EDUCATION, AND SUPERVISION



# APPENDIX G

## OCCUPATIONS WITH COEFFICIENTS OF REMUNERATION, EDUCATION, AND SUPERVISION

	<u>Remuneration</u>	<u>Education</u>	<u>Supervision</u>
Air traffic controller	6	6	4
Architect	5	6	4
Automobile sales manager	4	4	6
Bookkeeper	2	3	2
Carpenter	5	5	3
Certified public accountant	7	6	4
City manager	7	7	7
Computer programmer	4	4	4
Corporation executive	7	7	7
Director of personnel	6	5	6
File clerk	2	2	1
Hair stylist	3	2	3
Head cook	2	2	5
Noncommissioned officer	4	3	5
Physician	7	7	5
Registered nurse	4	5	5
Sales clerk	1	1	2
School administrator	6	7	6
School teacher	3	6	4
Secretary	2	4	3
Semi-skilled worker	3	3	2
Service station attendant	1	1	2
Skilled worker	5	5	3
Small business owner/manager	6	3	7
Supervisor/foreman	3	1	6
Unskilled worker	1	1	1
Waiter/waitress	1	1	2
Welder	3	2	3



## APPENDIX H

### COMPUTATION OF SCORE ADJUSTMENT FACTORS





## APPENDIX H

### COMPUTATION OF SCORE ADJUSTMENT FACTORS

Before reading this section, the reader may wish to briefly review the two forms of the questionnaire in Appendices A and B, taking special note of the arrangement and imputed abilities of the male and female case study subjects on each form. It is also important to recall that the score of a questionnaire on each one of the three dependent variables was formed by subtracting the sum of the three female scores on that variable from the sum of the three male scores on that variable.

In the process of preparing the data for analysis, it was noted that scores on Form B questionnaires were consistently higher than scores on Form A questionnaires. This occurred because information contained in cases two, three, and five usually elicited challenging careers, and information in cases one, four, and six usually elicited less challenging careers.

The adjustment process described here involves (1) determining the mean difference between test forms, and (2) adding half of the mean difference to Form A, which had consistently low scores, and subtracting half of the mean difference from Form Q questionnaires, which had consistently high scores. The net effect of this process makes scores on Form A comparable to scores on Form B of the questionnaire.

The case study subjects in cases numbered two, three, and five were of the same sex, and the opposite sex designation was assigned to the case study subjects in cases numbered one, four, and six. The coefficient of remuneration for each respondent was found by computing

the sum of the three female remuneration scores and subtracting it from the sum of the three male remuneration scores. Coefficients of education and supervision were formed using the same procedure.

Although it was not intended, the males who appeared in cases two, three, and five on Form B appeared more talented and motivated than the females in cases one, four, and six, who appeared rather dull. Hence, when the sum of the very low female scores was subtracted from the sum of the very high male scores, the coefficient was very high for all respondents who received Form A of the questionnaire.

On Form A the females who appeared in cases two, three, and five appeared more talented and motivated than the males in cases one, four, and six, who appeared rather dull. Consequently, when the sum of the female scores was subtracted from the sum of the male scores, the coefficients were usually near zero. The talented and motivated female case study subjects usually received the same kinds of occupations as rather dull male case study subjects.

The following chart shows the relative difference in test forms:



Case Study Number	Form	N	Relationship of Scores	Average Remuneration Score	Average Education Score	Average Supervision Score
2	B <sub>Male</sub> Subjects	114	Highest	14.00	15.85	14.68
3	A <sub>Female</sub> Subjects	114	Average			
4						
1	A <sub>Male</sub> Subjects	114	Average	11.08	11.52	11.00
4	B <sub>Female</sub> Subjects	114	Lowest			
6						
Average difference due to test form:				2.92	4.33	3.68

The adjusted remuneration coefficient was formed in the following manner:

1. The sum of scores for all cases numbered two, three, and five was computed. This was called X.
2. The sum of all scores for cases numbered one, four, and six was computed. This was called Y.
3. Then X minus Y was equal to the total number of points on all questionnaires due to test form alone.
4. This remainder was divided by N to determine the mean difference between questionnaire Form A and questionnaire Form B.
5. In order to adjust scores for different test forms, three different approaches were considered: (1) subtract the remainder

divided by N from each Form B respondent's score; or (2) add the remainder divided by N to all Form A respondents' scores; or (3) add one-half of the remainder divided by N to all Form A respondents' scores, and subtract one-half of the remainder divided by N from all Form B respondents' scores. Either of these three methods would bring about a satisfactory adjustment. The third alternative was selected. Mathematically this entire process can be stated:

$$\frac{X - Y}{2N} = Z$$

where Z is the adjustment factor and N is the number of respondents. After the adjustment factor was computed it was added to each Form A coefficient and subtracted from each Form B coefficient.

The same procedure was used to find the adjustment factor for the education coefficient and for the supervision coefficient. Using adjusted scores allowed the data to be treated as if the two forms of the questionnaire were equivalent. Adjustment factors for each of the three dependent variables are summarized in the following chart:

	<u>Remuneration</u>	<u>Education</u>	<u>Supervision</u>
X	3191	3613	3347
Y	2520	2627	2507
N	228	228	228
Z	1.5	2.2	1.8

X is the sum of scores for cases two, three, and five.

Y is the sum of scores for cases one, four, and six.

N is the number of respondents.

Z is the adjustment factor =  $\frac{X - Y}{2N}$ .

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