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THE IMPACT OF JOB CANDIDATE SEX AND PHYSICAL ATTRACTIVENESS ON RECRUITER'S EVALUATIONS

By

Raymond Andrew Noe

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ABSTRACT

THE IMPACT OF JOB CANDIDATE SEX AND
PHYSICAL ATTRACTIVENESS ON
RECRUITER'S EVALUATIONS

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Previous research concerning the effects of job candidate sex and physical attractiveness on recruiters' evaluations are reviewed. The present study was designed to explore the effects of candidate sex, candidate physical attractiveness, and job type on recruiters' recommendations for candidates to continue in the selection process. The specific attributions made by the recruiters to their "choice" candidate for both the traditionally male (industrial engineer) and traditionally female (nurse) jobs was examined. Also, an attempt was made to link the recruiters "ideal" applicant stereotype to the recommendations given. Analysis of variance and multivariate analysis of variance were used to analyze the data. Results indicated that individuals seeking out-of-role jobs received lower recommendations than their in-role counter parts, recruiters preferred males for the traditionally male job on the basis of perceived leadership capabilities, and candidates received differential evaluations depending on their sex and physical attractiveness.

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INTRODUCTION

Individuals entering the American workforce in the 1980s face a multitude of problems. The country's present economic instability and employer demands for specialized job skills are but a few of the factors that play a part in painting a dismal employment picture for both men and women. A further hindrance to women trying to attain a desired job or position has been the prevalence of occupational sex discrimination which results in an unfavorable classification of a job applicant on the basis of sex. For example, female applicants for a managerial position may be denied the job simply because of their sex. The Civil Rights Act of 1964 and the Equal Employment Opportunity Act of 1972 sought to eliminate not only sex discrimination, but discrimination on the basis of race, color, religion, or national origin as well. To some extent, these legislative attempts to curtail occupational discrimination have been unsuccessful. In particular, social pressure to maintain the present status of sex-typed jobs has remained constant. This is evident by the underutilization of women in the workforce. According to statistics compiled by the Department of Labor (U.S. Department of Labor, 1974), females are disproportionately underrepresented in professional and managerial positions, even though males and females compose equal membership of the white-collar labor force. Only 32% of the female white-collar workers are employed in professional and managerial

positions, far less than the 61% of male white-collar workers who are employed in such occupations (U.S. Department of Labor, 1974). Women are less than 2% of the engineers, 4% of the dentists, 5% of the lawyers, 9% of the physicians, 10% of the scientists, 18% of all salaried managers, officials and administrators, and only about 21% of all professionals outside of the fields of education and health (Farley, 1978). Terborg and Ilgen (1975) ascertained through their examination of past research that women do possess the qualifications required for management and scientific positions. Women have been shown to be similar to men in vocational interests, sources of job satisfaction and motivation, leadership ability, problem-solving, cooperation and competition, and managerial capability (from Terborg and Ilgen, 1975). According to the fifteenth annual survey of entering college freshmen conducted by U.C.L.A. and the American Council on Education, about one woman in four (27%) is planning a career in business, medicine, engineering, or law (Detroit Free Press, 1981). This represents more than a four hundred percent increase since 1966 when only five percent indicated a preference for the four careers.

A Framework for Occupational Sex Discrimination

A framework for considering sex discrimination has been constructed by Terborg and Ilgen (1975). Types of occupational sex discrimination are classified on the basis of when in the individual's occupational history the discriminatory behavior occurs.

The first classification, access discrimination, has been defined as "non-job related limitations placed on the identifiable subgroup at the time a position is filled" (Terborg and Ilgen, 1975; Terborg and Zalesny, 1980). Access discrimination has occurred in employee selection when females with qualifications similar to those of males, are evaluated as less desirable than males or are given inferior positions. Fidell (1970) empirically demonstrated access sex discrimination in hiring practices from resumes of individuals (differing only by sex) applying for positions as professors of psychology. Females received fewer offers than males for academic positions leading to tenure and only males were offered full professorships. Cohen and Bunker (1975) found that significantly more females were recommended for an editorial assistant job while more males were recommended for a personnel technician job, even though both male and female candidates' credentials for these jobs were identical. Subsequent analysis revealed that hiring decisions were influenced both by the applicant's sex and the position for which he/she was applying. Various other studies have illustrated that females are judged less desirable for management positions and are extended fewer job offers (e.g., Dipboye, Fromkin and Wiback, 1977). It is alleged that such access discrimination is due to stereotypes concerning appropriate sex-role behavior. However, only one attempt has been made to actually measure such stereotypes (Terborg and Ilgen, 1975).

The second classification, treatment discrimination, refers to invalid differential treatment of employees of one sex or the

other once they have gained access into the organization. Examples of treatment discrimination include sex discrimination in regard to salary raises, rate of promotion, and assignment to challenging and attractive work.

It has been postulated that both access and treatment discrimination are the result of sex-role and sex characteristic stereotypes (e.g., Terborg and Ilgen, 1975; Rosen and Jerdee, 1974a; Dipboye, Fromkin and Wiback, 1977; Dipboye, Arvey and Terpstra, 1977; Cash, Gillen and Burns, 1977). Therefore, in order to understand how sex-role and sex characteristic stereotypes cause access and treatment discrimination, it is first necessary to note the origin of such stereotypes.

Formation of Stereotypes

There is a good deal of confusion concerning a precise definition of stereotypes (Brigham, 1971). A stereotype has been defined as a "fixed impression, which conforms very little to the facts it tends to represent, resulting from our defining first and observing second" (Katz and Braly, 1935). This definition will serve as the basis for the following discussion of stereotypes. Inherent in this definition of stereotypes is the notion that certain groups, i.e. ethnic, racial, religious, sex, are characterized by preconceived notions which describe or pertain to all individuals of the group regardless of individual characteristics which may be completely incongruous with the stereotype.

Of particular interest are stereotypes regarding females which result in discriminatory practices in employment decisions. Females have been barred from many types of jobs simply because of beliefs that they are not suited to certain situations (O'Leary, 1974). What are the causes of such stereotypes? Sexual stereotypes are usually acquired through the process of acquiring sexual identity. At two years of age, children are able to choose sex-appropriate toys in a freeplay environment and discriminate between toys suitable for boys and suitable for girls (Fagot and Patterson, 1969). By the age of three, sex-role differentiation is established and by the fifth year most children are able to differentiate between physiological cues of maleness and femaleness and psychological cues of masculinity and feminity (Brown, 1956, 1957). Brown (1958) concluded that preschool children as a group, become aware that different behavior patterns are expected depending on whether one belongs to the male or female "group". At the age of five, youngsters have knowledge of sex-role stereotypes present in our society which generally give a decided edge to males, assigning many more desired traits to males than to females (Williams, Bennet and Best, 1975).

Parents, television shows, and children's literature all play a major role in both transmitting sex-role stereotypes and in individual acquisition of sexual identity. Popular television shows generally present males as planful, active leaders while females are shown as passive, inactive followers. Also, males are more likely to be shown aggressing against others. The actions of females are

shown as having less effect on the environment in direct contrast to those of males (Sternglanz and Serbin, 1974). However, not all television shows tend to depict females in this fashion (e.g., "Bionic Woman", "Rhoda", "Charlie's Angels"). Therefore, children can acquire different sex stereotypes depending on their exposure to certain television shows. In children's literature, Weitzman et. al. (1972) found that the ratio of male to female characters was approximately eleven to one. Girls usually are portrayed as passive, while boys are shown in a wider range of settings. When women have careers, they are almost always traditionally feminine careers (e.g. nurse, secretary). In addition, only recently have publishers begun to discontinue using occupational titles that point to one sex or the other (mailman, milkman, postman, etc.). This change in publishing policy is a direct result of EEOC discrminination laws which state it is unlawful to discriminate in advertising by stating a preference for one sex or the other (Peres, 1979). The philosophy behind the adoption of this stance is the de-emphasis of the notion that certain occupations are more suited for males than for females that is reinforced by occupational titles with the suffic "man". Even though changes have and are continuing to be made to avoid communicating through literature and television that women are destined to a lower status than men, sex-role stereotypes are generally supported by the media.

Formation of Sex-role Stereotypes Through Social Learning

Another manner in which sex-role stereotypes are acquired is through social-learning, or matching the behavior of a given social model (Bandura, 1963). Boys tend to model their behavior after that of their fathers, girls after that of their mothers (Mischel, 1966). Positive reinforcement of "desirable" sex-role behavior as seen through the eyes of the parent, leads to the formation of the child's sexual identity and lays the groundwork for sex-role stereotypes. Males acquire a "mindset" of what is appropriate behavior for males, while females acquire a "mindset" of appropriate behavior for females. Such "mindsets", which are direct products of reinforcement, have led to beliefs that females are more sociable, more suggestible, possess lower self-esteem and lack motivation to achieve (Cecil, Paul and Olins, 1973; Maccoby and Jacklin, 1974).

Through social-learning, exposure to television shows and literature, individuals acquire sexual identity and sex stereotypes that influence one's perceptions, attitudes, and motivations toward others throughout one's life. Thus, one cause of occupational sex discrimination in terms of access discrimination, may be the result of the interviewer's sex stereotypes formed by contact with role models (parents), televison, and literature throughout his or her childhood. Since such contact differs from individual to individual, sex stereotypes are formed to various degrees and influence interviewers in different ways.

Stereotypes and the Employment Interview

Most selection decisions involve some type of interview. Because of its highly subjective nature however, the interview process is vulnerable to the personal biases, prejudices, and stereotypes of interviewers (Arvey, 1979). Nonetheless, the interview continues to be used both to promote the organization to the potential employee and to select candidates for positions within the organization. The interview process can be viewed as a jigsaw puzzle in which the interviewer determines whether the job applicant could be expected to "fit" in the particular firm. A good "fit" is obtained when both individual and organizational needs are satisfied through the employment relationship (Schneider, 1976). Since the "fit" is translated into a hiring decision based on the applicant's interview performance as seen through the eyes of the interviewer, it is important to note the effects of interviewer stereotypes on hiring decisions.

Occupational discrimination can be facilitated by interviewer stereotypes regarding candidate characteristics such as sex and physical attractiveness. Unless sex or physical attractiveness can be shown to be bona-fide occupational qualifications, selection on the basis of such characteristics is unlawful. Not only does the organization discriminate against a qualified applicant on non-job related characteristics, but it also risks having a less qualified but physically attractive applicant chosen. One consequence of this "mismatch" may be that the individual's talents or skills are

lacking in regard to fulfilling known role expectations. This has been shown to be related to increases in physical and mental stress and job dissatisfaction, both of which are antecedents for such negative organizational consequences as absenteeism and turnover (Brief, Schuler, and Van Sell, 1981; Porter and Steers, 1973).

A review of the last twenty-five years of interview research (Schmitt, 1976) illustrates current findings regarding interviewer stereotypes. Sydiha (1961) and Bolster and Springbett (1961) maintain that interviewers possess stereotypes of "idealized successful" applicants against which real applicants are judged as to their suitability for hiring. Hakel, Hollman, and Dunnette (1970) concluded that "the stereotype may be a potential source of variance in hiring decisions especially when the interviewer has idiosyncratic perceptions about the characteristics of some group" (p. 115).

Because stereotypes often contain non-critical information, it follows that non-job-related stereotypes (such as sex and physical attractiveness stereotypes) may be a part of interviewers' stereotypes of the "ideal" job applicant. Mayfield and Carlson (1966) theorized that the "ideal applicant" stereotype is indeed composed of two parts, one component is specific for individual interviewers and another is based on favorable and unfavorable individual characteristics on which there is inter-interviewer agreement. It is likely that physical attractiveness and sex stereotypes are found in the former component of the "ideal applicant" stereotype. Perceptions of job qualifications for the "ideal applicant" are more likely to be found in the latter. Because sex and physical

attractiveness stereotypes can develop through social learning, media exposure, and individual values, all of which vary from individual to individual, it is likely that interviewers from widely divergent backgrounds might have different stereotypes (London and Hackel, 1974; Schmitt, 1976). For example, an interviewer who comes from a family where the mother holds a traditionally male job, may hold different sex-role stereotypes than an interviewer who does not come from such a background. Therefore, different decisions concerning the job applicant may be made depending on who is doing the evaluating.

Although the notion of stereotyping is frequently invoked to explain the occurrence of differential evaluations during interviews, the precise nature of how stereotypes operate in these situations is not specified. Arvey (1979) points out the three current lines of speculation concerning this process. First,the stereotypes may be essentially negative in nature, for example, they may contain negative attitudes and opinions concerning particular minority groups. Second, the interviewer may reject the candidate, because of a perceived mismatch between stereotypic traits and the characteristics necessary to perform the job. Third, stereotypes may operate to shape the kinds of expectations that interviewers have of the job candidate during the interview.

Occupational discrimination would result either because of the inaccuracy of the characteristics determined necessary to perform the job or because of the inaccuracy of stereotypes attributed to the individual. Schein (1973) asked male managers to indicate

which of ninety-two adjectives best described women in general, men in general or successful middle managers. Results confirmed the hypothesis that successful middle managers are perceived to possess characteristics, attitudes, and temperaments more commonly ascribed to men in general than to women in general. As a result, interviewers are less likely to attribute managerial characteristics to female job candidates which may result in unfavorable evaluations.

Also stereotypes may shape the kinds of expectations that interviewers have of the job candidate during the interview. Cecil, Paul and Olins (1973) found that the kinds of standards and criteria used to evaluate candidates depended on whether the applicant was male or female. Subjects were asked to indicate what they thought would be important factors for interviewers considering both males and females for a white-collar job. Factor analysis revealed that the criteria used to evaluate males was based on motivation, ability, and interpersonal skills. While for females the criteria centered around more clerical and cosmetic standards such as appearance (dress and mannerisms) and secretarial abilities.

The specific nature of stereotypes that interviewers hold concerning applicants may influence evaluations of the candidates during the interview process. As a result, to the extent that stereotypes are basically negative, deviate from perceptions of qualifications needed for the job, or translate into different standards of evaluation for females, stereotypes may result in lowered evaluations from the interviewer, even when applicants are equally qualified for the job.

Occupational Discrimination as The Result of Sex Stereotypes

Sex characteristic stereotyping can be thought of as the practice of assigning attributes or characteristics that are thought to describe a sexual subgroup to a particular individual who is known to be a member of the subgroup. For example, women have been characterized by such qualities as dependence, passivity, frailty, non aggressiveness, non competitiveness, yieldingness, inability to take risks, and emotionality. On the other hand, men are seen as independent, aggressive, competitive, possessing leadership skills, assertive, courageous, rational, confident, and under emotional control (Bardwick and Douvan, 1972). Characterization on the basis of sex differences on various personality traits has been referred to by a number of authors as sex-characteristic stereotyping (Terborg and Ilgen, 1975; Terborg and Zalesny, 1980). Sex-characteristic stereotyping is largely an invalid process because of the large amount of overlap between sexes on any given variable which make it apparent that individual differences outweigh sex-differences.

Sexual stereotypes can also refer to widely held beliefs concerning appropriate behavior for males and females. This type of sexual stereotype, known as a sex-role stereotype, also has been found to influence personnel decisions. In a study involving hiring males and females for either an editorial assistant position or personnel technician position, Cohen and Bunker (1975) found that more females were recommended for the editorial assistant position, while more males were recommended for the personnel technician

position. They concluded through post hoc analysis that women are frequently at a disadvantage in hiring decisions because of the incongruity between others' perceptions of their skills and talents and the nature of job requirements.

Thus, two types of sexual stereotypes, sex-characteristic and sex-role stereotypes have been shown to influence interviewer perceptions and subsequent evaluation of applicants. Sex characteristic stereotypes operate in the process of matching perceived stereotypic applicant traits with the characteristics necessary to perform the job. Sex-role stereotypes operate to shape the kinds of expectations and standards that interviewers have of job candidates during the interview with regard to appropriate male and female behaviors. An additional consequence of sex-role stereotypes is in the formation of perceptions of occupational "fit". Merton states that applicants can be perceived to "fit" best in certain occupations in which a large majority of the membership are of one sex and in which there exists an associated normative expectation that this is how it should be (Epstein, 1970). On this basis, certain occupations can be viewed as traditionally male or female depending on the sexual gender of the majority of membership. Sex-role stereotypes may influence the interviewer to achieve congruence between an applicant's sex and "maleness" or "femaleness" of a job that is dependent on the sexual gender of the majority of its membership. This can result in unlawful discrimination for the qualified applicant of either sex who is denied employment simply because they are seeking an out-of-role job.

Physical Attractiveness Stereotypes

Research indicates the existence of a physical attractiveness stereotype that influences hiring decisions. The physical attractiveness stereotype, known as the "what-is-beautiful-is-good" stereotype is as follows: physically attractive persons, both male and female are presumed to have more socially desirable traits and achieve greater social and professional success than unattractive persons (Berscheid, Dion and Walster, 1972). Byrne, London and Reeves (1968) found that when subjects were asked to evaluate strangers of the same or opposite sex who were either physically attractive or unattractive, interpersonal attraction was greater toward physically attractive strangers regardless of sex. Attractiveness was also of importance in combination with information about several of the strangers' attitudes. However, physical attractiveness exerted a greater influence on interpersonal attraction in the absence of more relevant information (i.e. knowledge of stranger's attitudes).

Berscheid and Walster (1974) in regard to access discrimination, concluded that because management positions are traditionally male occupations, the more attractive a women is, the less likely that she will be judged suitable for occupying a job that is thought to require male characteristics. Heilman and Saruwatari (1979) found that attractiveness proved to be an advantage for males but was an advantage for females only when they were seeking a non-managerial position. One conclusion that can be drawn from the research of Berscheid and Walster (1974) and Heilman and Saruwatari (1979) is

that the interviewer-applicant relationship which culminates in a hiring decision is affected by the applicant's job qualifications as well as by the sex and physical attractiveness stereotypes of the interviewer. This conclusion is supported by Gillen (1975, 1980) who found that the integration of sex and physical attractiveness stereotypes was necessary in order to account for two types of perceived "goodness" of attractive persons--one type that is sex-relevant and another that is sex-irrelevant. For traits depicting sex-relevant goodness (in-role for males or in-role for females) attribution increased with physical attractiveness for individuals' engaged in the appropriate role but not for those engaged in inappropriate role behavior. Also, perceived social desirability was found to increase with physical attractiveness for both male and female stimulus persons.

Strategies for Studying Differential Evaluations in the Interview

Current research in this area has investigated whether equally qualified females receive lower evaluations than males on the basis of interviews. Three types of research strategies have been employed: resume studies, in-basket studies, and videotape and field experiments.

The majority of research has focused on resume studies. In this type of study, subjects are asked to review a series of job resumes and to determine the suitability of each of the candidates for employment and/or the starting wage that might be offered. The

content of each resume usually includes information regarding type and level of education and past work experience. Also, standardized test scores, career objectives, and letters of recommendation are sometimes included. A photograph, which has been pretested for attractiveness, is usually attached to the resume. In the typical study, the minority variable of interest (race, sex, age, or handicap) is manipulated through the photograph and the name printed on each resume. Subjects (students, managers, college recruiters) assuming the role of interviewer, are unaware tht the resumes they are evaluating may differ from those being evaluated by other interviewers. Variables such as applicant attractiveness, type of job, job demands, and personality characteristics are often manipulated to determine if these characteristics interact with the candidates minority status thereby influencing the evaluations given the candidates.

Another strategy involves the use of a within-subject design whereby subjects evaluate and rate several resumes that vary according to the variables of inteest. All characteristics of the resumes are similar with the exception of the variables being studied.

A potential problem with studies using the resume strategy is that they involve "pencil and paper" people and not face-to-face interviews with "real" people (Arvey, 1979). As a result, one must infer that the effects found in such "artificial" conditions generalize to "real" interview situations.

The "in-basket" strategy is the second type of strategy used in this type of research. Subjects assume the role of a personnel

director or manager who works through an "in-basket" and must take action on a number of items in memorandum or letter form. Each in-basket provides information about members of the organization, the various departments of the organization, and contains several different types of personnel problems. Subjects make decisions on the basis of the information given; this usually includes hiring and/or promotion decisions for a particular individual. Problems are written in various versions and correspond to changes in the variables of interest in one or more of the problems.

The final strategy, the use of videotapes or field experiments, is less frequently employed. These designs use interviewees who are observed by interviewers either face-to-face or in videotape presentations. Interviewers usually interview or observe on videotape only a single job candidate and then make evaluations about the suitability of the candidate for the position. The content of the interview is controlled to ensure that the same questions are asked and similar responses are delivered by the interviewees.

Research Concerning Applicant Sex and Physical Atractiveness in Access Decisions

It is evident that the literature provides support for the contention that job classification and/or type of job under consideration influence personnel decisions, particularly access decisions. Sex stereotypes that form early in life may later influence the evaluations that are made of the applicants by others. Discrimination against candidates (in the form of an unfavorable evaluation)

can result from the interviewer's perception of incongruence between the applicant's gender with that "required" for the job. Still another factor, the physical attractiveness or unattractiveness of the candidate (as perceived by the interviewer), may be an additional employment barrier to the qualified job applicant.

Rosen and Jerdee (1974a) used 235 male college students to evaluate male or female candidates for jobs with demanding requirements (requiring aggressive, interpersonal behavior, or decisive managerial action) or routine requirements (clerical tasks). Each candidate was evaluated for each of four jobs with an overall hiring rating obtained on a six-point scale. Results indicated that females were evaluated more severely when the job requirements were demanding and challenging. Overall ratings for female applicants were lower than those for males. Females were also rated lower than males on "technical potential", "potential for long service to the organization", and "potential for fitting in well".

The findings of Rosen and Jerdee (that females are evaluated more severely when job requirements are demanding and challenging and are less likely than males to be recommended for a managerial position than males) are supported by the majority of research findings in this area. Dipboye, Fromkin and Wiback (1975) found that male applicants received higher ratings corresponding to a recommendation to hire than female applicants for the same position of furniture store manager. Dipboye, Arvey and Terpstra (1977) obtained subject evaluations of twelve resumes for a sales-management position

which showed that under the restriction of choosing only one of the twelve applicants for the position, raters chose highly qualified males significantly more than highly qualified females. Dipboye and Wiley (1977) investigated the effects of applicant sex and aggressiveness on hiring recommendations. Sixty-six college recruiters evaluated candidates for the position of supervisor in a retail department store. Once again, when subjects were asked to choose only one candidate, males were chosen significantly more than females. Heneman (1977) verified the results found by Dipboye, et. al. (1975, 1977). Applicant qualifications (obtained through test scores) along with sex were manipulated. Results indicated that highly qualified females were rated as less suitable for the position than highly qualified males. Haefner (1977) found a significant main effect for sex in hiring recommendations based on resume profiles in which sex, age, race and the competence of the job candidates were varied.

Even though sex has been shown to have a significant effect on hiring recommendations for various positions, the impact of sex has been shown to be quite small in studies where both sex and applicant qualifications have been manipulated. Dipboye, Fromkin and Wiback (1975) found a main effect for applicant sex in hiring ratings, but sex accounted for only a small amount of the variance (1%) in the study in which physical attractiveness and scholastic standing were also manipulated. In a follow-up study in which interviewer sex and attractiveness was manipulated along with the variables of

the previous study, Dipboye, Arvey and Terpstra (1977) found that applicant sex accounted for less than 1% of the total rating variance even though the main effect for sex was significant. An important addition to the literature was the finding that rater attractiveness had no effect on candidate selection. Finally, Haefner's (1977) results indicated a significant main effect for sex in hiring recommendations which accounted for 5% of the variance, while applicant competence accounted for 88% of the variance in rating variance. The results of these studies demonstrate that while applicant sex significantly affects hiring recommendations, qualified candidates are preferred over less qualified candidates.

Research Concerning Both Access and Treatment Decisions

The notion that women are the victims of both treatment and access discrimination when they are as equally qualified as males, is supported by the work of Rosen and Jerdee (1974b) and Terborg and Ilgen (1975). While both studies used the in-basket strategy, they differed in the dependent measures of interest. Rosen and Jerdee (1974b) used 95 male bank supervisors to evaluate applicants for promotion, development and supervision. Manipulated variables included sex of the applicant and job complexity. Experimental materials were embedded in an in-basket exercise in which subjects were asked to assume the role of the personnel director and to respond in memorandum form to a series of items. For each item, subjects indicated on a fixed-response scale their decisions and

extent to which they would find certain reactions to the case acceptable. Males were more apt to be recommended for promotion than females and when the decision to terminate subordinates was made, the decision was rated higher when requested by a male supervisor. In addition, it appeared that while a highly promotable male employee was preferred to a female employee with less potential, a highly promotable female was preferred only slightly more frequently than an unpromotable male.

Terborg and Ilgen (1975) used an in-basket strategy to evaluate male and female job candidates. Subjects were asked to evaluate male and female job candidates for an engineering position. Dependent measures included both a hiring decision (access decision) and a recommendation for starting salary. No significant difference was found between male and female applicatns in the decision to hire, but females were given a lower starting salary than identical male applicants.

The Terborg and Ilgen (1975) study is of particular interest because it represents one of the few studies to actually attempt to measure subject (interviewer) stereotypes toward females. The Women As Managers Scale (WAMS) was used to assess subjects' stereotypes toward women in business. Hiring decisions were found to be significantly related to the attitude toward women in managerial positions as measured by the WAMS ($r = .58$). The more favorable the subjects' attitude toward women in managerial positions, the higher the rating the female received in terms of desirability of hiring for the

engineering position. The correlation between hiring decisions and WAMS scores suggests it is possible that interviewer stereotypes may significantly affect hiring decisions. If this is the case, close to 34% of the variance in the desirability for hire rating is accounted for by the interviewers' attitudes toward women in business.

The influence of the predominant sex of employees in the job on interviewers evaluations of applicants for that job has been investigated. Rose and Andiappan (1978) using seventy-five college students as subjects, investigated the influence that a predominantly male or predominantly female workforce would have on interviewer evaluations of candidates. Sex of subject, sex of applicant, and predominant sex of subordinates were the variables investigated. Subjects evaluated resumes on the probability of success in a managerial job that involved either a predominantly male or female workforce. Results of the study indicated that female raters evaluated applicants of both sexes more positively than male raters. The interaction between candidate sex and the predominant sex of subordinates was significant--female candidates were evaluated more favorably when the predominant sex of the subordinates was female, male candidates were given higher evaluations when the workforce was predominantly male. This finding serves to support the contention that both females and males are discriminated against for out-of-role jobs, i.e., jobs in which characteristics of the majority of membership are opposite those of the application or jobs in which

the majority of subordinates are of the opposite sexual gender of the applicant.

Applicant qualifications or competences have been investigated in several studies in order to clarify the extent to which sex actually influence interviewer evaluations. Such research addresses the issue of whether sex is significant only when it is the only salient cue available to the interviewer, or if it remains powerful regardless of what other variables are available to the interviewer. Several studies cited previously showed that in combination with applicant qualifications, sex accounted for a small proportion of variance in hiring ratings (Dipboye, Fromkin and Wiback, 1975; Dipboye, Arvey and Terpstra, 1977; Haefner, 1977).

Muchinsky and Harris (1977) not only manipulated applicant sex, rater sex, and applicant qualifications, but also manipulated job type. Resumes for the positions of copy editor, day-care person, and mechanical engineer were evaluated by subjects; hiring recommendations was the dependent variable. A main effect for applicant sex was observed whereby females were given higher ratings than males. Additionally, qualified applicants were preferred over unqualified applicants and underqualified females received higher evaluations than qualified males on the day-care and copy editor jobs. Interestingly, significant main effects also were observed for raters, such that female raters gave significantly higher ratings to applicants of both sexes than did male raters. This suggests the possibility that females are more lenient in their evaluations of job applicants than are males. The findings that females were

given higher evaluations on the day-care and copy editor jobs than males is not surprising since these two jobs are likely to be considered traditionally female jobs.

Past research tends to support the conclusion that highly qualified females are rated as less suitable for certain jobs than highly qualified males. But because of the possible effects of physical attractiveness stereotypes on interviewer decisions (e.g., Heilman and Saruwatari, 1979) both applicant attractiveness and the job under consideration must also be taken into account. Cash, Gillen and Burns (1977) using seventy-two personnel directors as subjects, manipulating sex, type of job, and applicant attractiveness. Jobs were either "masculine" (auto salesperson, hardware clerk), "feminine" (telephone operator, office receptionist), or "neuter" (motel desk clerk, photographic darkroom assistant). The "masculine" and "feminine" nature of the jobs was defined in terms of the predominant sexual gender of members holding the job. Results of the study indicated that attractive applicants were more favorably evaluated than unattractive applicants regardless of sex, when under consideration for neuter jobs. Also, when candidates were considered for traditionally masculine jobs, attractive males were more highly evaluated than attractive females. Attractive female candidates were more positively evaluated than unattractive males when under consideration for a traditionally feminine job. Marvelle and Green (1980) in an attempt to replicate these findings, employed a videotape strategy to enhance the realism of the interview situation.

Applicant sex, attractiveness, and type of job were the manipulated variables. Forty male undergraduates rated one candidate on the probability that a job offer would be made. Subjects reviewed a job description, the candidates resume, and conducted a simulated interview prior to rating the candidate. Results indicated that attractive candidates were evaluated more favorably on the probability of hire scale than unattractive candidates. However, in contrast to the results found by Cash et. al. (1977), no physical attractiveness discrimination was observed when candidates were interviewed for out-of-role positions, i.e., there was no significant difference in the probability of hiring the attractive or unattractive candidates of the sex not associated with the job. Supportive of the Cash et. al. (1977) study was the finding that the probability of hiring the candidate of the sex not associated with the job was less than the probability of hiring the attractive candidate of the sex associated with the job. Therefore, it can be tantatively concluded that candidates of the sex not associated with the job are less likely to be hired, regardless of their physical attractiveness.

Summary

The research concerning evaluations of job candidates yields the following conclusions. First, the evidence is fairly consistent in showing that women tend to be evaluated less favorably than men especially when women are considered for typically masculine-oriented jobs. Second, when qualifications of candidates are considered, they

account for 25-50% of the variance in ratings, and the notion that highly competent women are prone to negative evaluations compared with highly qualified males is not supported. Third, physical attractiveness has been consistently shown to influence evaluations of candidates for in-role jobs, i.e., attractive males and females receive higher evaluations than unattractive males and females for in-role jobs.

Research Questions

The selection process for the majority of college graduates typically involves a "multiple hurdle" approach. In multiple hurdle selection strategies, applicants are tentatively accepted and assessed further as to whether or not they should be permanently accepted by the organization (Cascio, 1978). First, the applicant must be deemed qualified and capable of performing the job by the recruiter during their initial contact at the college or university placement office which typically lasts less than one hour. The recruiter recommends that the applicant continue in the selection process, the potential employee travels to the organizations' headquarters or potential place of employment for more in-depth interviews with his/her potential boss and peers, psychological testing, or some combination of the two. The organization incurs substantial costs at this second stage of the selection process as a result of testing, transportation, food, and lodging costs incurred when potential employees are brought inside the organization for closer

scrutiny. It is at this second or subsequent stages of the selection process that the actual hiring decision is made.

In the initial stage of the selection process for college graduates, the sex and physical attractiveness of the applicant are likely to be more salient since detailed information concerning the prospective employees' qualifications (work experience, interests, volunteer activities) is not completely known. Therefore, it is at this point in the selection process, when recruiters first come in contact with prospective employees, that occupational discrimination on the basis of sex and physical attractiveness is likely to occur. This conclusion is logically derived from previous research which has noted that sex and physical attractiveness account for the largest amount of variance in hiring ratings in the absence of information regarding the applicant's qualifications (Dipboye, Fromkin and Wiback, 1975; Dipboye, Arvey and Terpstra, 1977, Haefner, 1977).

One criticism of past research efforts in this area is the neglect of the "reality" of the selection process. Regardless of whether applicant sex, physical attractiveness or qualifications have been manipulated, the dependent variable of interest continues to be hiring ratings, e.g., the probability that the applicant would be selected for the position. Typically, the information given the student, personnel administrator, or recruiter playing the role of interviewer lacks sufficient detail concerning the applicant. Yet the subjects are required to make hiring decisions! This highlights the fact that past researchers have neglected the successive stages

involved in the selection process. Perhaps, one way to give these studies added "realism" is to conceptualize them as dealing with the initial stages of the selection process where detailed information concerning the applicant usually is unknown. Whether similar results (in regard to the effects of applicant sex and physical attractiveness) would occur if the dependent variables were changed from hiring ratings to a more realistic "recommendation for the applicant to continue in the selection process" remains to be seen.

The major emphasis of this research effort was to study the effects that the sex and physical attractiveness of job applicants had on college recruiters' judgments in the initial stages of the selection process. In particular the following questions were addressed:

1) How does the sex and physical attractiveness of job candidates affect recruiter recommendations for both traditionally male and traditionally female jobs requiring advanced educational achievement (college degree)?

There is a scarcity of information in the current literature concerning the effect of job candidate characteristics, such as sex and physical attractiveness, on "interviewer" evaluations for jobs requiring more than a high school level education. Typical jobs in studies where job type (traditionally male vs. traditionally female) has been manipulated include auto salesperson, hardware clerk, telephone operator, office receptionist, motel desk clerk and photographic assistant (Cash et. al., 1977).

Generalizations from the results of earlier studies to other types of jobs, requires that jobs necessitating more than a high school education are investigated also. Grunes (1956) found that when high school studients were asked to group occupations representing all the major categories in the Dictionary of Occupational Titles, the level of education appeared to influence the students' occupational groupings. They grouped together occupations requiring a college education in one category and skilled and unskilled occupations requiring a high-school level education in other categories. Perhaps, the sex and physical attractiveness of job candidates for positions requiring a college degree are less likely to affect recruiters' recommendations. This could be due to recruiters' perceptions that these individuals have attained a certain level of prestige or status. Therefore, recruiters' may not attend to, and therefore be less likely to be influenced by, the sex and physical attractiveness of the job candidate, in making his or her recommendations for the individual to continue in the selection process. If this is the case, than no significant effect for candidate sex or physical attractiveness should be found in studies using jobs requiring a college degree.

2) What characteristics are attributed to the recruiters' "choice" job candidate?

Research has shown that males and females have been characterized by certain sets of attributes thought to describe each sex. Based on sexual stereotypes, these attributions have been suggested as one of the principal causes of unfavorable evaluations of female

job candidates seeking traditionally male jobs (e.g. Schein, 1973). This study sought to determine the characteristics that recruiters would attribute to their "choice" candidate for both a traditionally male and traditionally female job. Of particular interest was the extent that the recruiters' attributions varied according to the sex and physical attractiveness of their "choice" candidate.

3) Will knowledge of the sex and physical attractiveness of the recruiter's "ideal" applicant allow the prediction of his/her recommendations for the applicants to continue in the selection process?

Sex and physical attractiveness stereotypes have been inferred to be the cause of differential hiring decisions either a priori or in post hoc explanations in the majority of research (Fidell, 1970; Rosen and Jerdee, 1974a, 1974b; Cohen and Bunker, 1975; Cash, Gillen and Burns, 1977; Schein, 1973). Yet little of the past research has concentrated on measuring the stereotypes of the interviewer who makes the evaluations. The lone exception is the research of Terborg and Ilgen (1975) in which stereotypes toward women in business were assessed with the WAMS.

This study sought to establish a relationship between the recruiters' "ideal" applicant stereotype and recommendations concerning job candidates. If such a relationship can be demonstrated, it will be possible to identify recruiters who could be discriminating against qualified applicants on the basis of non-job related characteristics such as sex and physical attractiveness.

METHOD

Subjects

Approximately 80 college recruiters (53 males and 27 females from the Michigan State University Placement Center were asked to participate in the study during unscheduled time in their recruiting schedules.

Procedure

Subjects were asked to make evaluations of candidates for both a traditionally male and female job (engineer vs. nurse). Counterbalancing was used to eliminate possible order effects resulting from the order of presentation of the engineering and nursing job candidates. Each subject was given a job description, a list of qualifications, and a set of four resumes with attached photographs of each of the job candidates, for both the nurse and engineering jobs. Two males and two females were the candidates for each job; attractiveness varied within sets of the job candidates, i.e., one male was attractive, one male was unattractive, one female was attractive, one female was unattractive (see Appendix A). Subjects completed a questionnaire concerning the job candidates which included: subject recommendations for each candidate to continue in the selection process, the candidate subjects would choose for the job ("choice" candidate) if they were forced to make a hiring

decision, and the various characteristics attributed to their "choice" candidate for each job.

Independent Variables

The independent variables of primary interest were Candidate Sex (male-female), Candidate Physical Attractiveness (unattractive-attractive), and Job Type (traditionally male-traditionally female). Recruiters' previous recruiting experience, "choice" of job candidates for both the nursing and engineering jobs and the recruiters' sex and physical attractiveness "ideal" applicant stereotype were used as independent variables in subsequent analyses.

Job Type

The jobs of industrial engineer and nurse represented traditionally male and female jobs and were chosen on the basis of rankings provided by 22 different white and blue-collar jobs (see Appendix D). Twenty-two female and 22 male undergraduate students were asked to rank the three jobs they thought were most representative of traditionally female jobs and the three jobs they considered to be most representative of traditionally male jobs. There was considerable agreement across sexes as to which jobs were best representative of traditionally male or traditionally female jobs. Nurse, school teacher, and librarian were consistently mentioned as the traditionally female jobs, while carpenter, bank executive, stock-market broker, and civil engineer were consistently mentioned as the traditionally male jobs. Nurse and industrial engineer were chosen to represent the traditionally male and female jobs for

purposes of this study. One reason these jobs were chosen was the fact that the employment outlook for both these jobs is optimistic. The rate of demand for industrial engineers is expected to grow faster than the average rate for all occupations, with 10,500 openings predicted for every year through 1985 (Chronicle Guidance Publications, 1979). Recent statistics reveal a 4.1% vacancy rate in hospital nursing positions (University of Michigan, 1979). The good employment outlook for these two jobs was seen as adding to the "realism" of the study since organizations are actively recruiting college graduates to fill both nurse and industrial engineering positions.

A one page job description for each of the two positions was provided (see Appendix E). Both of the job descriptions for the nurse and industrial engineer position were taken from the Dictionary of Occupational Titles (U.S. Government Printing Office, 1977).

Candidate Physical Attractiveness

Physical attractiveness of job candidates was manipulated using facial photographs from a recent college yearbook. Attractive and unattractive individuals were chosen as described in the pilot phase of the project.

Candidate Sex

Candidate sex was assessed by both the applicant's name on the resume and the corresponding photograph.

Ideal Applicant Stereotype

The recruiters' ideal applicant stereotypes were assessed by asking the recruiters to describe the individual they felt would be a definite success on the job.

Resumes

Each resume included information relating to the candidate's job objective, education, work experience, references, and personal data. These elements were suggested to be included in the resumes by various resume construction guides (e.g., Jost, 1981). Also, the candidate's General Aptitude Test Battery (GATB) scores and the M.S.U. Placement Center credential form accompanied the resumes (see Appendix F).

General Aptitude Test Battery Scores (GATB)

The General Aptitude Test Battery (GATB) was developed by the United States Employement Service (USES). By testing many groups of employees, applicants, and trainees in different kinds of jobs, score patterns showing the critical aptitudes and minimum scores required for each occupation were subsequently established (Anastasi, 1976). The aptitudes covered by the GATB scores found in the 1965 edition of the Dictionary of Occupational Titles include Intelligence (G), Verbal Aptitude (V), Numerical Aptitude (N), Spatial Aptitude (S), Form Perception (P), Clerical Perception (Q), Motor Coordination (K), Finger Dexterity (F), Manual Dexterity (M), Eye-Hand-Foot Coordination (E) and Color Discrimination (C).

The critical scores and minimum aptitudes on the GATB for these two positions were taken from the Dictionary of Occupational Titles (U.S. Government Printing Office, 1965). This information was provided on the qualifications sheet for each respective job.

Candidate Qualification Sheet

Candidate requirements for both the nurse and industrial engineer position as stated on the application qualifications sheet are shown in Appendix G. Qualifications included GATB test score level, worker requirements, and typical situations the employee will encounter in the job. The worker requirements and on-the-job situations for both the nurse and industrial engineer job were taken from the Dictionary of Occupational Titles (U.S. Government Printing Office, 1965). The on-the-job situations were derived from the temperament scale of the qualifications profile for both of the jobs.

Dependent Variables

The primary dependent variables were recruiters' responses as to the likelihood they would recommend each job candidate to continue in the selection process. The recruiters' "choice" candidate for each job and the characteristics attributed to each "choice" candidate also were used as dependent variables.

Questionnaire

Information on the dependent measures was collected through a questionnaire given to each recruiter (see Appendix H). A five-point Likert scale ranging from "Extremely likely" to "Extremely

unlikely" was used for recruiters' recommendations that each candidate continue in the selection process. Nineteen seven-point semantic differential scales, anchored by adjectives which characterize males and females were completed. These anchors were derived from the work of Schein (1973), Maccoby and Jacklin (1974), and Bardwick and Douvan (1972). As a manipulation check, recruiters were asked to indicate to what extent they believed each job was traditionally male or female, and to rate the qualifications and physical attractiveness of each job candidate. Finally, recruiters were asked to complete a description of their "ideal" applicant for each job including the applicant's sex, age, marital status, physical attractiveness, community involvement, type and level of education, and scholastic achievement as measured by grade point average (GPA).

Pilot Testing of Resumes and Photographs

Twenty undergraduate students rated the attractiveness of a series of photographs of males and females (see Appendix B). These photographs were taken from a recent college yearbook. On the basis of attractiveness ratings (scale values ranged from 1 = Extremely unattractive to 5 = Extremely attractive), the photographs of the two attractive ($\bar{x}$ = 3.72, S.D. = .75; $\bar{x}$ = 3.72, S.D. = .75) and two unattractive ($\bar{x}$ = 2.10, S.D. = .77; $\bar{x}$ = 1.80, S.D. = .71) males and two attractive ($\bar{x}$ = 4.31, S.D. = .76; $\bar{x}$ = 3.86, S.D. = .83) and two unattractive ($\bar{x}$ = 1.86, S.D. = .88; $\bar{x}$ = 1.52, S.D. = .83) females were selected. T-tests between the means for attractive

and unattractive candidates of both sexes were significant at the .01 level.

Resumes were also pilot-tested to insure equivalance in candidate qualifications and to eliminate contaminating effects due to resume layout (see Appendix C). Eight resumes (one for each of the 4 nursing candidates and the 4 engineering candidates) were rated as to their similarity on a scale raning from 1 = Very similar to 5 = Very dissimilar. Mean ratings of the similarity between the resumes for: stated job objective, education, personal data, work experience, and GATB test scores ranged from 1.00 to 2.00. This indicated that the raters viewed the various components of the job candidates' resumes as being similar. Mean ratings of the overall qualifications of each candidate for the job (1 = Extremely qualified, 5 = Extremely unqualified) ranged from $\bar{x}$ = 1.85, S.D. = .93 to $\bar{x}$ = 2.20, S.D. = .95 for the nursing candidates and from $\bar{x}$ = 1.20, S.D. = .73 to $\bar{x}$ = 2.65, S.D. = .88 for the engineering candidates. This indicated that while there was some variability in the perceived qualifications of the job candidates, all of the candidates were perceived as being qualified for the job they were seeking.

Data Analyses

Analysis of variance was used to determine the effect of three independent factors: Candidate sex (male-female), Candidate physical attractiveness (attractive-unattractive), and Job Type (traditionally male-traditionally female) on recruiters' recommendations (for each job candidate) to continue in the selection process.

The computer package BALANOVA (Frankmann and Coyle, 1980) was used in the analysis. Omega-square was calculated in order to estimate the magnitude of the treatment effects.

The Statistical Package for the Social Sciences (SPSS; Nie, Hull, Jenkins, Steinbrenner, Bent, 1975) was used for the remaining data analyses. These analyses included chi-square, principal components factor analysis, reliability, multivariate analysis of variance, and T-tests. The chi-square statistic was computed in order to assess independence between the recruiter's "choice" candidate (for each of the two jobs) and sex of the recruiter. Principal components factors analysis followed by OBLIQUE and VARIMAX rotation, was used in order to group the adjectives which the recruiters attributed to their "choice" candidates for each job. Initial estimates of the communalities were given by the squared multiple correlation between a given variable and the remaining variables.

Based on the results of the factor analysis, adjectives were combined to form scales. Internal consistency of the scales was determined by using the coefficient alpha statistic. Also, Pearson product-moment correlation coefficients were computed for both the initial adjectives and the subsequent scales.

Multivariate analysis of variance (MANOVA) was used to explore simultaneously the relationship between the recruiter's "choice" candidate for each job, recruiter experience, i.e., type of job for which the individual recruits, and the adjective scales describing the "choice" candidate. MANOVA allows simultaneous testing of all the variables and considers the various interrelationships

among them, thereby decreasing the probability of Type I error (Hair, Anderson, Tatham, Grablowsky, 1979). Contrasts using Tukey's procedure were conducted in order to isolate the source of significant F-values.

T-tests were performed on the recruiters' judgments of candidate qualifications and physical attractiveness. This was done in order to confirm that the experimental manipulation had been perceived as intended.

RESULTS

Manipulation Check

Recruiters' judgments of the physical attractiveness of the job candidates indicated tht the recruiters perceived the candidates as intended: the unattractive candidates were perceived as unattractive, the attractive candidates were perceived as attractive. Differences between the mean ratings of attractive male candidates for the engineering ($\bar{x}$ = 1.96) and nursing ($\bar{x}$ = 1.78) jobs were significantly different ($p < .01$) from the mean ratings of unattractive male candidates for the engineering ($\bar{x}$ = 3.48) and nursing ($\bar{x}$ = 3.66) jobs. Significant differences were also found between mean ratings of attractive female candidates for the engineering ($\bar{x}$ = 1.68) and nursing ($\bar{x}$ = 1.61) jobs and the mean ratings of unattractive female candidates for the engineering ($\bar{x}$ = 3.75) and nursing ($\bar{x}$ = 3.66) jobs.

The candidates for each of the two positions were also viewed by the recruiters as being sufficiently qualified for the particular job they were seeking. The recruiters' judgments of candidate qualifications were made on a three-point scale (1 = Extremely qualified, 2 = Qualified with reservations, 3 = Not qualified). Mean ratings of candidate qualifications ranged from $\bar{x}$ = 1.25 to $\bar{x}$ = 1.46 for the four engineering candidates and from $\bar{x}$ = 1.21 to $\bar{x}$ = 1.29 for the four nursing candidates.

Recruiters also perceived the engineering job as the traditionally male job and the nursing job as the traditionally female job. Seventy-six of the 80 recruiters (95%) responded that the engineering job was "somewhat" or "extremely" traditionally male. Seventy-seven recruiters (96%) felt that the nursing job was "somewhat" or "extremely" traditionally female.

Analysis of Recruiters' Recommendations

Recruiters' recommendations for each candidate ranged from 1 = Extremely unlikely to 5 = Extremely likely. Table 1 shows the analysis of variance summary table. As shown in this table, the interaction between Job Type and Candidate Sex was significant. Mean recommendations given to male job candidates for the engineering job ($\bar{x}$ = 4.04) were significantly higher than the mean recommendations given to the female candidates ($\bar{x}$ = 3.76) for this job. The reverse, however, was found for the nursing job. Significantly higher mean recommendations were given to females ($\bar{x}$ = 4.05) than were given to males ($\bar{x}$ = 3.83).

The interaction between Candidate Sex and Candidate Attractiveness was also significant. Mean recommendations of unattractive male candidates ($\bar{x}$ = 4.03) were significantly higher than the mean recommendations given to attractive male candidates ($\bar{x}$ = 3.84). The reverse was true for females, mean recommendations of attractive females ($\bar{x}$ = 3.95) were significantly higher than the mean recommendations given to unattractive females ($\bar{x}$ = 3.86). Omega-squares for

the two significant interactions indicate that a minimal amount of variance is accounted for.

TABLE 1.--Analysis of Variance summary table.

Source	df	SS	MS	F	W^2
Job Type (J)	1	.264	.264	.214	
Error	79	97.36	1.23		
Candidate Sex (C)	1	.127	.127	.241	
Error	79	41.50	.525		
Candidate Attractiveness (A)	1	.352	.352	.295	
Error	79	94.27	1.19		
J x C	1	9.75	9.75	25.79*	.014
Error	79	29.87	.378		
J x A	1	.039	.039	.044	
Error	79	70.59	.893		
C x A	1	2.89	2.89	5.89*	.003
Error	79	38.74	.490		
J x C x A	1	.077	.077	.107	
Error	79	56.55	.716		
Subjects (S)	79	352.56	4.46		
Total	639	794.94			

*$p \leq .05$.

Analysis of Recruiters' "Choice" Candidates

Recruiters were asked to select one of the four candidates for each of the two jobs. A large majority of recruiters' chose the male candidates for the engineering job. Sixty-two of the 80

recruiters (77.5%) chose a male candidate while 18 recruiters (22.5%) chose a female candidate. A slight preference was shown by recruiters for attractive (N = 44.55%) vs. unattractive candidates (N = 36, 45%), but the discrepancy was not as large as that found for candidate sex. Thirty-four of the 80 recruiters (42.5%) selected the attractive male, 28 (35%), the unattractive male, 10 (12.5%), the attractive female, and 8 (10%), the unattractive female.

Differences in recruiters' candidate choice for the nursing job reflected a preference for attractive candidates of either sex. Fifty of the 80 recruiters (62.5%) chose attractive candidates while 30 recruiters (37.5%) chose unattractive candidates. Overall, 27 of the 80 recruiters chose attractive males (33.25%), 11, unattractive males (13.75%), 23, attractive females (28.75%), and 14, unattractive females (23.75%), as their choice candidate for the nursing job.

Recruiter sex was not related to candidate choice for either the engineering or nursing job.

Scale Construction

Principal components factor analysis of the adjective scales with OBLIQUE rotation revealed four factors: three of the four were relatively orthogonal. Factor 1 was moderately negatively correlated with both Factor 3 and 4. Table 2 illustrates the factor pattern intercorrelations. In order to aid in the interpretation of the factors, the factors were also rotated using a VARIMAX rotation. Table 3 shows the factor loadings of the adjective scales and

TABLE 2.--Factor Pattern Correlations

	1	2	3	4
1	1.00			
2	- .32	1.00		
3	- .14	.12	1.00	
4	- .55	.18	.11	1.00

TABLE 3.--Factor Loadings of Adjective Ratings

	1	2	3	4
Task-Oriented Person-Oriented	.059	.046	.418*	-.073
Extroverted-Introverted	.398*	.205	-.275	-.134
Leader-Follower	.690*	.317	-.025	.228
Rational-Irrational	.295	.679*	-.374	-.049
Independent-Dependent	.577*	.147	-.027	.103
Decisive-Indecisive	.377	.595*	-.220	-.106
Verbal ability-Math ability	-.079	-.252	.101	.459*
Achievement due to skill-Achievement due to luck	.468*	.446	-.329	-.114
Active-Passive	.762*	.131	-.019	-.184
Confident-Lack Confidence	.459	.611*	-.089	-.195
Competent-Incompetent	.482*	.236	-.330	.027
Unemotional-Emotional	.072	.087	-.056	.530*
Unsupportive-Supportive	.267	-.561*	.422	.295
Insensitive-Sensitive	-.092	-.189	.622*	.441
Dominant-Submissive	.510*	.491	.119	-.123
Objective-Subjective	.126	.686*	-.094	.113
Self-oriented Other oriented	-.202	-.156	.766*	.026

*Represents highest factor loading.

indicates that these scales may be described by one large, general factor and three others. Factor scales were formed on the basis of the factor loadings and content analysis of the items. As a result of content analysis, Factor 4 was divided into two scales.

Table 4 presents the item composition of the scales labeled leadership, decision-making, sociability, academic skills, and affect. It is important to note that the factor loadings of a number of the adjective scales are ambiguous, i.e., many scales have high factor loadings on more than one factor. This is especially true for items dealing with confidence, dominance, decisiveness, and source of achievement. This pattern of factor loadings could be the result of recruiters' perceptions that these traits are related to both leadership and decision-making capabilities.

Internal consistency, as measured by coefficient alpha, for the leadership (α = .8122) and decision-making (α = .8214) scales were acceptable; moderate internal consistency reliability was found for the sociability scale (α = .6776). Because the academic skills and affect scales each consist of one item no measure of internal consistency was necessary. Table 5 presents the scale intercorrelations. Pearson product-moment correlation coefficients computed between the various scales revealed a strong relationship between the leadership and the decision-making scales (r = .66). This is not surprising due to the content of these scales. Table 6 shows the item intercorrelations. An individual who is perceived to be a "leader" is also likely to be seen as rational, decisive, confident, and objective--items which comprise the decision-making scale.

TABLE 4.--Item Composition of scales[a]

Leadership	
Extroverted	Introverted
Leader	Follower
Independent	Dependent
Achievement due to skill	Achievement due to luck
Active	Passive
Competent	Incompetent
Dominant	Submissive
Decision-making	
Rational	Irrational
Decisive	Indecisive
Confident	Lack confidence
Objective	Subjective
Sociability	
Person Oriented	Task Oriented
Supportive	Unsupportive
Sensitive	Insensitive
Other-centered	Self-centered
Academic Skills	
Math Ability	Verbal Ability
Affect	
Unemotional	Emotional

[a]The first adjective in each pair was rated 1, the second 7.

TABLE 5.--Scale Intercorrelations

	Leadership	Decision-making	Sociability	Academic Skills	Affect
Leadership	1.00				
Decision-making	.66	1.00			
Sociability	- .39	- .50	1.00		
Academic skills	- .19	- .31	.26	1.00	
Affect	.09	.06	.04	.22	1.00

TABLE 6.--Item Intercorrelations.

	Task-oriented-Reason oriented	Extroverted-Introverted	Leader-Followed	Rational-Irrational	Independent-Dependent	Decisive-Indecisive	Verbal Abil.-Math Abil.	Ach. Due to Skill-Ach. Due to Luck
Task-oriented-Person oriented	1.00							
Extroverted-Introverted	-.210*	1.00						
Leader-Follower	-.004	.343*	1.00					
Rational-Irrational	-.041	.316*	.350*	1.00				
Independent-Dependent	.030	.193*	.457*	.347*	1.00			
Decisive-Indecisive	-.063	.339*	.478*	.603*	.239*	1.00		
Verbal Abil.-Math Abil.	.075	-.144	.012	-.216*	-.014	-.334*	1.00	
Ach. Due to Skill-Ach. Due to Luck	-.206*	.303*	.415*	.569*	.344*	.533*	-.276*	1.00
Active-Passive	.142	.377*	.513*	.314*	.451*	.351*	-.148	.464*
Confident-Lack Confidence	-.095	.379*	.423*	.562*	.368*	.587*	-.330*	.585*
Incompetent-Competent	-.091	.310*	.431*	.467*	.363*	.362*	-.181	.457*
Unemotional-Emotional	-.102	-.007	.159	.098	.083	.007	.216*	.079
Supportive-Unsupportive	.134	-.367*	-.310*	-.679*	-.178	-.501*	.286*	-.559*
Sensitive-Insensitive	.183	-.336*	-.036	-.441*	-.063	-.262*	.281*	-.366*
Dominant-Submissive	.023	.409*	.533*	.448*	.334*	.352*	-.253*	.439*
Objective-Subjective	-.065	.195*	.361*	.535*	.178	.469*	-.075	.318*
Self-centered-Other centered	.348*	.323*	-.231*	-.471*	-.158	-.379*	.148	-.388*

$p \leq .05$

TABLE 6.--Item Intercorrelations (Continued)

	Active-Passive	Confident-Lack Confidence	Incompetent-Competent	Unemotional-Emotional	Supportive-Unsupportive	Sensitive-Insensitive	Dominant-Submissive	Objective-Subjective	Self-centered-Other centered
Task-oriented-Person oriented									
Extroverted-Introverted									
Leader-Follower									
Rational-Irrational									
Independent-Dependent									
Decisive-Indecisive									
Verbal Abil.-Math Abil.									
Ach. Due to Skill-Ach. Due to Luck									
Active-Passive	1.00								
Confident-Lack Confidence	.457*	1.00							
Incompetent-Competent	.390*	.380*	1.00						
Unemotional-Emotional	.006	-.019	.110	1.00					
Supportive-Unsupportive	-.383*	-.523*	-.398*	.068	1.00				
Sensitive-Insensitive	-.223*	-.243*	-.268*	.206*	.578*	1.00			
Dominant-Submissive	.436*	.565*	.255	.009	-.401*	-.092	1.00		
Objective-Subjective	.181	.464*	.239	.135	-.456*	-.215*	.395*	1.00	
Self-centered-Other centered	-.184	-.270*	-.372	-.030	.438*	.533*	.089	-.179	1.00

*$p \leq .05$

This is evident by examination of the intercorrelations between the items of these scales.

Analysis of Recruiters' Attributes to Their "Choice" Candidates

Multivariate analysis of variance (MANOVA) was conducted separately for the nursing and engineering jobs. The leadership, decision-making, sociability, academic skills, and affect scales were the dependent variables and recruiter "choice" candidate and recruiting experience were the independent variables. Recruiting experience was determined by placing the recruiter into one of two categories on the basis of the types of job for which he/she recruited. Because one half of the recruiters had experience recruiting individuals for engineering positions (40 of 80), and the experience of the remaining recruiters covered a broad range of positions, eg., education, finance, management/administration, two categories of recruiting experience were chosen: 1) Experience in recruiting engineers, and 2) No experience in recruiting engineers. None of the recruiters had experience recruiting nurses. Results indicated that recruiter experience had no significant effect on the characteristics attributed to the recruiters' "choice" candidates.

MANOVA analysis revealed a significant difference in the attributions of leadership for the recruiters' "choice" candidate for the engineering job ($F(2.73) = 6.31$, $p \leq .01$). Contrasts using Tukey's Test between recruiters' attribution of leadership based on the recruiters' "choice" candidates revealed significant

differences. Males, in general, were seen as possessing more leadership characteristics than females. Unattractive females were perceived as having fewer leadership characteristics than the other candidates. Tables 7 and 8 present the means and standard deviation of the scale ratings attributed to "choice" candidates for the engineering and nursing jobs. Examination of the means and standard deviations of leadership scale scores for the "choice" engineering candidates reveals a large difference in mean values between the unattractive female and the other candidates. Also the relatively small standard deviation of the leadership scale scores for the unattractive female when compared with the other candidates indicates that the recruiters were in substantial agreement in their ratings. It appears, therefore, that the most notable contrast is that between the leadership scale scores of the unattractive female and all other candidates for the engineering job.

Analysis of Recruiters Ideal Applicant Stereotype

Regression analysis of the "ideal" applicant sex and physical attractiveness on the recruiters' recommendations for each candidate was not possible because of the lack of variability in the recruiters' responses. Seventy-five of 80 recruiters (93.75%) responded that a job candidates' sex "did not matter", while 69 of 80 recruiters (86.25%) responded that the job candidates' physical attractiveness "did not matter" for the engineering job. Results were similar for the nursing job. Seventy-one of 80 recruiters (88.75%) responded

TABLE 7.--Means and Standard Deviations of Scale Ratings x Candidate Choice for Engineer[a]

	Possible Range	Att $\bar{x}$	Male S.D.	Unatt $\bar{x}$	Male S.D.	Att $\bar{x}$	Female S.D.	Unatt $\bar{x}$	Female S.D.
Leadership	(7 - 49)	20.44	4.5	20.75	4.7	22.70	4.2	27.63	2.8
Decision-making	(4 - 28)	11.11	3.4	10.21	2.6	11.20	1.9	12.75	2.5
Sociability	(4 - 28)	17.52	3.1	17.36	3.3	16.00	1.4	17.37	2.1
Academic Skills	(1 - 7)	4.21	1.4	4.32	1.0	3.90	1.5	3.37	1.5
Affect	(1 - 7)	3.97	.67	3.64	.91	3.80	.42	4.00	.53
N		34		28		10		8	

[a]The lower the value the more the candidate is perceived as possessing the particular trait.

TABLE 8.--Means and Standard Deviations of Scale Ratings x Candidate Choice for Nurse[a]

	Possible Range	Att $\bar{x}$	Male S.D.	Unatt. $\bar{x}$	Male S.D.	Att $\bar{x}$	Female S.D.	Unatt $\bar{x}$	Female S.D.
Leadership	(7 - 49)	21.55	3.8	21.09	4.7	21.74	4.3	22.47	3.9
Decision-making	(4 - 28)	11.96	2.9	10.72	2.7	12.61	2.7	12.26	2.6
Sociability	(4 - 28)	19.37	2.6	19.73	3.3	20.56	2.6	18.9	2.7
Academic Skills	(1 - 7)	4.59	.97	5.00	1.3	4.39	1.1	4.53	.90
Affect	(1 - 7)	4.11	.51	4.09	1.2	4.43	.79	3.95	.78
N		27		11		23		19	

that the sex of their ideal candidate "did not matter" and 49 of 60 (61%) responded in a manner that indicated the physical attractiveness of their ideal applicant was "not important".

DISCUSSION

Physical attractiveness and sex appeared to have an impact on recruiters' recommendations of job candidates. Attractiveness worked against males but to the benefit of females. This was evidenced in lower ratings given attractive males and unattractive females for either job. The influence of candidate physical attractiveness on recruiters decisions may be dependent on recruiter perceptions of the importance of attractiveness to perform on the job. This is reflected in the comments made by the recruiters regarding physical attractiveness and the nursing job ("Attractiveness is more important for a nurse to possess than an engineer because nurses are in contact with people." "I would want a pretty nurse taking care of me in the hospital, but no one sees engineers..."). The particular jobs used to depict traditionally male and traditionally female jobs in this study may represent situations where physical attractiveness is perceived as necessary (nurse) and where attractiveness is not (engineer). Further study is warranted to uncover the reasons why physically attractive individuals are preferred over unattractive individuals for certain positions.

Analysis of the characteristics recruiters attributed to their "choice" candidate for the engineering job revealed that

unattractive females were characterized as possessing significantly less leadership capability than the other candidates. Survey data indicate a popular belief that women make inferior leaders (Bowman, Worthy, Greyser, 1965) and lack leadership potential (Bass, Krusell, Alexander, 1971). Also, recall that the stereotypes of women and the stereotypes of leaders are viewed as imcompatible. Due to the fact that engineering is an out-of-role position for females, it is possible that the recruiters: traditional stereotypes influenced their attributions of leadership characteristics to females. Possibly, unattractive females are perceived as possessing two undesirable occupational characteristics, i.e., they are unattractive as well as being female, which results in unfavorable attributions concerning their leadership capabilities. Research indicates that a relationship does exist between physical attractiveness and leadership status. Physically attractive individuals are perceived to possess more leadership capability than their unattractive counterparts (Partridge, 1934; Flemming, 1935). However, further research varying both sex and physical attractiveness is necessary to determine the impact these factors have on attributions of leadership.

This study reveals that one possible reason why females may receive differential employment decisions when compared with males is that they are perceived as possessing less leadership capability than males. Britton and Thomas (1973) found that employment interviewers felt that females were less likely to have the skills that

an employer would want. Possibly, the "skill" employers are looking for is leadership which is generally associated with "maleness"!

It is reasonable to assume that leadership is a component of a stereotype of specific traits which are believed to be essential for success. Women are not typically seen as possessing these traits to the same degree as men. "Success" in life is often equated with success in occupational achievement. In terms of occupational achievement, success has traditionally been associated with accomplishments of males in traditionally male jobs. Recall from the introduction that females are typically not perceived as possessing "male" characteristics, therefore, they are most often considered to be less likely to be a "success" in an out-of-role position. This is unfortunate given the results of leadership research which indicate that females may not be more or less successful as leaders than males. The recruiters in this study appear to prefer males over females for traditionally male positions on the basis of their perceptions of the females lacking leadership capabilities. More research is necessary in order to determine (a) if in fact attributions of leadership characteristics lead to differential decisions from recruiters concerning job candidates, and (b) if recruiters' perceptions of leadership ability result in unfavorable evaluations of females seeking positions in other occupations.

Despite the increasing attention given to alleviating sex discrimination in our society today, males and females seeking out-of-role jobs received lower recommendations to continue in the selection process than their in-role counterparts. This fails to support

the hypothesis that the "status" of the jobs used in this study would result in job candidates receiving equivalent recommendations from recruiters regardless of their sex and type of job. This suggests that job status does not negate the effects of sex-role stereotypes on recruiters decisions.

Cash, Gillen, and Burns (1977) speculated that occupational status rises with a person's level of attractiveness. Based on this belief, they hypothesized that the strength of the attractiveness variable in influencing recruiters should increase for so-called "upper strata" positions. "Upper strata" positions generally are white-collar jobs requiring a college degree or its equivalent. The jobs used in this study differ from the jobs used in previous research on the basis of their status, i.e., the jobs are generally "upper strata" positions and have more status thatn the jobs used in previous research. The results of this study suggest that attractiveness is not the only factor that influences recruiter's recommendations for "upper strata" positions. Recruiters' recommendations were influenced by <u>both</u> the sex and attractiveness of the candidates.

It is important to note the limitations of this study. First, as Muchinsky and Harris (1977) indicate, when information available to recruiters is not potent enough to influence a judgment one way or the other, recruiters' evaluations are more likely to be influenced by stereotypical perceptions. The recruiters in this study were presented with a limited amount of information concerning the applicants, Past research shows that recruiters have a stereotype of both males and females prior to the actual interview when the only

information they have concerning the candidate is based on a resume and letters of recommendation. During the interview the job candidate has the opportunity to disconfirm the recruiter's stereotypes. It is possible that the extent to which the candidate confirms or disconfirms the recruiters' sex and physical attractiveness stereotypes has a direct impact on the decisions the recruiter makes concerning the candidate. This study did not require the recruiters to participate in actual interviews, but rather involved their judgments of "paper people". Therefore, it is possible that the findings of this study may be applicable only to the pre-interview screening decisions made by recruiters.

Second, it is possible that recruiters' responses were directly the result of demand characteristics. For example, candidate attractiveness was manipulated by the use of photographs which may have suggested to the recruiters that their respones were to be based on the physical attractiveness of the job candidates. Therefore, particularly when asked to select their "choice" candidates, the recruiters may have responded in a manner that they perceived the experimenter desired, i.e., they chose attractive individuals for the nursing job. Efforts were made to reduce the possible influence of demand characteristics by explaining to the recruiters that the study dealt with decision-making--no mention was made of either the sex or physical attractiveness of the job candidates.

Third, the measure of "leadership" used in this study was based on the factor analysis of the nineteen semantic differential scales. While it may be argued that the leadership scale does

include traits which have been attributed to leaders, this measure lacks construct validity. Therefore, the findings regarding the attribution of leadership to the job candidates should be considered specualtive at best.

Nevertheless, the findings of this study suggest that (a) individuals seeking out-of-role jobs receive lower recommendations than their in-role counterparts for jobs requiring a college degree, (b) recruiters prefer males for traditionally male jobs on the basis of what may be perceptions of leadership capabilities, and (c) candidates receive differential evaluations from recruiters' depending on their sex and physical attractiveness.

APPENDICES

APPENDIX A

Experimental Design

APPENDIX A

Experimental Design

	Nurse[1]				Engineer			
	Male[2]		Female		Male		Female	
Males	A	U[4]	A	U	A	U	A	U
Females[3]	A	U	A	U	A	U	A	U

1 = Job Type

2 = Applicant Sex

3 = Interviewer Sex

4 = Applicant Attractiveness

APPENDIX B

Pilot-testing Questionnaire for Photographs

APPENDIX B

Pilot-testing Questionnaire for Photographs

Please rank each photograph according to the following scale:

5	4	3	2	1
Extremely Attractive	Somewhat Attractive	Neither Attractive nor Unattractive	Somewhat Unattractive	Extremely Unattractive

Place the scale rating you give the photographs next to the corresponding number of the photograph on the sheet in front of you. Also, in the upper right hand corner of the paper, designate your sex by M for males and F for females.

If you have any questions now or at anytime please ask!!!

APPENDIX C

Pilot-testing Questionnaire for Resumes

APPENDIX C

Pilot-testing Questionnaire for Resumes

Look over the resumes, job descriptions, GATB test scores, and job qualifications while you respond to the questions below. Circle your response.

1) How similar to you find the resumes in regards to the stated...

	very similar	somewhat similar	neither similar nor dissimilar	somewhat similar	very dissimilar
Job Objective	1	2	3	4	5
Education	1	2	3	4	5
Personal Data	1	2	3	4	5
Work Experience	1	2	3	4	5
GATB Test Scores	1	2	3	4	5

2) How qualified do you find each job applicant? Circle your response.

	extremely qualified				extremely unqualified
Applicant A	1	2	3	4	5
Applicant B	1	2	3	4	5
Applicant C	1	2	3	4	5
Applicant D	1	2	3	4	5

APPENDIX D

Male-Female Job Index

APPENDIX D

Male-Female Job Index (MFJI)

Listed below are several job titles. Please rank the three jobs you believe are most representative of traditionally female jobs and the three jobs you believe are most respresentative of traditionally male jobs. For the traditionally female jobs use: 1F, 2F, and 3F for your ranking. For the traditionally male jobs use: 1M, 2M, and 3M. Also please indicate your gender at the top of the page. Thank you.

_____personnel administrator

_____medical technician

_____social worker

_____nuclear chemist

_____clerk

_____librarian

_____stock market broker

_____dietician

_____keypunch operator

_____nutritionist

_____civil engineer

_____mail carrier

_____carpenter

_____bank executive

_____school teacher

_____travel agent

_____professor

_____chemical engineer

_____nurse

_____manager

_____economic analyst

_____day care administrator

APPENDIX E

Job Descriptions

APPENDIX E

Job Descriptions

Nurse

Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institution: Administers prescribed medications and treatments in accordance with approved nursing techniques. Prepares equipment and aids physician during treatments and examinations of patients. Observes, records, and reports to supervisor or physician patient's condition, and reaction to drugs, treatments, and significant incidents. Rotates among various clinical services of institution, such as obstetrics, surgery, orthopedics, outpatient and admitting, pediatrics, psychiatry, and tuberculosis. May assist with operations and deliveries by preparing rooms, sterile equipment, instruments, and supplies, and handling, in order of use to surgeon or obstetrician. May make beds, bathe and feed patients, and assist in their rehabilitation. May serve as leader for group of personnel rendering nursing care to a number of patients.

Industrial Engineer

Performs a variety of engineering work in planning and overseeing utilization of production facilities and personnel in department or other subdivision of industrial establishment: Plans equipment layout, workflow and accident prevention measures to maintain efficient and safe utilization of plant facilities. Plans and oversees study and training programs to promote efficient manpower utilization. Develops and oversees quality control, cost control, inventory control, and production systems.

APPENDIX F

Resumes and Credential Forms

Michael Allen Fitzgerald

School:
419 Park Lane
East Lansing, MI 48823
(517) 332-0457

Home:
27346 Cowman Drive
Troy, MI 58843
(614) 458-2227

Job Objective

A position in a medical care facility where I can use my personal skills and educational background to benefit the patient.

Education

1976 to June 1982	B.S. Nursing Michigan State University East Lansing, Michigan 48823 Overall GPA 3.45/4.0

Employment Experience

Summer 1980	Undergraduate Nurse, Float Team, Ingham Medical Center, Lansing, Michigan 48910. Duties included assessing, organizing, and implementing direct patient care and charting on any of ten units in the hospital.
Summer 1979	Nurses' Aid, Meadowbrook Medical Care Facility, Bellaire, Michigan 49615. Given responsibility for attending to own patients. Duties included bathing patients, preparing sitz baths, administering enemas, and making judgments on incisions regarding antiseptic treatments.

Personal
Birthdate: 2/13/58
Health: Excellent
Marital Status: Single

References
Provided upon request.

Form No. 22788810

MICHIGAN STATE UNIVERSITY

PLACEMENT SERVICES, East Lansing, Michigan 48824

EMPLOYMENT CREDENTIALS for Students

Expected Date of Graduation 6 (mo) 82 (yr)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing, Fee $3.00

PERSONAL

Name* Fitzgerald (Last) Michael (First) A. (Middle Initial) Student Number 765456

Home Address 27346 Cowman Drive (Number and Street) Troy (City) MI (State) 49221 (Zip) Phone (313) 487-2562 (Include Area Code)

Campus Address 419 Park Lane (Number and Street) East Lansing (City) MI (State) 48823 (Zip) Phone (517) 352-1662 (Include Area Code)

Veteran Yes ___ No X Social Security No. 675-99-9861 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Types Of Work Desired: Nurse

Professional School ☐ Graduate School ☐ Locational Preference: Michigan, Midwest

EDUCATION

Name of College or University & Location	Attendance From	Attendance To	Degree Earned or Expected	Field of Study: Major	Field of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University, East Lansing, MI 48824	9/76	Present	B.S.	Nursing		3.6	3.45

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Employer Employment Experience Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From	Dates Employed To
Ingham Medical Center, Lansing, MI 48910	Undergraduate Nurse	50	Summer	1980
Meadowbrook Medical Care Facility, Bellaire, MI 49615	Nurses' Aid	40	Summer	79

% College Expenses Earned 10% How Earned Summer Work.

OTHER INFORMATION

References (Names, Positions and Addresses)

Jay Curtis
Professor/MSU School of Nursing

Dr. John F. Stanley
Ingham Medical Center

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Michael A Fitzgerald (Signature) 9/14/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES

JOHN ALBERT MITCHELL

PRESENT ADDRESS

240 River Street
East Lansing, Michigan 48823
(517) 352-1662

PERMANENT ADDRESS

1645 North Michigan Avenue
Adrian, Michigan 49221
(313) 487-2562

PROFESSIONAL OBJECTIVE

I would like to administer and care for ill, injured, convalescent, and handicapped persons in a hospital or other health care facility.

EDUCATION

September 1976 to Present	B.S. Nursing GPA 3.4/4.0 Michigan State University East Lansing, Michigan 48824

WORK EXPERIENCE

Summer 1980	Nurses' Aide, Health Central, Lansing, Michigan. Prepared patients for examinations, transported patients to treatment units. Took vital signs of patients including temperature, pulse and respiration rate. Applied compresses and hot water bottles.
Summer 1979	Roselawn Manor Nursing Home, Lansing, Michigan. Assisted nursing home staff in patient care - bathed patients, took vital signs, emptied bed pans, gave enemas, douches, massages and alcohol rubs.

PERSONAL DATA

Date of Birth: 3/12/58
Marital Status: Single
Health: Excellent

REFERENCES

Available on request.

Form No. 227E0010

MICHIGAN STATE UNIVERSITY
PLACEMENT SERVICES, East Lansing, Michigan 48824
EMPLOYMENT CREDENTIALS
for Students

Expected Date of Graduation 6 / 82 (Mo. / Yr.)

PLEASE PRINT PLAINLY

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name * Mitchell (Last) John (First) A. (Middle Initial) Student Number 845324

Home Address 1645 North Michigan Avenue (Number and Street) Adrian (City) MI (State) 49221 (Zip) Phone (313) 487-2562 (Include Area Code)

Campus Address 240 River Street (Number and Street) East Lansing (City) MI (State) 48823 (Zip) Phone (517) 352-1662 (Include Area Code)

Veteran Yes ___ No X Social Security No. 654-78-9871 U.S. Citizen yes If No, Type of Visa ___

* If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Types Of Work Desired: Position as a Nurse.

Professional School ☐ Graduate School ☐ Locational Preference: Midwest

EDUCATION

Names of Colleges or Universities & Locations	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University East Lansing, MI 48824	9/76	to Present	B.S.	Nursing		3.6	3.4

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experience Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From	Dates Employed To
Health Central, Lansing, Michigan 48876.	Nurses' Aide	40	Summer	80
Roselawn Manor Nursing Home Lansing, MI 48875	Assisted nursing home staff in patient care.	40	Summer	79

% College Expenses Earned 15% How Earned Summer Earnings.

OTHER INFORMATION

References (Names, Positions and Addresses)
Mary McElroy R.N. Health Central
Susan Tomlin R.N. Roselawn Manor Nursing Home
Other references available .

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE
My file may be released to employers J.A. Mitchell (Signature) 9/24/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES.

Rose St. Mary

Local Address

387 Burcham Drive
East Lansing, Michigan 48823
Telephone: (517) 332-5018

Home Address

437 Jones St.
Marquette, Michigan 49885
Telephone: (906) 226-9832

Career Objective

To gain a position in a health organization, preferably a hospital, where I can use my skills to promote health, prevent disease, and provide nursing therapy.

Education

Michigan State University
East Lansing, Michigan 48824
B.S. degree in Nursing (June 1982)
GPA 3.4/4.0

Work Experience

Summer 1980	Undergraduate Nurse, Mason General Hospital, Mason, Michigan 47753. Responsible for attending to several patients. Bathed, dressed, and assisted patients in walking and turning, used such equipment as catheters, tracheotomy tubes, and oxygen supplies. Observed patients and reported adverse reactions to attending physician.
Summer 1979	Fostoria Nursing Home, Marquette, Michigan 49853 Prepared food trays and fed patients. Recorded patient food intake and output. Dressed wounds, gave enemas, alcohol rubs and massages.

Personal Data

Single
Excellent Health
Birthdate: September 9, 1958

References

Available upon request.

Form No. 2278810

MICHIGAN STATE UNIVERSITY
PLACEMENT SERVICES, East Lansing, Michigan 48824
EMPLOYMENT CREDENTIALS
for Students

Expected Date of Graduation 6 / 82 (Mo. / Yr.)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name* Mary Rose St. (Last, First, Middle Initial) Student Number 897654

Home Address 437 Jones St. (Number and Street) Marquette, MI (City, State) 49885 (Zip) Phone (906) 226-9832 (Include Area Code)

Campus Address 387 Burcham Drive (Number and Street) East Lansing, MI (City, State) (Zip) Phone (517) 332-5018 (Include Area Code)

Veteran Yes ___ No X Social Security No. 344-98-6512 U.S. Citizen yes If No, Type of Visa ___

* If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Type Of Work Desired: Nursing Position.

Professional School ☐ Graduate School ☐ Locational Preferences: Midwest

EDUCATION

Name of College or University & Location	Attendance From	Attendance To	Degree & Date of Graduation	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average (4.0 System)
Michigan State University East Lansing MI 48823	9/76	to Present	B.S.	Nursing		3.55	3.4

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experiences Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From	To
Mason General Hospital Mason, Michigan 47753	Undergraduate Nurse	40	Summer	80
Fostoria Nursing Home Marquette, Michigan 49853	Nurse Assistant	40	Summer	79

% College Expenses Earned: 10% How Earned: Savings from Summer Work.

OTHER INFORMATION

References (Names, Positions and Addresses)
Janet Rubin R.N.
School of Nursing M.S.U.

Kathy Stevens
Mason General Hospital

Other references available on request.

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Rose H. Mary (Signature) 9/3/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES

Susan Marie Burcham

Address: 201 Milford St.
East Lansing, MI 48823
517 - 353-8887

1666 Ronnie Lane
Livonia, MI 48154
313 - 464-8951

Personal: Marital Status: Single
Date of Birth: 4/1/58
Health: Excellent

Employment Objective: To be connected with a clinic, hospital, or private nursing home where I can use my nursing skills for the benefit of the institution and the welfare of the patient.

Education: September 1976 to present
B.S. Nursing GPA 3.5/4.0
Michigan State University
East Lansing, Michigan 48824

Work Experience:

Summer 1980 — Nurses' Aide, Homemaker's Upjohn, Dearborn, Michigan. Applied compresses and hot water bottles. Cleaned, sterilized, stored, and prepared dressing packs, treatment trays and other supplies. Answered various patient needs including bathing, dressing, and running errands.

Summer 1979 — Nurses' Aide, Sunnydale Farms Nursing Home, Ypsilanti, Michigan 57321
Fed patients, transported patients to treatment units. Recorded patients temperature, pulse rates, respiration rates. Responsible for directly overseeing seven patients.

References: Available on request.

Form No. 227E0010

MICHIGAN STATE UNIVERSITY
PLACEMENT SERVICES, East Lansing, Michigan 48824
EMPLOYMENT CREDENTIALS
for Students

Expected Date of Graduation 6 / 82 (Mo. / Yr.)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name* Burcham (Last) Susan (First) M. (Middle Initial) Student Number 784345

Home Address 1666 Ronnie Lane (Number and Street) Livonia (City) MI (State) 48154 (Zip) Phone 313 - 464-8951 (Include Area Code)

Campus Address 201 Milford Street (Number and Street) East Lansing (City) MI (State) 48823 (Zip) Phone 517 - 353-8887 (Include Area Code)

Veteran Yes ___ No X Social Security No. 456-87-9865 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Type Of Work Desired: Nursing Position

Professional School ☐ Graduate School ☐ Locational Preference: Illinois, Michigan, Anywhere in the Midwest

EDUCATION

Names of Colleges or Universities & Location	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University East Lansing Michigan 48824	9/76	to Present	B.S.	Nursing		3.6	3.5

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experience Name & Address of Employer	Description of Work	Hours Per Week	Dates Employed From	Dates Employed To
Homemakers Upjohn, Dearborn, Michigan.	Nurses' Aide	40	Summer	1980
Sunnydale Farms Nursing Home, Ypsilanti, Michigan	Assisted nursing staff.	40	Summer	1979

% College Expenses Earned: 10 % How Earned: Summer Work.

OTHER INFORMATION

References (Names, Positions and Addresses)

Dr. John F. Stanley
Homemakers Upjohn

Janet Gottschalk R.N.
Sunnydale Farms Nursing Home

Other references available on request.

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Susan M. Burcham (Signature) 9/30/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES

DENICE M. RANKE

TEMPORARY ADDRESS

214 Van Hoosen Apts.
East Lansing,MI 48824
(517) 355-1679

PERMANENT ADDRESS

342 Winry Drive
Rochester, MI 48063
(313) 651-1913

PERSONAL

Birthdate: August 7, 1959
Place of Birth: Rochester, Michigan
Health: Good

PROFESSIONAL OBJECTIVE

To obtain a position in industrial engineering that has potential for advancement and responsibility.

EDUCATION

Sept. 1976 to Present	Michigan State University, East Lansing, Michigan. B.S. Industrial Engineering GPA 3.3/4.0

EMPLOYMENT

June 1979 to Present Part-time	Fatigue and Fracture Lab., Division of Engineering Research, Michigan State University, East Lansing, Michigan. Research Laboratory Assistant: Responsibilities -- Design Drafting, Computer Programming, Metallurgical Studies and Fatigue Testing. Supervisor: Dr. John F. Martin
May 1977 to March 1979 Part-time	Curly's Fruit Market, Rochester, Michigan. Cashier,stock clerk: maintained stock and ordered inventory. Transferred to delicatessen. Manager: Tony Salvia
Dec. 1975 to Aug. 1976 Part-time	McDonald's Restaurant, Rochester, Michigan. Crewperson: served customers, operated register and performed janitorial duties.

REFERENCES

Furnished upon request.

Form No. 227E0010

MICHIGAN STATE UNIVERSITY

PLACEMENT SERVICES, East Lansing, Michigan 48824

EMPLOYMENT CREDENTIALS for Students

Expected Date of Graduation 6 / 82 (Mo / Yr)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name* Ranke (Last) Denice (First) Margaret (Middle Initial) Student Number 765435

Home Address 342 Winry Drive (Number and Street) Rochester (City) MI (State) 48063 (Zip) Phone (313) 651-1913 (Include Area Code)

Campus Address 214 Van Hoosen Apts. (Number and Street) East Lansing (City) MI (State) 48824 (Zip) Phone (517) 355-1679 (Include Area Code)

Veteran Yes ___ No X Social Security No. 290-46-7121 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Type Of Work Desired: Position in Industrial Engineering

Professional School ☐ Graduate School ☐ Locational Preference: None

EDUCATION

Names of Colleges or Universities & Location	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University East Lansing, MI 48824	9/75	present	B.S.	Industrial Engineering		3.5	3.3

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experience Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From	Dates Employed To
Fatigue and Fracture Lab., Division of Engineering Research, M.S.U.	Design Drafting, Computer Programming, Metallurgical Studies and Fatigue Testing	Part-time	6/79	present
Curly's Fruit Market, Rochester, MI	Cashier, stock clerk: maintained stock and ordered inventory.	20	5/77	3/79
McDonalds Restaurant, Rochester, MI	Creuperson	20	12/75	7/76

If College Expenses Earned 50% How Earned Part-time work at Division of Engineering Research

OTHER INFORMATION

References (Names, Positions and Addresses)

Dr. John F. Martin
Division of Engineering Research, M.S.U.

Tony Salvia
Manager, Curly's Fruit Market

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Denice M. Ranke (Signature) 9/29/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES.

EVE ST. CYR

LOCAL ADDRESS
345 Burcham Drive
East Lansing, Michigan 48823
Telephone: (517) 332-5018

HOME ADDRESS
438 East Prospect Street
Marquette, Michigan 49885
Telephone: (906) 226-9832

PERSONAL DATA
Single
U.S. Citizen
Excellent Health
Birthdate: September 9, 1959

CAREER OBJECTIVE
Seeking a position requiring performance of a variety of engineering work such as planning and overseeing the utilization of production facilities and work study programs.

EDUCATION
B.S., College of Engineering, Michigan State University, June,1982. Major: Industrial Engineering. GPA 3.4/4.0

EMPLOYMENT
Teaching Assistant. Mathematics Department, Michigan State University, East Lansing, Michigan. September, 1979 to March,1981. Undergraduate Assistant in introductory Algebra and Trigonometry courses stressing practical applications and techniques.

Tutor. Athletics Department, Michigan State University, East Lansing, Michigan. January, 1980 to December, 1980. Employed by the Athletic Department as a tutor for approximately twenty students in a study-hall. Responsibilities for aiding student athletes in different levels of physics, mathematics, or accounting.

Assistant Accountant. Marquette Business Service, Marquette, Michigan. Summer 1979. Acted as an accountant answerable for specific financial management of small business accounts in the Marquette area. Duties included knowledge of basic office management and bookkeeping skills.

REFERENCES
Supplied upon request.

Form No. 22780010

MICHIGAN STATE UNIVERSITY
PLACEMENT SERVICES, East Lansing, Michigan 48824
EMPLOYMENT CREDENTIALS
for Students

Expected Date of Graduation 6 (mo) 82 (yr)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name* Cyr (Last) Eve (First) St. (Middle Initial) Student Number 768954

Home Address 438 East Prospect Street (Number and Street) Marquette (City) MI (State) 49885 (Zip) Phone (906) 226-9832 (Include Area Code)

Campus Address 345 Burcham Drive (Number and Street) East Lansing (City) MI (State) 48823 (Zip) Phone (517) 332-5018 (Include Area Code)

Veteran Yes ___ No X Social Security No. 272-66-0461 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Types Of Work Desired: Industrial Engineer

Professional School ☐ Graduate School ☐ Locational Preferences: None

EDUCATION

Names of Colleges or Universities & Locations	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average (4.0 System)
Michigan State University East Lansing, MI 48824	9/76	to present	B.S.	Industrial Engineering		3.5	3.4

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experiences -Name & Address of Employer-	Description of Work	Hours Per Week	Dates Employed From	Dates Employed To
Michigan State University, East Lansing, MI 48824	Teaching Assistant. Undergraduate assistant in intro Algebra and Trig. courses.	20	9/79	3/81
Athletics Department Michigan State University, Marquette Business Service Marquette, Michigan	Tutor Accountant for small business accounts	varied 40	1/80 Summer	12/80 1979

% College Expenses Earned: 40% How Earned: Teaching Assistant and other employment

OTHER INFORMATION

References (Names, Positions and Addresses)
Dr. Namath Frongmote, Department of Mathematics, M.S.U.
Carolyn Sawyer, Marquette Business Service, Marquette, Michigan
John Hill, M.S.U. Athletic Dept.

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Eve St Cyr (Signature) 9/31/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES.

Thomas A. Zielinski

Address: B122 Butterfield Hall
Michigan State University
East Lansing, Michigan
(517) 355-1410

16666 Ronnie Lane
Livonia, Michigan 48154
(313) 464-8951
After June 7th.

Personal Data:

Marital Status: Single
Date of Birth: September 11, 1959
Place of Birth: Detroit, MI
Health: Excellent

Employment Objective:

An Industrial Engineering position which will allow me to pursue a career through combining technological awareness with non-technical related areas. Specifically general engineering duties related to quality control systems, workflow plans, and accident prevention programs.

Education:

Michigan State University, East Lansing, MI 48824
Expected Degree: B.S. Industrial Engineering, June 1982
GPA: 3.35 on 4.0 system.

Employment:

Resident Assistant, Office of Residence Halls Programs, Michigan State University, East Lansing. The Resident Assistant (R.A.) is a full-time student and a part-time member of the Resident Halls staff. The R.A. has some degree of responsibility for the entire residence program with specific emphasis being given to the approximately fifty students in the "house". An R.A. is responsible for community building and dealing with students rights and responsibilities. The R.A. also performs management and resource/referral functions.

Aluminum siding applicator for Redford Aluminum, 14646 Riverside, Livonia, MI 48154. Mel Benstead, Supervisor. Originally hired in 1973 as an assistant, eventually became a summertime partner.

References:

Available upon request.

Form No. 227E0010

MICHIGAN STATE UNIVERSITY

PLACEMENT SERVICES, East Lansing, Michigan 48824

EMPLOYMENT CREDENTIALS

for Students

Expected Date of Graduation 6 / 82 (Mo. / Yr.)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing. Fee $3.00

PERSONAL

Name* Zielinski (Last) Thomas (First) Allen (Middle Initial) Student Number 657435

Home Address 16666 Ronnie Lane (Number and Street) Livonia (City) MI (State) 48154 (Zip) Phone (313) 464-8951 (Include Area Code)

Campus Address B122 Butterfield Hall (Number and Street) M.S.U. East Lansing (City) MI (State) 48824 (Zip) Phone (517) 355-1410 (Include Area Code)

Veteran Yes ___ No X Social Security No. 567-89-9987 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Types Of Work Desired: Industrial Engineering Position

Professional School ☐ Graduate School ☐ Locational Preferences: None

EDUCATION

Names of Colleges or Universities & Location	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University East Lansing, Michigan 48824	9/76	present	B.S.	Industrial Engineering		3.45	3.35

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experience Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From	To
Office of Residence Halls Michigan State University East Lansing, MI 48824	Resident Assistant	40+	9/78	to Present
Redford Aluminum 14646 Riverside Livonia, MI 48154	Aluminum siding applicator	40	Summer 75-78	73 74

% College Expenses Earned 40% How Earned Summer Work, Resident Assistant position

OTHER INFORMATION

References (Names, Positions and Addresses)

John Culter
Office of Residence Halls(MSU)

Mel Benstead
Redford Aluminum

Other references available on request

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE

My file may be released to employers Thomas A. Zielinski (Signature) 9/19/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES

ANTHONY A. MESSINA

Permanent Address
3248 Essex
Troy, Michigan 48084
Telephone: (313) 649-5147

Present Address
722½ Grove
East Lansing, Michigan
Telephone: (517) 351-6506

JOB OBJECTIVE

A position in an engineering department where there is an opportunity to use my acquired skills to plan equipment layouts, study production workflow and perform a variety of other engineering work.

EDUCATION

September 1976 to Present	Michigan State University, East Lansing, Michigan. B.S. Industrial Engineering (June 1982) GPA 3.3/4.0

EMPLOYMENT EXPERIENCE

Summer 1979	Somerset Inn. Troy, Michigan General Maintenance
Summer 1978	Ford Motor Company. Dearborn, Michigan. Maintenance. Performed various maintenance operations required to insure efficient operation of electrical substations. Gained exposure to highly sophisticated maufacturing processes implemented in the production of an automobile from raw materials to finished product.
Summer 1977	Ford Motor Company. Dearborn, Michigan. Initially on production, advanced within three weeks to Glass Bending Lehr Coordinator. Responsibilities included organizing windshields in a coordinated arrangement for the bending furnance and maintaining a constant supply for the workers through close contact with department foreman. Made suggestions and implemented changes to efficiently increase shift quota.
Summer 1976 1975	Smith Bicycle Center. Troy, Michigan. Salesman. Duties included the sale of bicycles, minor repairs and inventory control. Promoted twice and achieved highest total sales for the months of June 1975, July and August 1976.

PERSONAL

Birthdate: 1/28/58
Marital Status: Single
Health: Excellent

REFERENCES

Provided upon request.

Form No. ZZ780910

MICHIGAN STATE UNIVERSITY
PLACEMENT SERVICES, East Lansing, Michigan 48824
EMPLOYMENT CREDENTIALS for Students

Expected Date of Graduation 6 / 82 (mo / yr)

PLEASE PRINT PLAINLY

$3.00

Transcripts of MSU Credits Obtainable With Student's Permission From Registrar, MSU, East Lansing, Fee $3.00

PERSONAL

Name* Messina (Last) Anthony (First) A. (Middle Initial) Student Number 758432

Home Address 3248 Essex (Number and Street) Troy (City) Michigan (State) 48084 (Zip) Phone (313) 649-5147 (Include Area Code)

Campus Address 722½ Grove (Number and Street) East Lansing (City) Michigan (State) 48824 (Zip) Phone (517) 351-6506 (Include Area Code)

Veteran Yes ___ No X Social Security No. 331-46-9834 U.S. Citizen yes If No, Type of Visa ___

*If you have a credential file with Placement Services under another name, please inform us.

OBJECTIVE

Types Of Work Desired: Industrial Engineer

Professional School ☐ Graduate School ☐ Locational Preference: None

EDUCATION

Names of Colleges or Universities & Locations	Attendance From	Attendance To	Degree Earned or Expected	Fields of Study: Major	Fields of Study: Minor	Major Grade Point Average	All University Grade Point Average 4.0 System
Michigan State University, East Lansing, MI 48824	9/76	Present	B.S.	Industrial	Engineering	3.5	3.3

Honors, Professional Organizations, Civic or Campus Activities, Travel, Publications, Foreign Language Skills, Special Training and/or Skills, etc.

EDUCATION MAJORS ONLY:
Type of Certificate: Elementary ___ Secondary ___ Special ___ Other (please specify) ___

EMPLOYMENT

Significant Employment Experience Name & Address of Employers	Description of Work	Hours Per Week	Dates Employed From To
Somerset Inn. Troy, MI	Maintenance.	40	Summer 79
Ford Motor Company, Dearborn, MI	Maintenance of electrical substations.	50	Summer 78
Ford Motor Company, Dearborn, MI	Production, Glass Bending Lehr Coordinator.	50	Summer 77
Smith Bicycle Center, Troy, MI	Salesman.	40	Summer 76-7

% College Expenses Earned: 40% How Earned: Summer work.

OTHER INFORMATION

References (Names, Positions and Addresses)
Jeff Mayer
Manager/ Somerset Inn
Jack Neffzinger
Superintendent of Operations/Ford Motor Co.
Other references available.

Other Information (Special Interests, Hobbies, etc.)

CREDENTIAL RELEASE
My file may be released to employers Tony A. Messina (Signature) 9/3/81 (Date)

EMPLOYER PLEASE NOTE: As recipient of this placement file, you are obligated to comply with the restrictions of Sec. 438 of Public Law 93-380 (Family Educational Rights and Privacy Act of 1974) and not permit any other party to have access to the file without the written consent of the candidate.

MICHIGAN STATE UNIVERSITY PLACEMENT SERVICES IS COMMITTED TO EQUAL EMPLOYMENT OPPORTUNITY PRINCIPLES AND PRACTICES

APPENDIX G

Job Qualifications Forms

APPENDIX G
Job Qualifications Forms

XYZ County Hospital: Qualifications for General Duty Nurse

Worker Requirements

Bachelor's degree in Nursing

Cleanliness, good health, freedom from communicable diseases

Ability to perceive differences in anatomical components

Facility for relating to people and an interest in their welfare

Performance on the General Aptitude Test Battery (GATB) has been found to be related to success on the job. Therefore, we require all of our potential employees to take the GATB and score at the following levels:

General Aptitude Test Battery Scores (GATB)

*G	Intelligence	2-3
*V	Verbal	2-3
*N	Numerical	3
*S	Spatial	2-3
*P	Form Perceptions	2-3
*Q	Clerical Perceptions	2-3
*K	Motor Coorindation	2-3
*F	Finger Dexterity	2-3
*M	Manual Dexterity	2-3
E	Eye-Hand-Foot Coordination	4-5
C	Color Discrimination	4

* = Essential for average successful performance

Scores range from 1 to 5 with 1 representing the highest score and 5 the lowest.

On-the-job situations

Nurses at our hospital must be able to adjust to the following situations:

1) Situations involving the necessity of dealing with people in actual job duties beyond giving and receiving instructions.

2) Situations involving the precise attainment of set limits, tolerances, or standards.

XYX Corporation Qualifications for Industrial Engineer

Worker Requirements

Bachelor's degree in Industrial Engineering is a minimum education requirement

Success in college engineering courses

Expressed interest in working in an industrial environment.

Performance on the General Aptitude Test Battery (GATB) has been found to be related to success on the job. Therefore, we require all of our potential employees to take the GATB and score at the following levels:

General Aptitude Test Battery Scores (GATB)

*G	Intelligence	1-2
*V	Verbal	1-2
*N	Numerical	1-2
S	Spatial	2-3
F	Form Perception	2-3
Q	Clerical Perception	3
K	Motor Coordination	4
F	Finger Dexterity	4
M	Manual Dexterity	4
E	Eye-Hand-Foot Coordination	5
C	Color Discrimination	5

* = Essential for average successful performance

Scores range from 1 to 5 with 1 representing the highest score and 5 the lowest.

On-the-job situations

Industrial Engineers in our corporation must be able to adjust to the following situations:

1) Situations involving the direction, control, and planning of an entire activity or activity of others.

2) Situations involving the evaluation (arriving at generalizations, judgments, or decisions) of information against sensory or judgmental criteria.

3) Situations involving the evaluation (arriving at generalizations, judgments, or decisions) of information against measurable or verifiable criteria.

APPENDIX H

Questionnaire and Instruction Form

APPENDIX H

Instructions

This research will increase our knowledge of how recruiters, such as yourself, use various pieces of information about job applicants in arriving at decisions concerning job candidates.

You will find a job description, qualifications sheet, and resumes (with attached test scores) for the applicants for two jobs: Nurse and Engineer.

Please read the job description and look over the qualifications sheet and the resumes of the applicants for the job. Then complete the accompanying questionnaire. Please do this for both jobs.

All responses will be confidential. Your responses on the questionnaire will not be associated with you or the organization you work for in any way. If you are interested in obtaining the results of this study, please leave you name and mailing address with the research team. Thank you for your participation!

Questionnaire

1. On the basis of the information you have concerning each of the applicants for this position, how likely is it that you would recommend that each applicant continue in the selection process? Circle one response for each applicant.

	extremely unlikely				extremely likely
Applicant A	1	2	3	4	5
Applicant B	1	2	3	4	5
Applicant C	1	2	3	4	5
Applicant D	1	2	3	4	5

2. How qualified do you feel each applicant is for the job? Check the appropriate response for each applicant.

	Qualified	Qualified with reservations	Not qualified
Applicant A	_____	_____	_____
Applicant B	_____	_____	_____
Applicant C	_____	_____	_____
Applicant D	_____	_____	_____

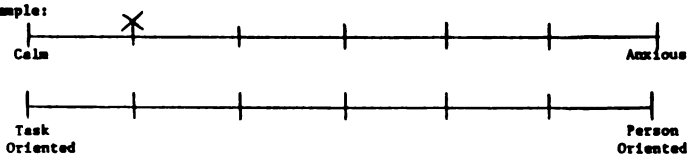
3. Suppose you had to choose only one of the applicants for this position. Based only on the information given, which applicant would you choose? Circle one.

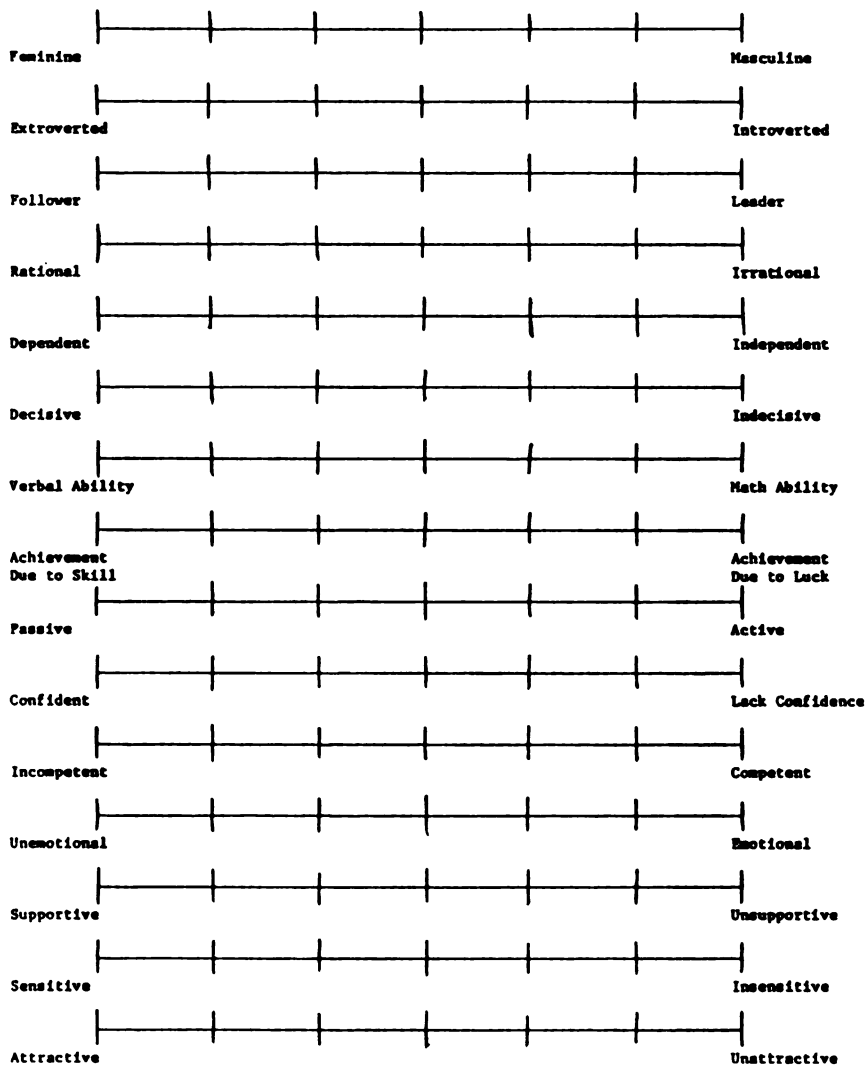
Applicant

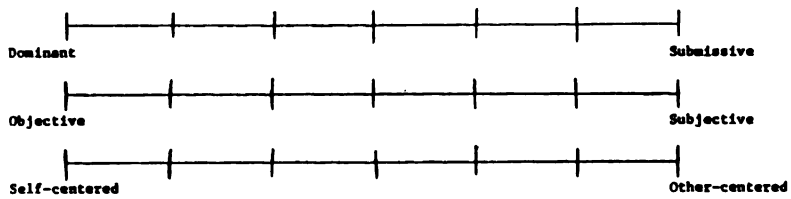
A B C D

4. Rate the one individual you chose for the job on the basis of the following characteristics. Place an X at the point on the scale which best represents the individual. Complete each of the scales. Do not leave any blank.

Example:




Feminine
Masculine
Extroverted
Introverted
Follower
Leader
Rational
Irrational
Dependent
Independent
Decisive
Indecisive
Verbal Ability
Math Ability
Achievement Due to Skill
Achievement Due to Luck
Passive
Active
Confident
Lack Confidence
Incompetent
Competent
Unemotional
Emotional
Supportive
Unsupportive
Sensitive
Insensitive
Attractive
Unattractive



5. Describe the "ideal applicant" for this position -- the individual you feel will be a definite success on this job. Check one response for each category.

SEX
___ Male
___ Female
___ Doesn't Matter

RACE
___ Black
___ White
___ Asian
___ Spanish American
___ Doesn't Matter

SCHOLASTIC ACHIEVEMENT
___ 3.50 - 4.00
___ 3.00 - 3.49
___ 2.50 - 2.99
___ 2.00 - 2.49
___ 1.50 - 1.99
___ 1.00 - 1.49
___ Below 1.00
___ Doesn't Matter

COMMUNITY INVOLVEMENT
___ Very Active
___ Fairly Active
___ Neither Active nor Inactive
___ Fairly Inactive
___ Very Inactive
___ Doesn't Matter

AGE
___ 19 or Below
___ 20-29
___ 30-39
___ 40-49
___ 50 or Above
___ Doesn't Matter

MARITAL STATUS
___ Single
___ Married
___ Married with children
___ Doesn't Matter

PHYSICAL ATTRACTIVENESS
___ Very Attractive
___ Somewhat Attractive
___ Neither Attractive nor Unattractive
___ Somewhat Unattractive
___ Very Unattractive
___ Doesn't Matter

EDUCATION

LEVEL	TYPE
____ Some High School	____ Technical School
____ High School Graduate	____ Junior College
____ Some College	____ College or University
____ College Graduate	____ Doesn't Matter
____ Some Graduate School	
____ Masters Degree	
____ Doctorate	
____ Doesn't Matter	

6. One definition of whether a job is traditionally male or female is the extent to which members in the job are of one sex or another.

   How traditionally male or female do you feel this job is? Circle one.

1	2	3	4	5
Traditionally Male	Somewhat Traditionally Male	Neither Traditionally Male nor Female	Somewhat Traditionally Female	Traditionally Female

7. How important is the person's physical attractiveness for success on this job? Circle one.

1	2	3	4	5
Very Important	Somewhat Important	Neither Important nor Unimportant	Somewhat Unimportant	Very Unimportant

8. How physically attractive is each job applicant? Circle one response for each applicant.

	Very Attractive				Very Unattractive
Applicant A	1	2	3	4	5
Applicant B	1	2	3	4	5
Applicant C	1	2	3	4	5
Applicant D	1	2	3	4	5

9. For successful performance of this job ..... (circle one response for each category) ....

	Not at all necessary		Moderately necessary		Extremely necessary
Analytical Skills are:	1	2	3	4	5
Quantitative Skills are:	1	2	3	4	5
Verbal Skills are:	1	2	3	4	5
Interpersonal Skills are:	1	2	3	4	5

10. What is your sex? Circle one.

M F

11. How many months experience do you have in recruiting? _____

12. List some examples of the types of jobs for which you recruit new employees.

_____

_____

_____

_____

REFERENCES

REFERENCES

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Arvey, R. D. Unfair discrimination in the employment interview: legal and psychological aspects. Psychological Bulletin, 1979, 86, 736-765.

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Brown, D. G. Sex-role preferences in young children. Psychological Monographs, 1956, 70, No. 14 (Whole No. 421).

Brown, D.G. Masculinity-Feminity development in children. Journal of Consulting Psychology, 1957, 21, 197-202.

Brown, D. G. Sex-role development in a changing culture. Psychological Bulletin, 1958, 55, 232-241.

Byrne, D., London, O., and Reeves, K. The effects of physical attractiveness, sex, and attitude similarity on interpersonal attraction. Journal of Personality, 1968, 36, 259-271.

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