COUNSELLOR BIAS IN OCCUPATIONAL CHOICE
FOR FEMALE STUDENTS

by

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to the required standard

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The purpose of this study was to determine if high school counsellors in British Columbia would have a tendency to choose for females, jobs that paid less, required less education and more supervision. In addition, counsellor's age and family background were examined to see if these variables related to counsellor career selection for young women. It was thought that a study of this type was important to establish if an occupational career bias against females does exist, and then, to use that data to bring this information into counsellors' awareness. This data would be useful for the improvement of both in-service and university-based counsellor education program.

A random sample of 200 high school counsellors from the British Columbia Counsellors Association were asked to analyze six case studies previously designed and used by Donahue (1976). The personal characteristics of the student described in each case study could describe either a male or a female. Two forms containing identical case study information were used. However, on the second form the sex designation of each case study subject was the opposite of the sex designation on the first form. Thus, each case was presented to half of the counsellors in the sample as a male student and to the other half of the counsellors in the sample as a female student.
Participants were given a list of 28 occupations. These occupations had been previously given weighted coefficients on a seven-point scale for salary, level of prerequisite education, and for level of supervision. The counsellors were asked to choose three occupations for each case study subject and rank these occupations in order of preference. The occupations were later assigned a coefficient of remuneration, education and supervision. In addition, on a short personal data sheet, enclosed with the questionnaire, respondents were asked to provide information on their age and family structure.

The data were collected over a seven week period. Sixty-nine per cent of the subjects completed the questionnaire and data sheets. However, twelve per cent of the questionnaires returned were not in usable form. The data were analyzed using the Mann-Whitney U test.

The results demonstrated that British Columbia counsellors in the study tended to choose lower paying occupations that are more highly supervised for female case study subjects than for male subjects. The differences were statistically significant for these two variables. There appeared to be no difference in levels of prerequisite education chosen for both male and female case study subjects.

The two additional variables of counsellor's age and family structure were found to be independent of and unrelated to remuneration, education and supervision levels chosen. Counsellors of all ages and types of family structures
chose occupations for females that paid less and were more highly supervised than the occupations chosen for identical male case study subjects.

In conclusion, British Columbia counsellors in this study hold the same occupational biases toward women. They encourage, perhaps at an unconscious level, conformity to the currently accepted sex roles in the labour market. These counsellors showed a marked tendency to choose different kinds of occupations for males than for females. The occupations chosen perpetuate the current condition of women who earn less than men, seldom work in a supervisory capacity and do not fully utilize their equivalent, formal education.
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CHAPTER I

Introduction

Statistics Canada (January 1979) reported that there are nearly four and one-third million women workers in Canada, about 40% of the total labor force. During the last decade the number of women workers has increased by 68.6%. U.S. News and World Report stated that women were entering the work force at a rate of two million a year in the U.S. Women in the U.S. and Canada are entering the work force at an ever increasing rate, and yet, women still have not escaped the stereotype of "women's work." Nearly 80% of all working women are employed in the traditional clerical, sales, service or light factory jobs. These statistics suggest that many women continue to be victims of job discrimination. However, more than just job discrimination is involved. Many working women simply lack the education, training or desire to qualify for higher paying jobs. The lack of preparation is sometimes ascribed to the "Cinderella Syndrome"--the belief by women that they always will be supported by men. Surveys show that young women generally underestimate how much future livelihoods will depend upon jobs of their own. Yet, Statistics Canada (1976), reports that 464,345 families, almost half a million, are headed by a woman.

In 1977 U.S. News and World Report stated that among
full time workers, median earnings for women totaled $8,818, just 58.9% of the $14,626 median earned by men. Statistics Canada (1979) doesn't have information on separate categories for men and women. It does report industry earnings--construction, $18,907.68 per year; mining, $20,171.20. These two industries are predominantly filled by men, whereas secretaries earn $12,000.00 and nurses $16,000.00--both these categories are predominantly filled by women. The basic reason for the gap is occupational segregation. Most men are employed in higher paying occupations; most women work in lower paying jobs. Three-fourths of all working women are employed in services, finance, insurance, real estate, retail trades and light factory work--what sociologists call the "girls' ghetto." Men, meanwhile dominate construction, mining, transportation and heavy manufacturing.

Even in industries where women hold a majority of the jobs, they are seldom bosses. In banking, women hold more than 80% of the clerical jobs and less than 20% of the managerial positions.

Why are the majority of women concentrated in these low status occupations? What sociological or psychological forces inhibit career options for women? A major force limiting the occupational role definition of women are sex role stereotypes. Women's roles--on television, in the classroom and in the family have been stereotyped. Women are repeatedly portrayed as "mothers with aprons on," or
they are shown primarily as nurses, librarians, waitresses, teachers, beauticians, and telephone operators. These are deep rooted attitudes that take a long time to change and they limit women to traditional roles.

The development of these attitudes linking certain occupations with one sex or the other begins early in the socialization process. Brady and Brown (1973) examined sex differences of 8- and 10-year-old boys and girls on selected vocational behavior variables. They found that boys scored significantly higher than girls on the number of varied occupational choices and that 62% of 8-year-old girls and 56% of 10-year-old girls chose teacher, nurse, or housewife as an occupation. The authors concluded that girls begin to occupationally limit themselves by 8 years of age and that 8- and 10-year-old girls' occupational goals are concentrated on nurturant and possible sex-typed career goals. Schlossberg and Goodman (1971) further examined cultural stereotyping as it applies to specific occupations. The data indicates that there is no appreciable increase in stereotyping from kindergarten to sixth grade, the children were more ready to exclude women from men's jobs than to exclude men from women's jobs and with few exceptions, the children chose jobs for themselves that fall within the usual stereotypes. It seemed the children believed a woman's place was in certain specified occupations and by contrast, they did not feel that men had to be similarly limited.
Women are limited by these socially approved job options as well as by negative stereotypes of personal qualities. Men are perceived to be "competent" and women perceived to have a relative absence of the traits which comprise competency. Relative to men, women were stereotypically perceived to be dependent, subjective, passive, noncompetitive and illogical (Rosenkrantz, Vogel, Bee, Broverman and Broverman, 1968).

As a result of society's negative bias against women, women have a lower level of self-esteem (Rosenkrantz, Vogel, Bee, Broverman and Broverman, 1963). This has important implications for future occupational development. Putnam and Hansen (1972) have documented that this lower self-esteem corresponds to a lower vocational maturity level.

Young women have difficulty viewing accurately their position in the world at work and have many vocational problems based on real needs and concerns which differ from those of men. Some of these conflicts centre around the concept of feminine role and personal career ambitions. Vocational counselling with young women must explore all career options and include the special needs of each woman. "Are counsellors free from this negative bias against women"? How can counsellors examine all career options if they themselves hold personal biases against women? Studies by Maslin and Davis (1975), and Schlossberg and Pietrofesa (1970), arrived at the same conclusion, "that counsellor bias exists
against women entering a masculine occupation." "Are counsellors in British Columbia exhibiting this same bias against women"? There has been no research on counsellors in British Columbia which examines sex role bias. Clearly, the research pertaining to early attitudinal development of sex appropriate career choices indicates the pervasive quality of sex role stereotyping. If the career exploration process is to counter such stereotyping, it must convey the message that the full range of occupations can be considered for either sex. Counsellors must convey a positive commitment to unbiased career decision making. This investigation of British Columbia high school counsellors was a step toward this end.

Purpose of the Study

The main purpose of this study was to determine whether counsellors in secondary schools in British Columbia share the sex bias attitudes prevalent in our North American culture. A second purpose of the study was to investigate counsellor characteristics which may contribute to high school counsellors limiting the kinds of occupations to be considered by their female clients. It was hoped that the results of this study would make counsellors more aware of predispositions that may affect their counselling with females and that this awareness would allow them to consider the full range of occupations for both sexes.
Definitions

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

Androgynous. Having the presence of both feminine and masculine traits in one's range of characteristic attitudes and behaviors.

Negative Bias. As used in this study, negative 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.

Typical family structure. Father who works and financially supports the family, mother who remains in the home earning no income as a full time housewife during the first twelve years of the child's (children) home life.

Atypical family structure. Any family structure that varies from the typical norm.

Hypotheses

The main hypothesis of this study was that high school counselors in British Columbia limit, whether consciously
or unconsciously, the kinds of occupations they consider in guiding female students toward career choices.

In more specific terms, there were three areas which this study investigated.

Hypothesis 1 High school counsellors will select lower paying occupations for female case study subjects than for identical male case study subjects as measured by a carefully developed coefficient of remuneration.

Hypothesis 2 High school counsellors will select occupations that require less educational preparation for female case study subjects than for identical male case study subjects as measured by a carefully developed coefficient of education.

Hypothesis 3 High school counsellors will select occupations that require more supervision for female case study subjects than for the identical male case study subjects as measured by a carefully developed coefficient of supervision.
If counsellors do have a predisposition to choose lower paying jobs that require less education and more supervision for females, it is likely that some counsellors would have a stronger predisposition than others. In addition, counsellors who have a tendency to discriminate may share certain characteristics. Subordinate hypotheses explored two of these different characteristics which could be added to some of the known characteristics; the goal being to begin developing a personal profile of a discriminating counsellor.

The subordinate hypotheses were:

Hypothesis 4  Counsellors under 35 are likely to discriminate against females less than counsellors 35 years of age and older.

Hypothesis 5  Counsellors from a "typical" family background will be more discriminating against females than counsellors from "atypical" family background.
CHAPTER II

Related Literature

Stereotypes

In North American society stereotypes outline a woman's personal characteristics, her appropriate feminine role and the vocational options suitable for her. These stereotypes are limiting for the personal growth of women as they support a negative bias toward females. Fernberger (1948) investigated the differences ascribed to men and women and concluded that not only are these stereotypes pervasive in our culture but it would be very difficult to overcome the social patterns and stereotyped opinions regarding male and female characteristics.

As a university professor, Fernberger had completed a lecture in the elementary psychology course on race and sex differences in which he stressed that many such supposed differences had not been experimentally demonstrated for either race or sex. A test was then given in groups to 217 undergraduates who had had the lecture on sex differences only a few days before. The majority of the undergraduates believed men are more intelligent than women. The opinions were that men are more intelligent, more crude, more dependent on the opposite sex and that they have all-round superiority. On the other hand, women were believed to be
the cause of trouble, to talk too much, and to be more sensitive. The social bases of these stereotypes seem universal in our culture and experience such that a lecture which stressed no fundamental psychological differences between the sexes had little or no effect on the subjects' beliefs. It may be that many of these opinions have an emotional background such that a purely intellectual appeal would have little effect in changing such opinions. If such stereotypes are to be eliminated, Fernberger felt the appeal must be emotional as well as intellectual.

Sherriffs and Jarrett (1953) continued research into the cultural stereotyping of men and women. Given a large number of behaviors and attitudes, subjects were required to state whether each item most appropriately characterized men or women. The results showed remarkable agreement between the subjects as to which behaviors and attitudes characterize men, and behaviors and attitudes which characterize women. This pattern of general traits which are ascribed to each sex form the basis of stereotypes.

Sherriffs and McKee (1957) attempted to construct a scale comprised of a larger sample of traits. They felt the scale would be more representative and show individual differences in attitudes towards males and females. The authors used Sarbin's (1955) two hundred adjective check list as a source of items. This check list is widely agreed to include many characteristics which represent significant
aspects of personality and it was not specially constructed to evaluate males and females. Subjects were asked to list ten of the characteristics of men and ten of women. The authors' main purpose was to answer the question "Is there really a difference in the degree to which members of American society esteem men and women"? Subjects responded to the adjective check list under forced and free choice conditions. Another group of subjects responded to two forms of a rating scale, one of which included a neutral point and one of which did not. The results indicated that significantly more subjects think more highly of males than of females. On the average both men and women ascribed significantly greater number of favorable adjectives to males. Women, but not men, ascribed a significantly larger number of unfavorable adjectives to females than males. In both the experimental designs--both open and forced choice--the data indicated in every case that males were regarded more favorably than females. Interestingly, subjects will, if given a chance, deny partiality for either sex. Sherriffs and McKee felt that perhaps the college subjects had a veneer of equalitarianism overlying their more firmly, established beliefs. They also felt discrimination towards women may then take many subtle forms and may not even be in one's awareness.

A follow-up study by Sherriffs and McKee (1957) attempted to examine qualitatively the characteristics which men and women ascribe to themselves and to each other. The results
indicated that the characteristics both men and women ascribed to women contain, two or possibly three, general themes. The first might be called a description of a lady—the traits emphasize social skills and grace, another theme was warmth and emotional support. The final theme included the words "sensitive," "dreamy," "artistic," and religious" which gave the impression of some sort of concern for the spiritual implications of experience. In addition, women were regarded as guilty of snobbery, and being irrational, unpleasant and emotional. In general, male subjects particularly emphasized men's desirable characteristics and female subjects emphasized women's neuroticism. The desirable characteristics ascribed to men were that men are considered frank and straightforward in social relations, intellectually rational and competent, and bold and effective in dealing with the environment. Men's undesirable characteristics were limited largely to excesses of these traits. The subjects were asked to check from among the list of adjectives those adjectives which they felt to be characteristic of themselves. The results showed that both men and women chose significantly greater numbers of adjectives from the sex-appropriate stereotype. This tendency was significantly greater among women. Sherriffs and McKee concluded that women appear to have a greater tendency to conform to social expectations or that women are more effectively indoctrinated in their social role than men.
Eleven years later Rosenkrantz, Vogel, Bee, Broverman and Broverman (1968) developed a questionnaire to assess individual perceptions of "typical" masculine and "feminine" behavior. Items on which the subjects had 75% agreement were then termed stereotypic of either masculine or feminine traits. The masculine poles of various items were more often considered to be more socially desirable than the feminine poles. The male value items seemed to reflect a "competency" cluster. Included in the cluster were attributes such as being independent, objective, active, competitive, logical, skilled in business, worldly, adventurous, able to make decisions easily, self-confident, always acting as a leader, and ambitious. A relative absence of these traits characterized the stereotypic perception of women; that is, relative to men, women were perceived to be dependent, subjective, passive, noncompetitive, illogical, etc. The female-valued stereotypic items consisted of attributes such as gentle, sensitive to the feelings of others, tactful, religious, neat, quiet, interested in art and literature and able to express tender feelings. These items are referred to as the "warmth and expressiveness" cluster.

Subjects in the Rosenkrantz et al (1968) study clearly agreed as to feminine and masculine traits, these specific qualities (competent and independent for males, warm and passive for females) describe not only personal attributes but also include appropriate responses to situations. These
appropriate responses are sex appropriate and well known to the North American culture.

Lunnenborg (1969) investigated stereotypic thinking in relation to sex differences in personality. The Edwards Personality Inventory was selected as an appropriate test instrument for it represented a fairly up-to-date, systematic survey of important normal personality variables. Subjects were instructed to predict the response of the typical male or female for the purpose of comparing these responses with the results of self-description in a comparable sample. The results showed that stereotyped responding both exaggerated existing sex differences and created differences which males and females did not normally acknowledge.

The five scales which originally did not discriminate the sexes in the self report condition but did under stereotype instructions were: plans and organizes things (higher for women), persistent (higher for men), carefree (higher for men), worries about making a good impression on others (higher for women), and likes to be alone (higher for men). When subjects were instructed to respond as one sex or the other to Edwards personality items their judgments were neither random nor mirrors of self-described sex differences. Rather, already existing sex differences in personality traits were greatly exaggerated and where there were none, they were created. These judgments, following from instructions to respond in terms of personal stereotype of
what is masculine and what is feminine, suggest that such stereotypes are quite extensive as only one scale of fourteen remained unaffected. It would appear that sex stereotypes regarding personality are the same for college men and women, that is, females describe males in exactly the same ways as males describe other males and vice versa.

The implication of this extension of previous stereotyping research is that it would appear that what is being measured by typical Male and Female scales is determined in part by stereotyped notions of sex differences. These notions are very pervasive in our culture. Not only are they pervasive but both sexes are in agreement as to which characteristics can be and are ascribed to men and women (Sherriffs and Jarrett, 1953). A significantly large number of the favorable qualities such as being independent, competent, self-confident, active, acting as a leader, able to make decisions easily, are described as being typically male. A relative absence of these traits characterizes the stereotypic perception of women. The general consensus was that men are more intelligent and have all round superiority when compared to females (Fernberger, 1948; Rosenkrantz et al, 1968; Sherriffs and McKee, 1957). However, this belief system is not always obvious to subjects or even in awareness. When directly asked, subjects will deny any preference for either sex (Sherriffs and McKee, 1956). Another element is that women were found to emphasize the unfavorable or neurotic qualities of females to a greater extent
than do males. So it appears that women, perhaps to a greater degree than men, have a negative view of both the personal qualities which a woman is believed to have and her feminine role in our culture. Women, although giving support to this negative bias of themselves, showed a greater tendency to conform to social expectations and described themselves in sex role appropriate terms (Rosenkrantz, et al, 1968).

Effects of Stereotyping

As sex role stereotypes constitute social expectations for sex appropriate behavior, these stereotypes serve as potential obstacles for woman's personal growth. A woman's self-concept appears to be influenced by the negative social values attached to female traits. Rosenkrantz, Vogel, Bee, Broverman and Broverman (1963), using college students and a stereotype questionnaire, found that sex role stereotypes continued to be clearly defined and held in agreement by both college men and women. Despite the professed and legal equality of sexes, both men and women agreed that a greater number of the characteristics and behaviors stereotypically associated with masculinity were more socially desirable than those associated with femininity. And, finally, the self-concept of men and women are very similar to the respective stereotypes. In the case of the self-concepts of women this means, presumably, that women also hold negative values of their worth relative to men (Rosenkrantz

Baruch (1972) used the same Sex Role Stereotype Questionnaire developed by Rosenkrantz, Vogel, Bee, Broverman and Broverman to obtain a self-rating of competence to compare with self-esteem as measured by Coopersmith's Self-Esteem Inventory. The results indicated that general self-esteem and self-ratings of competence were related. Evaluation of self as competent clearly is important to feminine self-esteem. For women the attainment and maintenance of a high level of self-esteem is a more difficult and complex task than for men, as the traditional feminine sex role standard does not endorse competence related traits such as ambition, competition and aggression. Also women consistently underestimate themselves in many areas as compared with both men and with their own actual abilities. Goldberg, Pheterson and Kiesler (1971) devised a study in which women were asked to judge paintings created by men and women. Some paintings were said to be entries in art competitions, others were said to have already won prizes. The subjects were 120 female college students who were presented with the eight paintings; sex of the artist, status of the painting and a brief background of personal difficulties faced by the artist, were the variables. The results indicated that women evaluated female entries in a contest less favorably than identical male entries, but female winners, equally to identical male winners. This implies that the work
of women in competition is devalued by other women. Even work that is equivalent to the work of a man will be judged inferior until it receives special distinction. Goldberg et al (1971), argued that their questionnaire data reflected the differing expectations which women (or men) have about men and women. That is, a woman will probably be less competent and her accomplishments fewer than a man, although she may be as creative and certainly as "emotional." Such analysis implied that the subjects were not really judging the artists or paintings at all, but were simply expressing attitudes they held prior to the study. Women, then, when confronted with another woman who is trying to succeed in some endeavor, will assume that she is less motivated, less expert or simply less favored by others. These assumptions are based on the negative bias against women in our culture.

A factor which has been found to influence the perception of sex role stereotypes is maternal employment. It has been argued that stereotypic sex role perceptions may be influenced by the degree of actual sex role differentiation in a given family or society. Maternal employment was felt to be a key factor in determining the degree of role differentiation that occurs between parents. If the father is employed outside the home, while the mother remains a full time homemaker, their roles are clearly polarized for the child. On the other hand, if both parents are employed outside the home, their roles are more likely to be perceived as similar. A child growing up in a family with a
working mother, therefore should experience less parental sex role differentiation than would a child with a non-working mother. A child growing up in an "atypical" family structure (i.e., single parent) should also experience less parental sex role definition than a "typical" family structure.

Harley (1964) reported that the mother's employment status does, in fact, influence a child's perception of sex role characteristics. Daughters of working mothers see adult men and women as sharing more in their activities than do daughters of nonworking mothers. Vogel, Broverman, Broverman, Clarkson and Rosenkrantz (1970) explored the generality and persistence of this effect by examining the stereotypic sex role perceptions of college-aged men and women with working versus nonworking mothers. The results indicated both men and women who are children of employed mothers perceive significantly less difference between the masculine and feminine roles, on both the stereotypic and differentiating items, than did men and women who are the children of homemaker mothers. The daughters of working mothers perceived both the masculine role and the feminine role as less extreme and they perceived less difference between the roles with respect to competency. These daughters of working mothers perceived the feminine role itself as entailing greater competency than did women with homemaker mothers. The masculine role was perceived by sons of working mothers as entailing more warmth and
expressiveness. The results support the hypothesis that sex role perceptions are affected by actual parental role behaviors to which children are exposed. It appears then, that maternal employment exerts a positive influence on the child's perception of their own sex, by augmenting competency for girls and emotional warmth and expressiveness for boys. Another important implication of the results is the evidence that the traditional conceptions of sex roles are subject to variation as a function of individual experience. Presumably, the less restrictive and more congruent definitions of sex roles held by children of working mothers influence role behavior, so that children of working mothers feel even freer than their parents to engage in overlapping role behaviors and so achieve in their own lives a greater sex role equality. Until this greater role equality occurs, women will continue to experience unique conflicts.

**Unique Conflicts Created by Stereotyping**

When sex role stereotypes do not correspond with what people think of themselves, with what they think others want them to be, or with what they ideally would like to be, then some form of conflict is likely to result. Connie Deutsch and Lucia Gilbert (1976) investigated sex role stereotypes and their influence on the adjustment of real self, ideal self and beliefs of college men and women. The results showed women's sex role concepts regarding their real self
and their beliefs of what the other sex desires were highly
dissimilar. These findings suggest sources of conflict
that exist for women but not for men. The average college
undergraduate woman saw herself as slightly feminine, wanted
to be more androgynous but believed she was more desirable
to men if she was extremely feminine. Further discrepancy
among females was found in the disparity between what they
believed men's ideal woman to be and the men's reported
ideal woman.

Earlier research by Steinmann and Fox (1966) supported
this discrepancy. They sampled 837 women and 423 men using
the Inventory of Feminine Values to organize data into four
clusters--work and accomplishment, marriage, child-rearing
and characteristics of the self. The results showed that
women did share a set of values. The average response
pattern was the same: most women outlined a relatively balanc-
ed self-perception. Development and achievement through
their own potentialities was combined with permissive
nurturing. The women outlined a balance between "extra
family strivings" and "intrafamily strivings." Their ideal wom-
an was slightly more active than themselves. However their per-
ception of man's ideal woman was a woman with little of
the self-assertion and self-achievement they reported in
themselves or in their ideal woman. Women saw man's ideal
woman as significantly more accepting and permissive than
their own self-perception of a subordinate role in both
personal development and women's place in the familial
structure. Men, when questioned in this study, stated that their ideal woman had a balance of intrafamily and extra-
family feelings. Deutsch and Gilbert (1976) felt the dis-
crepancy between the family-oriented, permissive women that women believed men desired and the ideal woman that men actually delineated may be accounted for in at least several ways:

(1) a serious lack of communication between men and women,

(2) women projecting their current feelings and what they would like men to believe, and

(3) men talking a current liberal stereotype which they may or may not believe.

The main implication from this study is that there is a real lack of communication between men and women and both do not understand each one's desires as to what role a woman should assume.

These differing attitudes toward women, held by men and women, were also found in the Kaplan and Goldman (1973) study. Women, in this study, believed there was a much greater difference in attitude for men and women than did male respon-
dents. These false perceptions of beliefs have important implications for women.

Peggy Hawley (1971, 1972) suggested that women choose careers on the basis of their belief of what men think.
The processes underlying women's career development are very much different from men's. Hawley hypothesized that men's views of appropriate feminine behavior play a significant, although often unrecognized, part in the career development process of women. An important consideration for most women is the effect of career choice upon the man-woman relationship. Women with varying degrees of awareness make career decisions on the basis of what they think men will tolerate. Hawley found that women choose careers consistent with their own judgments of the model of femininity held by significant men in their lives. For instance, Math-Science majors in the 1972 study, who were preparing for careers in nontraditional male dominated areas, believed men made little differentiation in male-female work roles and other related behaviors and attitudes. This group was found to be more androgynous, meaning a perception of behavior which does not make sex based distinctions. Their model of femininity allowed the widest range of educational and career choices without violation of sexual identity. Teachers preparing for traditional feminine careers were found to be dichotomous, meaning a perception of behavior which separates behavior into male-female categories. Thus, the careers women choose and their perception of men's views of the feminine ideal are very much related. These belief systems, not always in awareness, become forces which inhibit choice and restrict the options that are psychologically available to women. Hawley felt these attitudes
influence decisions; decisions can be followed by actions; which in turn define life style. The life style of a woman therefore is affected by her attitude.

The study by Matthews and Tiedeman (1962) had as its primary purpose to chart the effect of attitude toward career and marriage on the life style of women, as women progress through adolescence and young adulthood. Eighteen scores of attitude toward career and marriage were the primary variables. An attitude scale was used as well as two scores of life style. One score of life style was college attendance, the second included plans for patterning of career and marriage.

They noted that attitudes toward career and marriage are related to life style. "What effect does development have on this relationship?" was the primary question of the study. Results indicated that women move away from a belief in their inferiority to men as they mature. Conflict in attitudes concerning homemaking and feminine role versus careers were also noted by the authors. Matthews and Tiedeman (1962) found support for the assumptions that attitudes are related to life style, and furthermore attitudes are related to development. An important theme was a woman's perception of the male attitude toward her use of her intelligence. It appears that many girls and women structure their lives on the premise that males view the female's use of her intelligence with distaste. This attitude would be a great deterrent to the realization of
self through employment. An additional inhibitor is the perception of the dominant position of men as being "appropriate." The final theme of attitude in life style is the conflict between acceptance of the role of wife and mother and acceptance of a feminine career.

Farmer and Bohn (1970) further investigated this home-career conflict. The subjects were 50 women from a Business and Professional club who were all working women. The Strong Vocational Interest Blank for Women was used to measure vocational interest patterns. The Strong Vocational Interest Blank for Women was administered twice, once with the standard instructions and the second time with experimental set instructions:

(a) "pretend men like intelligent women, and
(b) pretend women can combine career and family and perform both well."

The experimental set was aimed to reduce home-career conflict. The hypothesis that women in response to a set which reduced home-career conflict would score higher on Career scales and lower on Home scales was supported. This study demonstrated that women's attitudes towards career can be affected. The women in the study were older and had already made their career commitments, perhaps the effect of set on young girls would be even greater.

Sandra Harris (1974) conducted a study using sixth grade girls which attempted to increase the number of tentative career choices and decrease the percentage of sex typed
choices. Although her sample was very small—18 subjects—5 were randomly assigned to the experimental group and the remaining 13 girls were the control group. The instrument consisted of one question "Name the jobs you think you might like to do in the future." The experimental subjects came to the counsellor's office for weekly 30 minute group sessions. The results indicated a significant increase in number of tentative career choices for the experimental group and a decrease in sex typed choice. Experimentally this study has weaknesses in that the sample was small and only one counsellor was used, but it does appear that the counselling procedures employed were effective in broadening the thinking of young girls regarding the occupational world.

Sex role stereotypes of personal qualities do exist but this framework does not seem as important as the woman's perception of her feminine self. This attitude can be influenced by parental role models, counselling intervention or one's developmental stage. Putnam and Hansen (1972) investigated the relationship of the feminine role and self-concepts to vocational maturity. The stratified sample of 375 girls consisted of 16 year old girls from middle class families in suburban or rural suburban areas. A feminine role rating inventory, a self-concept scale, a vocational development inventory and a personal data form were used. The results demonstrated that self-concept was significantly associated with vocational maturity. Girls were found to be somewhat vocationally immature in
comparison with their male classmates and have a lower self-concept than the average male. According to Super's vocational life stages, the subjects in this study were in the exploratory stage and therefore should have been selecting the occupation through which they could implement their self-concept. The results of this study supported the premise that the higher the level of self-esteem, the higher the level of vocational maturity. The relationship between the feminine role concept of own self and vocational maturity indicated that the more the girl viewed her role as being liberal, the higher her level of vocational maturity. Since Super's theory of vocational development views the individual as moving through a series of life stages, the individual's final choice reflects the thoroughness with which she has implemented her self-concept into the world of work. Vocational development of the self-concept and vocational adjustment depends upon the implementation of this self-concept. The feminine role concept which each girl selects is then consistent with her self-concept, and her occupational choice will be an implementation of her self-concept. For women a conflict or inconsistency appears between a woman's expectations and attitudes and society's expectations and attitudes towards woman's role in society.

Effects of Stereotypes on Occupations

The feminine social role in which women are described
as passive, dependent, irrational, emotional, warm, lacking in confidence, can be limiting to the personal as well as the vocational growth of women. Not only are there specific behaviors that are "typically" feminine but there are certain jobs which are thought to be appropriate for women in our society.

Schlossberg and Goodman (1972) investigated the degree to which elementary school children hold stereotypes about occupations based on sex. Children in kindergarten and the sixth grade were asked to respond to 12 drawings, representing work settings of six occupations traditionally considered feminine (i.e. secretary, elementary teacher, waitress, nurse, household worker) and six occupations traditionally considered masculine (doctor, dentist, architect, draftsman, T.V. repairman, mechanic and laboratory scientist). To discover the degree to which children stereotype occupations, the researchers helped the children to identify the pictures. The interviewer would say, "This is where a person works who fixes televisions. Could a man (woman) work here"? In addition, each child was asked, "What do you want to be when you grow up"? The data indicated:

(1) there was no appreciable increase in stereotyping from kindergarten to sixth grade,

(2) children were more ready to exclude women from men's jobs than to exclude men from
women's jobs,

(3) with few exceptions, the children chose jobs for themselves that fell within the usual stereotypes (i.e. most children felt either men or women could be doctors or nurses, but all the boys chose to be doctors and the girls nurses).

The results indicated that children as young as 5 years of age have a limited perception of a woman's place in the world of work. The children in Schlossberg and Goodman's study did not necessarily feel that a woman's place was in the home, but that a woman's place was in certain specific occupations. By contrast, these same children did not feel that men had to be similarly limited. Not a single child specified special training or any other qualification for a man for either the masculine or feminine occupations.

Schlossberg, et al (1972), data from the middle and upper income sixth graders and the model cities project school, when compared, showed that middle income sixth graders were consistently less stereotyped. One explanation may be that the middle income elementary school was in a community where many of the mothers worked at professional jobs. Perhaps this enables the children to view women as having more capabilities. Direct positive experience involved in parent modeling appears to moderate the negative societal attitude toward woman's occupational capacities. The sex typing of occupations reflects and perpetuates the differential status
of males and females as recorded by Broverman, 1968; Fernberger, 1948; Lunneburg, 1969; Sherriffs and Jarrett, 1953.

The research of Larwood, O'Carroll and Logan (1977) has supported the hypothesis that the arousal of achievement tendencies may depend in part on the importance and conspicuousness of role clues. Achieving or goal directed behavior is considered a male characteristic while that same achievement motive is overshadowed in women by the motive to avoid success (Horner, 1969, 1972). The motive to avoid success presumably springs from the females' acquisition of the social value that success is inappropriate for themselves. Success and achievement striving is not part of the appropriate sex role stereotype of women in our North American culture. Thus a woman who might otherwise succeed at a challenging task is led instead toward failure. Horner (1972) suggests that rather than being present in all achievement arousing situations, the motive to avoid success may be mediated by sex role. If success is directly unfeminine, women may fear success in situations in which the norms for correct sex role behavior are both conspicuous and important. Conversely, when such norms are neither obvious nor important, the motive to avoid success may not be strongly aroused and a woman may meet a challenging situation with a relatively open attempt to succeed.
Double Standards for Men and Women

As a result of this social valuing of males, women tend to underrate themselves as well as other women and hold negative concepts of themselves. These factors make the attainment of a feeling of competence difficult. Self-esteem and vocational development are related, in that the higher the level of self-esteem, the higher the level of vocational maturity. Women then may need additional support and encouragement from "experts" to step out of their feminine role stereotypes (Baruch, 1972; Goldberg, et al, 1971; Putnam and Hansen, 1972; Rosenkrantz, et al, 1968; Sherriffs and Jarrett, 1953).

"Are professionals free from this negative bias against women"? is a question which has important implications for the ongoing growth of women. Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1970) found that a double standard of mental health exists for men and women. Their study involved 79 psychologists, psychiatrists or social workers--46 men and 33 women. The clinicians were given the Stereotype Questionnaire with one set of instructions, either "male," "female," or "adult." The subjects were asked to describe a healthy, mature, socially competent person. The results indicated that clinicians tended to consider socially desirable masculine characteristics more often as healthy for men than for women. Upon examination of the items which described adult females it was found to be a
negative assessment of women. For instance, clinicians were more likely to suggest that healthy women differ from healthy men by being more submissive, less independent, more easily influenced, less competitive, more excitable in minor crisis, less objective and disliking math and science. The researchers noted that this constellation seems an unusual way of describing any mature, healthy individual. Another hypothesis of the study was that concepts of mental health for an adult (sex unspecified) would differ significantly from the concepts of mental health for women. The results confirmed the double standard hypothesis. It may be that the double standard of health for men and women may stem from an "adjustment" notion of health, health consisting of a good adjustment to one's environment. The authors felt that men and women from birth are trained to fulfill different social roles. An adjustment notion of health and the different norms of male and female behavior in our society would then lead to a double standard of mental health. So for a woman to be judged mentally healthy, she must adjust to and accept the behavioral norms for her sex, even though these behaviors are generally less socially desirable and considered to be less healthy for the generalized competent mature adult. Given that these clinicians were merely reflecting the sex role stereotypes and the differing valuations of these stereotypes prevalent in our society, one questions whether they treat male and female patients differently.
Billingsley (1977) designed her study to assess the extent to which a pseudoclient's sex and presenting pathology influenced the treatment goal choices of practicing male and female psychotherapists. The results of the study indicated that client's sex was not related to psychotherapist treatment goal choices, at least not for the two client pathologies used in the case histories of the study. The major findings of the study were that male and female therapists chose different kinds of treatment goals for their clients and female therapists chose more masculine treatment goals. The interactive effect of a trained examiner's and client's sex on the severity of clinical inference has been demonstrated in two other studies (Abramowitz and Abramowitz, 1973; Haan and Livson, 1972).

The results of the Abramowitz study indicated that non-liberal counsellors imputed greater maladjustment to a left-oriented politically active female than to an identically described male client. These results tend to support the assertion that not only does a bias exist against women and is shared by the general population, but this bias is also promoted by clinical personnel.

Clinical personnel not only in the mental health area but in the vocational counselling area as well have been shown to support this bias against women. Maslin and Davis (1975) replicated the Broverman et al (1970) research using counsellors-in-training for subjects. Their results indicated the same double standards of mental health as
shown in Broverman's study, except that female counsellors-in-training held relatively androgynous views. As previously discussed Abramowitz, et al (1973), found that nonliberal examiners attributed significantly greater psychological maladjustment to the leftist, politically active female client than to her male counterpart. In 1975 using a very small sample Abramowitz et al found that, on the basis of a short interview and psychoeducational records, relatively traditional counsellors imputed greater maladjustment to female medical school aspirants than to male aspirants.

Using a different experimental method, Schlossberg and Pietrofesa (1970) arrived at the same conclusion, "that counsellor bias exists against women entering a masculine occupation." Coached female clients (who supposedly couldn't decide whether to enter engineering, a masculine occupation, or a feminine occupation such as teaching) were interviewed by counsellors-in-training. Biased statements made by the counsellors were catalogued and analyzed; 81.3% of the biased statements were against women, and only 18.7% were in favor of them. Female counsellors displayed as much bias as male counsellors. Although Schlossberg and Pietrofesa's study is significant research, it has the limitations of using a student population rather than practising professionals.

In similar research, this time with practising school counsellors, Thomas and Stewart (1971) used a sample of 62 volunteer counsellors. They divided the counsellors into
groups and showed them three videotapes; an introductory tape, a tape of an interview with a client who chose deviant career goals, and an interview with a client who chose a conforming career goal. The counsellors 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 counselling, and suggested two additional career choices that would be appropriate for the client to consider. Female counsellors gave higher acceptance scores to both deviate and conforming clients than did male counsellors. The authors also found that male counsellors showed increased acceptance as they became more experienced; the opposite was true of female counsellors. Regardless of their sex, counsellors rated conforming goals as more appropriate than deviate goals. Counsellors also rated female clients with deviate career goals to be more in need of counselling than those with conforming goals.

Shapiro (1977) used trained graduate students to role play typical and atypical sex role conditions. Videotapes of the interviews were analyzed to assess counsellor reinforcement patterns of specific client "cue" sentences. Contrary to expectations, results indicated that counsellors as a whole exhibited more behavioral bias with typical than with atypical clients. Counsellors reacted more positively toward the atypical than toward the typical clients and
counsellors' responses to a global sex role inventory indicated that counsellors described the healthy, well-adjusted female as significantly more instrumental than the healthy, well-adjusted male.

Smith (1974) also found support for the nonbias position of counsellors. Her study presented four case studies, with sex of the client and ethnic group as the only cues that differed for the cases seen by the 512 counsellors. The analysis of covariance failed to reveal significant differences due to the sex or ethnic group of the client or to the sex of the counsellor.

Donahue (1976) also using the case study approach found that high school counsellors did exhibit a bias. Counsellors were asked to select appropriate careers for their six case study subjects. The results demonstrated that the counsellors 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.

These differing results—biased and nonbiased—may indicate an underlying attitudinal change occurring in counsellors. Engelhard, Jones and Stiggins (1976) attempted to chart the development of counsellors' attitudes over a period of six years from 1968 to 1974. The three major dimensions of counsellors' attitudes regarding women and women's social roles were: attitudes toward the dual role of mother and worker, attitudes toward sex role definition,
and finally attitudes regarding the expected impact of women on society. The working mother factor yielded the lowest cluster scores of the three factors for both men and women counsellors indicating the most conservative counsellor attitudes. In addition, male and female counsellors were farther apart. In 1974 they were still as far apart as in 1968 but both have become significantly more open to the combined worker-mother role. Women counsellors were found to be more open to diverse sex role definition and score higher on the Societal Impact factor than male counsellors. It was shown that male and female counsellors differ on all three dimensions of attitude, but there are signs of significant attitude growth on the part of both male and female counsellors.

Counsellors in high schools, if free from a negative bias, could and should be social change agents. Thus it is important to know if counsellors in B.C. do support a negative bias against female students when making vocational plans and suggestions. It is imperative for counsellors to recognize and relate to the very different processes required for a woman to find vocational fulfillment. The unique obstacles faced by a young woman trying to find her place in the world of work are numerous and often subtle. Firstly, she must adapt her needs, personal style and outlook to conform to society's feminine model. Acceptance of the female role means acceptance of many qualities which hinder vocational development (i.e. lack of competence, dependency,
passive emotionality, illogicalness, etc.). If success is directly unfeminine, women may fear success in situations in which the norms for correct sex role behavior are both conspicuous and important. Women have acquired the social belief that success is inappropriate for themselves. Women devalue themselves, and other women and are faced with limited socially approved vocational options. Society and more importantly, the significant men in their lives have influence on their vocational plans. The home-career conflict is a major issue for many women. Awareness and communicating recognition of these common issues and conflicts is critical if the counsellor is to be effective. Counsellor effectiveness can be described as the discovery of how the pressures of social stereotyping of male and female qualities and roles influence and limit women in their career development. The counsellor must aid and encourage women to "step out" of these role confinements and find and develop their own unique vocational potentials as "persons."
CHAPTER III

Methodology

Previous studies have indicated that high school counsellors discriminate against females in career selection. This study is an attempt to learn whether high school counsellors in B.C. do have a predisposition to discriminate against women in career selection and to discover if the age and family structure of the counsellor influences this bias. In this chapter seven aspects of the methodology are described:

(1) population and sample,

(2) instrument used to measure a counsellor's predisposition to discriminate against females in career selection,

(3) development of the occupation list and coefficients of remuneration, education and supervision,

(4) validity and reliability of the case studies,

(5) collection of data,
Population and Sample

The population of this study includes all secondary school counsellors in British Columbia. The sample consists of two hundred randomly selected secondary school counsellors from the B.C. School Counsellors Association membership list. The president of the association (1977-78) stated that it was a fairly comprehensive list. Nevertheless, there are counsellors working within the B.C. school system who are not members. Although limiting the generalizability of the results, the high percentage of counsellors on the list (75-80%) makes the random sample fairly representative of counsellors in the province.

Instrumentation

The instrument used in this study was developed by Thomas J. Donahue (Discrimination Against Young Women in Career Selection by High School Counsellors, 1976). It involved the presentation of six case studies in written form. Its purpose was to collect data that could be used to assess the degree to which counsellors were predisposed to choose for "caseestudy" females, lower paying jobs that
require less education and more supervision than those chosen for "case study" males.

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, socioeconomic background, values, personality traits, and social pressures that might influence career choice. 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 subjects were male for cases one, four and six; and female for cases two, three and five. 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 Form A and B was identical. Only the name of the case study subject and the gender of the pronouns were changed. The case studies were short and the entire task involved 15-25 minutes of the counsellors' time. The task was for the counsellor to select three occupations which might be appropriate for the case study subject and rank the choices in order of preference. (Form A and Form B of the questionnaires can be found in the Appendix). The counsellors were asked to select the occupations only. Each occupation
chosen was later assigned (by the researcher) indices representing remuneration, education and supervision.

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 by T. Donahue (1976) for each of the three dependent variables—remuneration, education and supervision. The scales for remuneration and supervision were revised to make them reflect the current B.C. work environment.

Coefficient of remuneration. The coefficient of remuneration is the number on an ordinal scale 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.

The coefficients have been revised to make them current and appropriate to the Canadian salary scale. Five manpower counsellors, from the North Vancouver branch, listed the average salary range for each occupation. These salary ranges were used to find a mean salary representing each occupation. The B.C. Regional Salary, Wage Rate Survey, Civil Service Commission Salary Schedules and Wage Rates, Salaries
and Hours of Labour in Canada were used as cross reference sources. The revised annual salary range for each coefficient was:

1. Below $10,000
2. $10,000 - $14,999
3. $15,000 - $19,999
4. $20,000 - $24,999
5. $25,000 - $29,999
6. $30,000 - $34,000
7. $35,000 and above

Coefficient of education. The coefficient of education was the number, on an ordinal scale, assigned to an occupation, indicating, on a seven-point scale, the approximate amount of formal education or training required to engage in that occupation. A coefficient of one indicates an occupation with the least formal education required, and a coefficient of seven indicates an occupation that requires the maximum prerequisite education. The coefficient of education for an occupation was originally determined by using job descriptions from the Occupational Outlook Handbook. The Canadian Classification Dictionary of Occupations had similar education requirements so the original coefficient of education as determined by Donahue (1976) was used in this study. 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

5. Apprenticeship or associated degree required

6. Bachelor's degree required

7. Graduate degree required

Coefficient of supervision. The coefficient of supervision was the number on an ordinal scale assigned to an occupation which indicates, on a seven-point scale, the approximate amount of supervision individuals, engaged in that occupation, normally received. 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 judgment in their work. This type of work usually consists of routine tasks. At the other end of the scale were people like corporate 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 coefficient of supervision for an occupation was determined by computing the mean numerical judgment score of five Canada Manpower counsellors working in the North Vancouver branch.

Occupation List Construction

Donahue (1976) selected approximately 60 common occupations from the Occupational Outlook Handbook. Occupational titles were selected without regard to the case studies. The 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. 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.

Validity and Reliability

The case study approach was considered an indirect measurement method. Indirect has been defined by Webster's Third New International Dictionary as "deviating from a direct line or course, proceeding obliquely or circuitously" and a definition of test is "an act or process that reveals inherent qualities (as of character)." So the case study approach is a roundabout method of revealing counsellor bias.

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 science wherein yesterday's crucial experiments are today's routine measurement procedures."¹

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-defence and permit testing in many administrative settings where attitude scores might otherwise be unobtainable.²

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 samples of the criterion tasks have considerable validity."³ The instrument

² Ibid., p.335
used in this study was both highly structured and involved a task quite similar to a counsellor's work in vocational guidance. These two factors alone established the construct validity of the test.

By approaching the problem indirectly, the instrument will avoid the pitfall of eliciting socially acceptable answers that are not correlated with the individual's true behavior. Attitudes regarding occupations suitable for girls will be inadvertently revealed while the counsellors struggle with the specific problem of three occupational choices for a case study subject. Since attention is focused on a problem that does not appear to be primarily related to sex of the case study subject, the choice of a career could be made without the counsellor's judgment being strongly influenced by contemporary social pressures. This allowed the counsellor to select according to personal choice rather than "socially acceptable" views.

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 original set of occupations were 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 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 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." 

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

4 Bem Bem, Training the Woman, p.29.
Considering the structured nature of the test, its simulation of a task closely related to the counsellor's work, its indirect approach, and the composition of the occupational choice list, the construct validity of the test was judged by the researcher 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 to the best knowledge of the experimenter.

Any direct measure of this underlying attitude has dubious validity because the current cultural climate, brought about by the feminist, would influence the respondents and likely make paper-and-pencil instruments of this type invalid. Most counsellors 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 difference
in scores of subgroups such as young counsellors or 'typical' counsellors. It was not intended that scores of individual counsellors would be used to produce counsellor bias.

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 counsellor'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 counsellor's attitude toward a female's occupational role. Understanding this relationship between personality variable and attitude may allow for the prediction of counsellor bias.

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 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 is difficult to obtain responses from counsellors once. It would be more difficult to get practising counsellors to respond to the same questionnaire a second time. A separate sample for test-retest would also be impractical. The time and expense would be considerable and the population size of 407 makes an additional random sample difficult.

However, reliability of results will be enhanced by the fact that each counsellor was required to make three job selections instead of one. The three job selections on each of the six case studies were then averaged by the researcher.

Collection of the Data

On January 11, 1979 an envelope containing covering letters, questionnaire, answer sheet, personal data sheet, stamped-addressed-return envelope and 3x5 card, was mailed
to all subjects. A numerical code was on the enclosed, stamped envelope so that those who did not respond would receive a second letter. A second letter and questionnaire was sent on January 29, 1979. Copies of the letters can be found in Appendix C.

Phase I - Major Hypotheses

Hypothesis 1 There is no statistically significant difference between the remuneration of occupations chosen by high school counsellors in B.C. for female case study subjects and those chosen for equivalent male case study subjects.

Hypothesis 2 There is no statistically significant difference between the educational requirements of occupations chosen by high school counsellors in B.C. for female case study subjects and those chosen for equivalent male case study subjects.

Hypothesis 3 There is no statistically significant difference between the level of supervision of occupations chosen by high school counsellors in B.C. for female
case study subjects and for equivalent male case study subjects.

Phase II - Secondary Hypotheses

Hypothesis 4 Counselor's age.

4a There is no statistically significant difference in the remuneration of occupations chosen for male and female case study subjects by counsellors who are less than 35 years old and counsellors who are 35 years old or older.

4b There is no statistically significant difference in the educational requirements of occupations chosen for male and female case study subjects by counsellors who are less than 35 years old and counsellors who are 35 years old or older.

4c There is no statistically significant difference in the supervisory level of occupations chosen for male and female case study subjects by counsellors who are less than 35 years old and counsellors who are 35 years old or older.
Hypothesis 5 Family Structure.

5a There is no statistically significant difference in the salary level of occupations chosen for male and female case study subjects by counsellors coming from a "typical" family structure or counsellors from "atypical" family structure.

5b There is no statistically significant difference in prerequisite educational level of occupations chosen for male and female case study subjects by counsellors coming from a "typical" family structure or counsellors from "atypical" family structure.

5c There is no statistically significant difference in supervisory level of occupations chosen for male and female case study subjects by counsellors coming from a "typical" family structure or counsellors from "atypical" family structure.
Design and Analysis

Form A and Form B, having identical case study information but with gender differences, were assumed to be equivalent forms. Form A, the 57 averaged counsellor responses for--remuneration, education and supervision were ranked with those of Form B.

### Form A

**Job Choice**

<table>
<thead>
<tr>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>( \text{R} (C_1) )</th>
<th>( \text{R} (C_2) )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remuneration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R_{1,1} )</td>
<td>( R_{1,2} )</td>
<td>( R_{1,3} )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R_{2,1} )</td>
<td>( R_{2,2} )</td>
<td>( R_{2,3} )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Education** | | | | |
| \( E_{1,1} \) | \( E_{1,2} \) | \( E_{1,3} \) | | |
| \( E_{2,1} \) | \( E_{2,2} \) | \( E_{2,3} \) | | |
| . | . | . | | | |
| . | . | . | | | |

| **Supervision** | | | | |
| \( S_{1,1} \) | \( S_{1,2} \) | \( S_{1,3} \) | | |
| \( S_{2,1} \) | \( S_{2,2} \) | \( S_{2,3} \) | | |
| . | . | . | | | |
Form B

<table>
<thead>
<tr>
<th>Remuneration</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>( \bar{R} (C_1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( R_{1,1} )</td>
<td>( R_{2,2} )</td>
<td>( R_{1,3} )</td>
<td>( R_{2,3} )</td>
<td>( \bar{R} (C_2) )</td>
</tr>
<tr>
<td>( R_{2,1} )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
</tr>
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<td>( \cdot )</td>
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<td>( \cdot )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>( \bar{E} (C_1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( E_{1,1} )</td>
<td>( E_{1,2} )</td>
<td>( E_{1,3} )</td>
<td>( \cdot )</td>
<td>( \bar{E} (C_2) )</td>
</tr>
<tr>
<td>( E_{2,1} )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
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<td>( \cdot )</td>
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<td>( \cdot )</td>
<td>( \cdot )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supervision</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>( \bar{S} (C_1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( S_{1,1} )</td>
<td>( S_{1,2} )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \bar{S} (C_2) )</td>
</tr>
<tr>
<td>( S_{2,1} )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
</tr>
<tr>
<td>( \cdot )</td>
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<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
<td>( \cdot )</td>
</tr>
</tbody>
</table>

The \( \bar{R} \), \( \bar{E} \), \( \bar{S} \) for each counsellor for Forms A and B was computed by the method shown above. The Mann-Whitney U test was used for analyses of the mean difference in the ranking of the averaged scores.
Mann-Whitney U Test. Mann-Whitney U test is a nonparametric difference test which can be used if the study involves two independent samples. This research used two separate samples as the counsellors who received Form A were randomly chosen as were the counsellors who received Form B. The U test is a powerful nonparametric technique and can be used in place of the parametric "t" test with little loss in power efficiency. As the three scales of remuneration, supervision and education are not all interval scales but ordinal, the Mann-Whitney U test was appropriate.

The U test is based on the notion that if scores of two similar groups (coefficients of Form A of the questionnaire and coefficients of Form B) are ranked together, there will be considerable intermingling of the two groups' rankings; but if one group significantly exceeds the other (i.e. the male case study subjects), then most of the superior groups' rankings will be higher than those of the inferior group. The value of U is computed; after the combined ranking, by concentration on the lower ranked group and counting the number of ranks of the higher group which fall below the lower ranked group. The lower the value of the statistic yielded by the test, the more significant it is.
First tests: Mann-Whitney U test

Form A

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

vs.

Form B

\[ R_1, R_2, R_3, \]

The test was repeated for education and supervision.

Second tests: Mann-Whitney U test

Form A

(case 1)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

vs.

Form B

(case 1)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

The test was repeated for education and supervision.

The test was repeated for each case.
Third test: Mann-Whitney U test

Form A (1, 4, 6)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

vs.

Form B (1, 4, 6)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

The test was repeated for education and supervision.

The test was repeated for combined cases 2, 3, 5 Form A and Form B.

Subordinate Hypotheses - Mann-Whitney U tests

Form A (counsellors under 35)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

vs.

Form A (counsellors 35 and over)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

The test was repeated for education and supervision.

The test was repeated for Form B.

Form A (typical family structure)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

vs.

Form A (atypical family structure)

\[ \bar{R}_1, \bar{R}_2, \bar{R}_3, \]

The test was repeated for education and supervision.

The test was repeated for Form B.
In the following chapter the analyses of the data will be presented. The research results will be presented as follows:

(1) the sample,
(2) questionnaire responses,
(3) equivalence of forms,
(4) major hypotheses,
(5) secondary hypotheses, and
(6) summary.
CHAPTER IV

Results

The main purpose of this study was to determine whether high school counsellors in British Columbia have a tendency to discriminate in their vocational counselling of female clients. A second purpose was to discover if the counsellor's age and family structure influenced the strength of this tendency if, in fact, it did exist.

Two hundred randomly selected high school counsellors, from the British Columbia Counsellors Association membership list, were asked to choose appropriate occupations for three male and three female case study subjects. Responses were assigned coefficients on the three dependent variables of remuneration, education and supervision. These response coefficients were statistically analyzed using the Mann-Whitney U test.

The Sample

Two hundred (200) subjects were randomly selected from a population of four hundred seven (407) high school counsellors who were members of the British Columbia Counsellors Association (Membership list: 1977-78). One hundred were randomly selected to receive Form A and one hundred Form B. Of the 114 subjects who returned their questionnaires, 37%
were under 35 years of age and 20% grew up in "atypical" family structures.

**Questionnaire Responses**

From a population of 200 randomly chosen subjects, 138 (69%) returned questionnaires and 114 (57%) completed their questionnaires in such a way that they could be used for analyses. Ten were returned unopened due to a lack of a forwarding address, and fourteen were returned incomplete.

The four reasons most frequently cited for not completing the questionnaire were as follows:

1. five respondents reported that there was insufficient data presented in the questionnaire,
2. five respondents were not high school counsellors,
3. three respondents felt that counsellors do not, and should not, "choose appropriate careers" for their clients,
4. one person did not wish to take part in the study.

**Equivalence of Forms**

The Mann-Whitney U test was used to statistically analyze the difference in mean rank between the coefficients from Form A and coefficients from Form B. The Mann-Whitney U test is a non-
parametric difference test which can be used with two independent samples. This research used two separate samples; those randomly selected counsellors who received Form A of the questionnaire, and those randomly selected counsellors who received Form B.

The three occupations chosen by each counsellor for each of the six cases, were assigned a coefficient for each of remuneration, education and supervision; coefficients previously determined by expert judges. These coefficients were then averaged for each counsellor and for each case study. These averages for remuneration, education and supervision from Form A were ranked along with the averages for remuneration, education and supervision from Form B.

It was hypothesized that there would be no difference as Form A and B were thought to be equivalent. As indicated in Table 1 there was no statistically significant difference between Form A and Form B. Therefore, Form A and Form B were assumed equivalent. Donahue (1976), in a study done with high school counsellors in Michigan, had found that computed scores on Form A were higher than computed scores on Form B.

In the present study the two forms were shown to be equivalent. Therefore, they can be compared and differences attributed to case sex differences rather than difference in form.
### TABLE 1

Table of Mean Ranks and Statistics for Equivalence of Forms (All Cases)

<table>
<thead>
<tr>
<th></th>
<th>Remuneration</th>
<th>Education</th>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Rank:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>57.96</td>
<td>57.99</td>
<td>58.61</td>
</tr>
<tr>
<td>Form B</td>
<td>57.04</td>
<td>57.01</td>
<td>56.39</td>
</tr>
<tr>
<td><strong>Subjects (n):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>Form B</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Mann-Whitney:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>1598.5*</td>
<td>1596.5</td>
<td>1561.0</td>
</tr>
<tr>
<td>P:</td>
<td>0.883**</td>
<td>0.874</td>
<td>0.719</td>
</tr>
<tr>
<td>Z:</td>
<td>-0.147***</td>
<td>-0.159</td>
<td>-0.360</td>
</tr>
</tbody>
</table>

* U is the minimum of the two values \( I_1 \) and \( I_2 \) (inversions)

** P probability associated with the obtained U value

*** Z Fisher randomization two sample test - if computed Z is greater than -1.96 or less than +1.96, Ho is not rejected at the 0.05 level
**Major Hypotheses**

The counsellors were asked to select three occupations, and rank them in order of preference, for the six case study subjects. Each of the 28 occupations had been previously rated and assigned a coefficient ranging from 1-7 for the three dependent variables of remuneration, education and supervision. The three coefficients of remuneration for each case study were then averaged, as were the coefficients for education and supervision. The mean remuneration scores for the case studies on Form A were ranked, along with the mean remuneration scores for the case studies on Form B. The same was done for education and supervision. The Mann-Whitney U test was applied to each in turn.

As indicated in Table 2, cases 1, 2, 4 and 5 with male case study subjects are ranked significantly higher than female case study subjects for the variable of remuneration. Cases 3 and 6 show no significant difference in the ranks for males and females.

The variable of education as indicated on Table 3 shows no significant differences in the ranks for males and females on the cases 1, 2, 3, 5 and 6. Case 4, however, shows a significantly higher rank for male subjects than for female subjects of the same case.

Also indicated on Table 4, supervision is ranked significantly higher for male subjects on cases 1, 2, 4 and 5 than for female subjects of the same cases. Cases 3 and 6
TABLE 2
Sex, Mean Remuneration Rank and Statistics for Each of the Six Cases (Form A and Form B)

<table>
<thead>
<tr>
<th>Case</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>F</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Form A</td>
<td>72.26</td>
<td>46.00</td>
<td>57.31</td>
<td>74.18</td>
<td>49.01</td>
<td>57.92</td>
</tr>
<tr>
<td>Form B</td>
<td>42.74</td>
<td>69.00</td>
<td>57.69</td>
<td>40.82</td>
<td>65.99</td>
<td>57.08</td>
</tr>
</tbody>
</table>

Mann-Whitney:

<table>
<thead>
<tr>
<th>U</th>
<th>783.0</th>
<th>969.0</th>
<th>1613.5</th>
<th>673.5</th>
<th>1140.5</th>
<th>1600.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>0.000</td>
<td>0.000</td>
<td>0.950</td>
<td>0.000</td>
<td>0.006</td>
<td>0.890</td>
</tr>
<tr>
<td>Z</td>
<td>-4.790</td>
<td>-3.730</td>
<td>-0.063</td>
<td>-5.504</td>
<td>-2.756</td>
<td>-0.138</td>
</tr>
</tbody>
</table>
### TABLE 3

Sex, Mean Education Rank and Statistics for Each of the Six Cases (Form A and Form B)

<table>
<thead>
<tr>
<th>Case</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>M</td>
<td>F</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Form A</td>
<td>M</td>
<td>F</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Form B</td>
<td>F</td>
<td>M</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Mean Rank:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>58.36</td>
<td>54.50</td>
<td>59.76</td>
<td>66.58</td>
<td>53.50</td>
<td>58.61</td>
</tr>
<tr>
<td>Form B</td>
<td>56.64</td>
<td>60.50</td>
<td>55.24</td>
<td>48.42</td>
<td>61.50</td>
<td>56.39</td>
</tr>
<tr>
<td>Mann-Whitney:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>1575.5</td>
<td>1453.5</td>
<td>1495.5</td>
<td>1107.0</td>
<td>1396.5</td>
<td>1561.0</td>
</tr>
<tr>
<td>P:</td>
<td>0.780</td>
<td>0.330</td>
<td>0.445</td>
<td>0.003</td>
<td>0.193</td>
<td>0.713</td>
</tr>
<tr>
<td>Z:</td>
<td>-0.279</td>
<td>-0.973</td>
<td>-0.763</td>
<td>-2.981</td>
<td>-1.301</td>
<td>-0.368</td>
</tr>
</tbody>
</table>
### TABLE 4

Sex, Mean Supervision Rank and Statistics for Each of the Six Cases (Form A and Form B)

<table>
<thead>
<tr>
<th>Case</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case Sex:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>M</td>
<td>F</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Form B</td>
<td>F</td>
<td>M</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td><strong>Mean Rank:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>71.55</td>
<td>47.75</td>
<td>54.23</td>
<td>67.65</td>
<td>50.68</td>
<td>58.77</td>
</tr>
<tr>
<td>Form B</td>
<td>43.45</td>
<td>67.25</td>
<td>60.77</td>
<td>47.35</td>
<td>64.32</td>
<td>56.23</td>
</tr>
<tr>
<td><strong>Mann-Whitney:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>823.5 1069.0 1438.0 1046.0 1236.0 1552.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P:</td>
<td>0.000 0.002 0.277 0.001 0.027 0.677</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z:</td>
<td>-4.559 -3.164 -1.088 -3.343 -2.214 -0.417</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
show no significant difference in the ranks of supervision for male and female subjects.

The next set of tests using the Mann-Whitney U test investigated the ranking of the mean remuneration scores for cases 1, 4 and 6 from Form A with the mean remuneration scores for cases 1, 4 and 6 from Form B. On Form A, cases 1, 4 and 6 are all male case study subjects and on Form B, cases 1, 4 and 6 are all female case study subjects. Cases 2, 3 and 5 on Form A (all female) were ranked with cases 2, 3 and 5 on Form B (all male). The tests were repeated for the variables of education and supervision.

**Major Hypotheses:**

Hypothesis 1 There is no statistically significant difference between the remuneration assigned to occupations chosen by high school counsellors in British Columbia for female case study subjects and those chosen for identical case study subjects identified as males.

Analysis of the data yielded results shown in Table 5. The null hypothesis was rejected at the .05 level of confidence. Counsellors in British Columbia chose higher paying occupations for male case study subjects than for identical female case study subjects.
### TABLE 5

Sex, Mean Remuneration Rank and Statistics on Cases 1, 4, 6 (Males vs. Females) and on Cases 2, 3, 5 (Males vs. Females)

<table>
<thead>
<tr>
<th>Cases</th>
<th>Sex:</th>
<th>Form A</th>
<th>M</th>
<th>Form B</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 4, 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2, 3, 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean Rank:

<table>
<thead>
<tr>
<th>Cases</th>
<th>Form A</th>
<th>73.09</th>
<th>46.75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Form B</td>
<td>41.91</td>
<td>68.25</td>
</tr>
</tbody>
</table>

Mann-Whitney:

<table>
<thead>
<tr>
<th>Cases</th>
<th>U:</th>
<th>736.0</th>
<th>1012.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P:</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Z:</td>
<td>-5.045</td>
<td>-3.476</td>
</tr>
</tbody>
</table>
Hypothesis 2  There is no statistically significant difference between the prerequisite educational requirements of occupations chosen by high school counsellors in British Columbia for female case study subjects and those chosen for identical male case study subjects.

Analysis of the data yielded the results shown in Table 6. The null hypothesis was accepted. Counsellors in British Columbia did not choose careers with a higher educational prerequisite for male case study subjects than for identical female case study subjects.

Hypothesis 3  There is no statistically significant difference between the level of supervision required for occupations chosen by high school counsellors in British Columbia for female case study subjects and for identical male case study subjects.

Analysis of the data yielded the results shown in Table 7. The null hypothesis was rejected at the .05 level of confidence. Counsellors in British Columbia chose jobs requiring less supervision for male case study subjects than for female case study subjects.
TABLE 6
Sex, Mean Education Rank and Statistics on
Cases 1, 4, 6 (Males vs. Females) and on
Cases 2, 3, 5 (Males vs. Females)

<table>
<thead>
<tr>
<th>Cases</th>
<th>1, 4, 6</th>
<th>2, 3, 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases Sex:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Form B</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Mean Rank:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form A</td>
<td>62.34</td>
<td>54.93</td>
</tr>
<tr>
<td>Form B</td>
<td>52.66</td>
<td>60.07</td>
</tr>
<tr>
<td>Mann-Whitney:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>1348.5</td>
<td>1478.0</td>
</tr>
<tr>
<td>P:</td>
<td>0.117</td>
<td>0.406</td>
</tr>
<tr>
<td>Z:</td>
<td>-1.569</td>
<td>-0.852</td>
</tr>
</tbody>
</table>
TABLE 7
Sex, Mean Supervision Rank and Statistics on
Cases 1, 4, 6 (Males vs. Females) and on
Cases 2, 3, 5 (Males vs. Females)

<table>
<thead>
<tr>
<th>Cases</th>
<th>1, 4, 6</th>
<th>2, 3, 5</th>
</tr>
</thead>
</table>

Cases Sex:
- Form A: M
- Form B: F

Mean Rank:
- Form A: 70.85
- Form B: 44.15

Mann-Whitney:
- U: 863.5
- P: 0.000
- Z: -4.323

- U: 1067.0
- P: 0.000
- Z: -3.165
Secondary Hypotheses

The purpose of the two secondary hypotheses was to discover factors that may influence or be associated with the tendencies revealed by the three major hypotheses. The two variables were counsellor’s age and family structure.

(a) Counsellor’s age.

Hypothesis 4(a) There is no statistically significant difference in remuneration assigned to occupations chosen for identical male and female case study subjects by counsellors in British Columbia who are less than 35 years old and counsellors who are 35 years or older.

Hypothesis 4(b) There is no statistically significant difference in the prerequisite education level of occupations chosen for identical male and female case study subjects by counsellors in British Columbia who are less than 35 years old and counsellors who are 35 years or older.

Hypothesis 4(c) There is no statistically significant difference between the level of supervision required for
occupations chosen for identical male and female case study subjects by counsellors in British Columbia who are less than 35 years old and counsellors who are 35 years or older.

Analysis of the data yielded the results shown in Table 8. The null hypotheses related to the age of the counsellor were accepted for the variables of remuneration and supervision. As stated in Table 8, there was no statistically significant difference in the assigned salary level, or supervisory level of occupations chosen for male and female case study subjects by counsellors less than 35 years of age and counsellors 35 years or older. However, there was a statistically significant difference in the educational level.

(b) Family structure.

Hypothesis 5(a) There is no statistically significant difference in remuneration assigned to occupations chosen for identical male and female case study subjects by counsellors in British Columbia coming from a "typical" family structure or counsellors coming from "atypical" family structure.
TABLE 8

Table of Mean Ranks and Statistics for Counsellors Under 35 and Counsellors 35 and Older.

<table>
<thead>
<tr>
<th></th>
<th>Remuneration</th>
<th>Education</th>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rank:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 35</td>
<td>31.11</td>
<td>34.31</td>
<td>30.11</td>
</tr>
<tr>
<td>35 +</td>
<td>26.49</td>
<td>24.93</td>
<td>26.97</td>
</tr>
<tr>
<td>Subjects (n):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 35</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>35 +</td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Mann-Whitney:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>277.0</td>
<td>219.5</td>
<td>295.0</td>
</tr>
<tr>
<td>P:</td>
<td>0.315</td>
<td>0.041</td>
<td>0.495</td>
</tr>
<tr>
<td>Z:</td>
<td>-1.006</td>
<td>-2.039</td>
<td>-0.683</td>
</tr>
</tbody>
</table>
Hypothesis 5(b) There is no statistically significant difference in the prerequisite education level of occupations chosen for identical male and female case study subjects by counsellors in British Columbia coming from a "typical" family structure or counsellors from "atypical" family structure.

Hypothesis 5(c) There is no statistically significant difference between the level of supervision required for occupations chosen for identical male and female case study subjects by counsellors in British Columbia coming from a "typical" family structure or counsellors from "atypical" family structure.

Analysis of the data yielded the results shown in Table 9. All three null hypotheses related to family structure were accepted. As stated in Table 9, there was no statistically significant difference in the salary level, educational level, or supervisory level of occupations chosen for identical male and female case study subjects by counsellors who come from a "typical" family structure or those from an "atypical" family structure.
TABLE 9

Table of Mean Ranks and Statistics for Counsellors from "Typical" and "Atypical" Family Structures

<table>
<thead>
<tr>
<th></th>
<th>Remuneration</th>
<th>Education</th>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rank:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical</td>
<td>27.39</td>
<td>26.68</td>
<td>28.00</td>
</tr>
<tr>
<td>Atypical</td>
<td>30.75</td>
<td>33.95</td>
<td>28.00</td>
</tr>
<tr>
<td>Subjects (n):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Atypical</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Mann-Whitney:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U:</td>
<td>197.5</td>
<td>165.5</td>
<td>225.0</td>
</tr>
<tr>
<td>P:</td>
<td>0.548</td>
<td>0.193</td>
<td>1.000</td>
</tr>
<tr>
<td>Z:</td>
<td>-0.601</td>
<td>-1.301</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Summary

Counsellors in British Columbia when presented with identical male and female case study subjects chose occupations with higher levels of remuneration and less supervision for the male case study subjects than for identical female case study subjects. Levels of prerequisite education assigned to the occupations chosen for the male and female case study subjects showed no statistical differences.

Counsellor's age (under 35; 35 and older) and family structure ("typical" and "atypical") did not influence counsellors' tendencies to discriminate in occupational selection. There was no statistically significant difference between the mean ranks for remuneration and supervision of counsellors under 35 years and counsellors 35 years and older. Counsellors from "typical" family structures and those from "atypical" structures also did not show any statistically significant differences in their mean ranks for remuneration, education and supervision.
CHAPTER V

Conclusions and Discussion

Women in Canada are faced with many institutional and social obstacles to self-actualization in the working world. An area of concern to those in the counselling profession is the possibility that counsellors themselves may be personally detrimental to the self-actualization of their female clients.

A review of the literature showed that bias against females permeates many aspects of society. Counsellors appear to be neither better nor worse than other people in respect to bias against females. As is probably true for most segments of society, counsellors seem to assimilate the cultural norms of society. One cultural norm is that there are specific occupations for males and for females. Women who aspire to occupations which have been traditionally thought of as masculine often encounter counsellor bias against these aspirations. Abramowitz, et al (1975), found that counsellors imputed greater maladjustment to female medical school aspirants than to the males. Schlossberg and Pietrofesa (1970) arrived at the same conclusion "that counsellor bias exists against women entering a masculine operation." The masculine occupations usually have higher remuneration levels as well as often being supervisory in nature. Thus for a woman to attempt to improve her working
status she runs the risk of encountering this bias against females entering masculine occupations.

The question then arises, "What type of career counseling do young girls receive from high school counsellors"? Thomas and Stewart (1971) found that counsellors rated conforming goals (i.e. females choosing traditional female careers) as more appropriate than deviate goals. Counsellors also rated female clients with deviate career goals to be more in need of counselling than those with traditional goals. The Thomas and Stewart study examined the bias counsellors exhibit to a girl who has made a decision. What then happens to a girl who is undecided as to her career options? Do counsellors examine and encourage all occupational options or do they encourage only the traditionally female occupations? A study examining this issue was completed by Donahue (1976). Counsellors were presented with data on six case study subjects and asked to select appropriate careers. The results indicated there was a bias against females exhibited by the high school counsellors. The counsellors 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. Donahue's study was completed three years ago and the counsellors in the study worked in Michigan.

Do Counsellors in British Columbia, in 1979, guide females toward traditional occupations which require lower remuneration, education and supervision levels? Results from
this study indicate that high school counsellors in British Columbia hold an occupational bias toward women. The counsellors selected, for the female case study subjects, occupations that had lower remuneration levels and more supervision, than for the identical male case study subjects.

Counsellors, perhaps without awareness, encourage conformity to currently accepted sex roles in the labour market. The counsellors in this study, showed a marked tendency to choose different kinds of occupations for males than for equally qualified 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 the present world of work. This is a world where women seldom work in a supervisory capacity, where women earn less than men, and where women work in occupations which do not fully utilize their formal education.

Counsellors, in this study, did choose occupations with similar levels of prerequisite education for male and female case study subjects. The data indicated that even though counsellors sometimes chose occupations for females that required higher levels of formal education, they seldom chose a career that paid a high salary or was supervisory in nature. This suggests that it may be viewed as socially acceptable for women to have an education, as long as they stay in a dependent, supervised role. Or perhaps it reflects a middle class attitude that everyone who possibly can will pursue higher
educational development. Thus, education may become a goal in itself rather than a means to advanced occupational positions. A girl may be encouraged to pursue a university-level education for a number of reasons and the goal may not be a specific career. Women may be encouraged to attend university to meet eligible males and to add to her value as a wife and mother. The underlying assumption still held by many people is that women work only for a short time, if at all, and then assume traditional roles of wife and mother. It appears that counsellors support the education of women. However, this education may not be enough to gain entry into high paying jobs that utilize supervisory skills.

The subordinate hypothesis concerning counsellor age did not result in any significant differences in counsellor's bias against females and their occupational choice. The assumption was that younger counsellors (under 35 years of age) would hold more flexible beliefs about a female's capabilities, sex role characteristics and position in the working world. It was thought that the beliefs might not be restricted by traditional, sex-typing of careers. However, the data indicates there is no statistically significant difference exhibited by the younger counsellors when compared to 35 and over age group on the variables of remuneration and supervision. It appears that the recent social focus on women's fight for equality and increased movement into the labour
force have had little influence on counsellors of any age. Counsellors in British Columbia apparently continue to hold a negative bias on a woman's role in the world of work.

An additional subordinate hypothesis considered the counsellors family structure as a young child. A "typical" family structure was defined as father working and financially supporting the family, while mother remained in the home for the first twelve years. "Atypical" was a family structure which differed from the "typical." The results of the study indicated there was no statistically significant difference exhibited by counsellors from either family structure.

It was thought that since many notions of sex role stereotyping are formulated in early childhood, counsellors raised in a family setting in which the sex roles of the parents had not been "typical" might hold "atypical" beliefs about male, female characteristics and capabilities. Vogel, Broverman, Broverman, Clarkson and Rosenkrantz (1970) found that men and women of employed mothers perceived less difference between masculine and feminine roles. They viewed the feminine role as entailing greater competency and masculine role as entailing more warmth and expressiveness than did men and women with homemaker mothers. Thus a variation from the "typical" family structure did result in differences in belief systems. A continuation of that reasoning was that perhaps any variation from the norm would produce changes in attitudes about male, female characteristics. A single parent by necessity has expanded his or her role functions and thus
the role modelling for the child doesn't fit the "typical" male, female categories.

In retrospect, "atypical" family structure may have been too broad a category. Families in which neither parents worked (i.e. students; illness), both parents working full or part time, dead parents, and many more situations fit into the "atypical" family structure.

Schlossberg and Goodman (1971) found that with young children the type of occupation filled by the mother was influential on children's attitudes. Children with mothers working at professional careers were less biased against women occupationally than were children whose mothers had low level jobs. Are children from higher socioeconomic homes more socially aware of a wider range of career options for women? Perhaps parents or attitudes of the mother, as perceived by the child, are critical factors. A question asking the counsellors, "What would your mother think of a woman as mayor"? may indicate attitudes prevalent in the family background that would be more influential than the family structure. It seemed to the researcher that the hypothesis must be specific if the results are to be specific and useful.

Some general tendencies noted in the data were the following. Occupations chosen were quite similar for particular case study subjects. This conformity may indicate that the case studies did give enough information so that counsellors weren't guessing wildly, that the information gave
a general picture of personality and capabilities of the subject. The counsellors' personal bias or perception of the occupational roles of men and women then determined the particular level of remuneration, education and supervision chosen. Some counsellors' bias was fairly obvious and consistent as observed by the researcher. Regardless of the case study information, it appeared that women subjects were assigned the traditional low level occupations such as hair stylist, sales clerk, secretary.

Occupations seemed to differ in the levels of popularity --physician was seldom suggested, but small business owner/manager, C.A. and architect seemed frequently to be the choice. Another category not often selected was semi-skilled or skilled workers. Perhaps the counsellors did not have a clear idea as to jobs included in that category. Or, are the popular job choices reflecting a middle class bias of higher education? The labour market today has a shortage of semi-skilled and skilled workers perhaps because of a lack of valuing or acceptance of that type of occupation. These jobs often have a lower level of formal educational prerequisites but often high levels of remuneration and are sometimes supervisory in nature.

Two case studies (3 and 6) appear to be in some way unique. Only these two, from the total of six, had no significant statistical difference on all three variables of remuneration, education and supervision. For these two case studies there was occupational equality between the sexes according to career choices made by the counsellors. Both
case studies describe a person capable of better than average ability with an interest in theoretical work. Case 6 is slightly unusual in that the subject is described as a "bookworm who has a hard time getting along with his/her peers." Case 3 would also rather work with data than with people and things. Perhaps the somewhat eccentric qualities described do not fit the stereotypic image of the typical female.

Broverman, et al (1968) found that subjects clearly agreed as to feminine and masculine traits. The female valued stereotypic items consisted of attributes such as gentle, sensitive to the feelings of others, sociable, tactful, etc. These attributes which describe typical female qualities are different than those described in case studies 3 and 6. Since these two case study subjects were not traditionally feminine, perhaps counsellors avoided selecting traditional female occupations for them. Perhaps counsellors are willing to encourage "different" occupations to these somewhat unique females. The case study subjects, who may have been regarded as "different" yet capable, were assigned by the counsellors occupations of high levels of remuneration, education and occupations that were supervisory in nature.

A final observation was that some of the participating counsellors, when asked to make occupational choice about a client, stated that they do not judge counsellees; or make decisions for them. Nevertheless, these counsellors do
provide occupational information for counsellees and decide which information is more appropriate to share. If counsellors have a tendency to choose low paying occupations that need more supervision for female case study subjects, as shown in this research, it is likely that the counsellor will more often choose career information pamphlets or discuss lower paying nonsupervisory jobs for female than for male clients. Another subtle form of counsellor bias would be selective positive verbal reinforcement when the female client discusses traditional careers. Body language and accompanying facial expressions may communicate this bias to the female client. These subtle forms of bias against female occupational choices may not even be in the counsellors awareness. However, the bias detected in this study undoubtedly has an effect on the nature of counselling received by girls in spite of the objections raised by some counsellors contacted in this study.

Recommendations

The major limitation of this study was the use of a membership list to obtain the study population. The sample was randomly selected from the British Columbia Counsellors Association membership list. As the Association doesn't have every high school counsellor currently working in British Columbia on its list, the generalizability of the results may be limited. An improvement would be to have a sample randomly
selected from all working counsellors. The resulting data would then be more representative of counsellors and study results could then be generalized to the whole province.

Another recommendation involves post hoc analysis of the additional information obtained from the counsellors on the personal data sheet. This information includes counsellors' sex, geographic location, educational level and years of experience. This analysis would further add to existing data. It may answer questions such as "Are all the counsellors biased or just the males/females"? "Are counsellors living in the lower mainland less biased than those living elsewhere"? "Are counsellors with higher levels of education less biased"? "What portion of respondents were males and what portion were females"? "Did the majority of respondents live outside the lower mainland"? Perhaps being more isolated geographically, counsellors in these areas have a greater need to belong to the Counsellors Association. The membership list may represent more counsellors in these outer areas. Post hoc analysis may throw some light on these issues and add to the data on counsellor bias.

The final recommendation would be to make practical use of this data. The results indicate that counsellors in British Columbia do exhibit a bias against women in their occupational choices. Initially, counsellors must be made aware of the results of the study. A majority of the counsellors who did take part in the study requested the results. These counsellors will be sent a summary of the results
of this study. Articles should be presented for publication in journals and magazines. The Canadian Counsellor and B.C.T.F. are two examples of publications circulated to those involved in the field of education. An additional method of communicating these findings would be to notify the various school boards in the province. With this notification of the study results, it should be recommended that action, in the format of workshops, in-service, lectures, should be taken. The aim of these programs would be to reduce counsellor bias and intensively examine the issue of women and their occupational roles. As women present different needs, pressures and expectations, a theory for effective career counselling of young women could begin to develop. An effective theory for career counselling must examine the widest range of occupations possible, the realistic necessity of high level employment (rising rate of single parent families), the lengthy work span possible for women, and alternate methods of combining child rearing and working outside the home. An effective theory for career counselling of young women would include these unique issues and aid in well planned, long range career options.

Not only are in-service workshops necessary for counsellors currently working in British Columbia but an additional focus should be on counsellors-in-training. A course, or workshop on women, their special needs and difficulties in occupational self-actualization could become a requirement for those students involved in career counselling. A
personal focus on biases against men or women would be helpful to bring these attitudes into awareness and should be included in counselling training centers.

In conclusion, counsellors in British Columbia, in this study, did exhibit a negative bias against women in their choice of occupational roles. They selected occupations with lower levels of remuneration and more supervision for female case study subjects than for identical male case study subjects. This attitude reflects the current labour market where most women are concentrated in lower paying and less rewarding positions. This must change! In order to be effective, social change agents, counsellors must convey the message that the full range of occupations can be considered for either sex. Counsellors must exhibit a positive commitment to unbiased career decision making. Hopefully this study is an effective first step.
REFERENCES


APPENDIX A

LIST OF COEFFICIENTS OF REMUNERATION, EDUCATION AND SUPERVISION FOR THE OCCUPATIONS
## Occupations with Coefficients of Remuneration, Education, and Supervision

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Remuneration</th>
<th>Education</th>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Traffic Controller</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Architect</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Automobile Sales Manager</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Carpenter</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Chartered Accountant</td>
<td>7</td>
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<td>Welder</td>
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APPENDIX B

FORM A AND FORM B OF THE QUESTIONNAIRE
FORM A OF THE QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Occupations</th>
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<td>Air Traffic Controller</td>
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<td>Bookkeeper</td>
<td>School Teacher</td>
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<td>Carpenter</td>
<td>Secretary</td>
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<tr>
<td>Computer Programmer</td>
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<td>Attendant</td>
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<td>Director of Personnel</td>
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<td>Small Business Owner/Manager</td>
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<td>Supervisor/Foreman</td>
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<tr>
<td>Head Cook</td>
<td>Unskilled Worker</td>
</tr>
<tr>
<td>Mayor</td>
<td>Waiter</td>
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<tr>
<td>Non-commissioned Officer</td>
<td>Waitress</td>
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<td>in the Military</td>
<td>Welder</td>
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<tr>
<td>Physician</td>
<td></td>
</tr>
<tr>
<td>Registered Nurse</td>
<td></td>
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</tbody>
</table>

Directions

From the occupations above, choose three careers you feel are appropriate for each of the subjects below. Write your choice on the enclosed data sheet.

1. Willie is an East Indian "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. (mean is 500).

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 a 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, 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 three occupations you would choose for each case study subject below and rank them in order of choice.

(Willie) Case #1 ________ ________ ________
(Ann) Case #2 ________ ________ ________
(Rita) Case #3 ________ ________ ________
(John) Case #4 ________ ________ ________
(Betty) Case #5 ________ ________ ________
(Joe) Case #6 ________ ________ ________

Now please check the responses which most accurately describe you on each of the short answer questions on the personal data sheet.
### FORM B OF THE QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Air Traffic Controller</th>
<th>Registered Nurse</th>
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</thead>
<tbody>
<tr>
<td>Architect</td>
<td>Sales Clerk</td>
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<tr>
<td>Automobile Sales Manager</td>
<td>School Teacher</td>
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<td>Bookkeeper</td>
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<td>Carpenter</td>
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<td>Mayor</td>
<td>Waiter</td>
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<tr>
<td>Non-commissioned Officer in the Military</td>
<td>Waitress</td>
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<tr>
<td>Physician</td>
<td>Welder</td>
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</tbody>
</table>

### Directions

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

1. Belinda is an East Indian "C" average student from a disadvantaged neighborhood. Her nonverbal I.Q. is 112; her verbal I.Q. is 97. She is the best dancer in the school and also does 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 Scholastic Aptitude Test (mean is 500).

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 and things.

4. Betty is a quiet person with few interests. Her full scale I.Q. is 92. She does not 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 three occupations you would choose for each case study below and rank them in order of choice.

(Belinda) Case #1

(John) Case #2

(Joe) Case #3

(Betty) Case #4

(Steve) Case #5

(Ann) Case #6

Now please check the responses which most accurately describe you on each of the short answer questions on the personal data sheet.
APPENDIX C

LETTERS ACCOMPANYING THE QUESTIONNAIRE
January 3, 1979

Dear Colleague:

As a counsellor educator at the University of British Columbia, I am involved in supervising graduate student research. Although I am unable to reveal the details of this present project, I do want to assure you that this research is of interest to all of us who are concerned with counselling services in British Columbia.

I will appreciate your cooperation and thank you in advance for your efforts to complete this research.

Sincerely,

Sharon E. Kahn, Ph.D.
Assistant Professor
Department of Counselling Psychology

SEK/TMM

Enclosures
January 3, 1979

Dear Colleague:

In order to complete some research of interest to our profession, I need data which only you can supply. Your name was randomly chosen from the membership list of the B.C. Counsellors' Association. I would greatly appreciate your cooperation.

Please read the six short sketches on the enclosed sheet and choose three career objectives from the list of occupations which you feel is most appropriate for each one. Write the careers on the enclosed sheet. As 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 three. There are no right or wrong answers. You may use a career more than once.

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

If you know a colleague who 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 do it now.

Thank you.
Dear Colleague:

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

The purpose of this research is to determine if some counsellors 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.

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,
APPENDIX D

PERSONAL DATA SHEET
PERSONAL DATA SHEET

My age is:  
___ under 35  
___ 35 and over

I am:  
___ male  
___ female

I hold:  
___ less than bachelor degree  
___ bachelor degree  
___ up to 10 units beyond a bachelor degree  
___ 10 or more units beyond a bachelor degree  
___ masters degree  
___ 10 or more units beyond a masters degree  
___ Ed.D or Ph.D.

I live:  
___ in lower mainland area  
___ elsewhere

As a young child (up to age 12)  
___ father financially supported the family while mother remained at home  
___ family situation different than above

I have approximately ___ years of counselling experience